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Entrepreneurship in the context of the fourth Industrial Revolution

The fourth Industrial Revolution (Industry 4.0) represents a combination of Cyber Physical Systems (CPS), of the Internet of Things (IoT) and the Internet of systems. The networks of devices that will be connected to each other and that will be able to store and exchange data at an extraordinary speed can provide unlimited possibilities for creating contexts in which people can develop their business.

Thus, smart cities will develop, and they will represent cities that are self-optimised in relation to the objectives of the entrepreneurs' groups. Within this leap into the unknown (Revolution 4.0), mankind will have to find solutions, not only to survive, but to transform the virtualities of the present into realities of the future, entrepreneurship becomes an independent activity, carried out by excellence at its own risk, with a chance for the evolution of the society as the source of innovation and change, entrepreneurship will require finding solutions whereby the individual should not only adapt, but, at the same time, should enhance the value of the exceptional results obtained within Revolution 4.0. It is obvious that, within such a context, the selection of competences will be extremely tough and the results will be useful for the society to the extent that it will define strategies that ascertain controllable evolutions.

This revolution of networks, platforms, digital technologies will have a major impact on people because they will have to adapt to contexts where there will be no boundaries between the physical, digital and biological components of the reality. New technologies will become major challenges not only for individuals, but also for organizations.

The revolution at the level of top technologies will create exponential leaps that will impose dramatic changes at the level of the production systems, management, but also at the level of government types. Such leaps can also create problems in the labour market, because multiple specializations will no longer be able to be available to all individuals, thus requiring the existence of very high abilities to adapt to contexts.

Therefore, one may foreshadow a polarization of the labour force between the two extremities: highly skilled staff and staff with poor education. Such polarization can create a shortage of average training personnel.

Prof. Ph.D. Paul Marinescu

The Importance Of The Antreprenorial Training In The Financial Field On Setting Up New Start-Ups In Romania

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Abstract: *With this paper, the author wishes to highlight the importance of financial education in the entrepreneurial field from the earliest stages of starting a business and, on the basis of real observations, to mark the main problems and difficulties that arise in this context. The article is structured by considering a research in the scientific literature, a presentation of Romania Start Up Plus program, an outlook on the particularities and characteristics of the Sud-Muntenia region, and, finally, a close observation and analysis on financial training through Romania Start Up Plus program. Lack of financial knowledge and fair financial planning at the entrepreneurial level are the major impediments both in the start of a business and in its further development, among the major obstacles being the access to financing, which in the case of Romania is among the lower in the European Union.*

Keywords*:* financial education in entrepreneurship, business plan, financial planning, access to finance, Romania Start Up Plus program

JEL Classification: M13, O22, L26, M53

Introduction

With this paper, the author wishes to highlight the importance of financial education in the entrepreneurial field from the earliest stages of starting a business and, on the basis of real observations, to mark the main problems and difficulties that arise in this context.

In "A report on Teacher Education and Training to prepare teachers for the challenge of entrepreneurship education" by the European Commission, on the implementation of the EU's Lisbon Programme, shows that education play a significant role in developing the entrepreneurial skills and knowledge and emphasizes some recommendations for the European Commission: „raise awareness of the value and importance of teacher education for entrepreneurship; stimulate implementation of national and local policies and frameworks; collect and disseminate good practices, experience and knowledge; enhance networking among specialists; establish a European level platform; stimulate and disseminate research, particularly on pedagogies" (European Commission, 2011) [1].

Present article is structured by considering a research in the scientific literature, a presentation of Romania Start Up Plus program, an outlook on the particularities and characteristics of the Sud-Muntenia region, and, finally, a close observation and analysis on financial training through Romania Start Up Plus program.

Marius Ghenea, the well-known Romanian entrepreneur, believes in his book, "Entrepreneurship. The Road to Ideas to Opportunities and Success in Business ", that among the weaknesses of Romanian entrepreneurs there is the lack of training in the field of financial planning of the business: "A large part of the Romanian entrepreneurs rely solely on their entrepreneurial intuition regarding the company's cash flow planning and other financial planning elements that are absolutely necessary for a harmonious development of the business; here, entrepreneurship education is perfectly feasible (a financial management course applied to entrepreneurship, especially start-up) "(Ursache, 2018) [2].

Lack of financial knowledge and fair financial planning at the entrepreneurial level are the major impediments both in the start of a business and in its further development, among the major obstacles being the access to financing, which in the case of Romania is among the lower in the European Union. Thus, "access to finance is the most important concern for 9% of Romanian SMEs (compared to 7% at EU level). [...]Bank loans remain the relevant form of external financing for 35% of Romanian SMEs (compared to 48% at EU level). Between April and September 2017, 15% of SMEs in Romania actually applied for a bank loan (EU: 26%). 6% did not apply because of fear of rejection (EU: 5%). [...] In Romania, out of those SMEs who applied, 18% of bank loan applications were rejected (compared to 5% at EU level). In addition to the problem of loan applications being rejected, 10% of companies who successfully applied received less than they applied for (EU: 11%) and 0% reported that they declined the loan offer from the bank because they found the cost unacceptable (EU: 1%). It means that, in total, 28% of Romanian SMEs did not manage to get the full bank loan they had planned for during 2017 (EU: 17%)" (European Commission, 2018) [3].

Literature review

There are a number of researches and analyzes on the field of entrepreneurial education and financial knowledge acquired in entrepreneurial education from the multitude of which the author selected a few considered relevant in the context.

Zahra considers „entrepreneurship training has been used as one of the driving force to improve entrepreneurial capabilities" (Zahra, 2011 cited in Seun, 2017, p.161) [4]. Also Seun & Kalsom show that „training is a kind of orientation enhancement on knowledge, attitude and skills" (Seun & Kalsom, 2015 cited in Seun, 2017, p.161) [4].

„Education and entrepreneurship training are very essential in developing young individuals'entrepreneurial competencies and during career phases – i.e.intending to start a business, starting a business, and running a business" say Maryam and Thomas (Maryam and Thomas, 2015 cited in Seun, 2017, p.162) [4].

In a research led by Mansor et al. the authors underline "the positive correlation between student readiness and resources and went further to show that entrepreneurship training does influence the effect of resources towards entrepreneurial readiness using hierarchical regression model" (Mansor et al., 2008 cited in Seun, 2017, p.160) [4].

As reffering to entrepreneurial education in European Union, the socio-demographic data (European Commission, 2012) [5] show that: „men (26%) are somewhat more likely than women (21%) to have taken part in an entrepreneurship course; younger respondents are also more likely to have taken part in an entrepreneurship course: 34% of 15-24 year-olds have taken part in one, but this gradually falls to just 17% among over-55s; and 44% of respondents who are taking steps to start a business have taken part in an entrepreneurship course; this compares with 30-32% of people who have previously started or taken over a business, and 20% of people who have no plans to start a business".

Regarding the importance of financial knowledge in entrepreneurial training, Garvin Professor of Global Entrepreneurship at Thunderbird School of Global Management - Glendale, USA, Dr. Robert Hisrich highlights that raising capital, managing the cash flow and valuing a business are between the 13 biggest problems that affect entrepreneurs and businesses of doing global business (US Department of State, 2018) [6].

Boldureanu makes a comparison between European Union and Romania and shows that „in comparison with the E.U. average (28%), 59% of the interviewed Romanians were convinced that school education had a role in increasing their interest in becoming entrepreneurs; and also they had greater confidence in the fact that school education provides skills and know-how to open a business" (Boldureanu, 2015) [7].

Pânzaru presents three factors as key challenges for the development of Romanian entrepreneurship: government policies that provide real support to entrepreneurs; promoting entrepreneurial training and easing access to sources of finance (Pânzaru, 2016) [8]

Analyzing entrepreneurship in the circumstance of Romanian culture and traditions, Grigore & Mitroi stress that „the efforts made on the educational dimension could be very effective in the current context of the ideological transition on the one hand, in conjunction with the trully spectacular

diversity of the media channels"(Grigore & Mitroi, 2012) [9].

„Lack of financial management knowledge has an impact on access to bank finance and also on the success and growth of SMEs" is the main conclusion of Chimucheka and Rungani (2011) [10]

Presentation of the program Romania Start-Up Plus

Within the financing programs of the European Union, according to the specifications on the website of the Ministry of European Funds in Romania, the Human Capital Operational Program 2014-2020 has a total allocation of €4.326 billion (Ministerul Fondurilor Europene, 2018) [11]. The program sets out the investment priorities, specific objectives and actions undertaken by Romania in the field of human resources, thus continuing the investments made through the European Social Fund during the 2007-2013 period and helping to reduce the economic and social development disparities between Romania and the EU Member States. In order to achieve the proposed objectives, 7 Priority Axes have been established within the POCU.

"Romania Start-up Plus" Program is part of Priority Axis 3 - Jobs for All, Investment Priority 8iii – Independent Activities, Entrepreneurship and Business Start-up, including Micro-Enterprises and Innovative Small and Medium Sized Enterprises, Specific Objective 3.7. - Increasing employment by supporting non-agricultural enterprises in the urban area.

The program, worth €105 million from the allocation for the Human Capital Operational Program (POCU) 2014-2020, aims to stimulate entrepreneurship and create jobs, and is intended for individuals seeking self-employment in the development regions of Romania (urban and rural), with the exception of the Bucharest-Ilfov area.

The financing mechanism is the following: when the contract with the entrepreneurial scheme administrators is signed, the future entrepreneur receives a grant of up to €24,000, representing the first tranche of funding. The second tranche of financing, up to a maximum of €16,000, will be granted if the entrepreneur generates gross revenues equivalent to half the amount of the first tranche. The total amount of €40,000 may vary from intermediary to intermediary, some offering less money.

The Start-up Scheme can be run by Local Public Authorities, Chambers of Commerce, Continuing Vocational Training Providers (CVTs), universities and NGOs that can apply to be scheme administrators. Each intermediary makes its own procedure to follow in order to enroll applicants. According to the list of administrators within the Romanian Start Up Plus program, there are 195 such administrators of the entrepreneurship scheme in the whole territory of Romania (Ministerul Fondurilor Europene, 2018) [12], out of which 34 are grouped in the region Sud-Muntenia. Beneficiaries of individuals (eg, unemployed, inactive, jobseekers and founders to create new jobs) are registered only at selected intermediaries in the development region where they reside. The younger NEETs aged 16-24 can not be part of this project.

The eligible expense list is an extended one, and beneficiaries could spend this amount of money on developing their own business. They must, however, create at least two jobs at least 6 months after signing the

financial aid contract (named Minimis). After setting up, newly created businesses must continue their activities for a minimum of eighteen months.

The evaluation also depends on each intermediary. If the business plan is a fairly accomplished one, it complies with the verification keys, it is realistic and meets the essential criteria and it has a high score, then funding will be obtained (CILV Consulting, 2018) [13].

By financing entrepreneurship projects under the "Romania Start-Up Plus" Program, the Ministry of European Funds intends to achieve the following objectives: • over 2,000 newly created jobs; • more than 1,500 new small and medium-sized enterprises funded; • more than 10,000 people prepared in the field of entrepreneurship.

Particularities and characteristics of the Sud-Muntenia region

The analysis of the profile of the Sud-Muntenia region is particularly important in the context of implementation of the Romania Start Up Plus program (economic structure, economic disparities, competitiveness and infrastructure, innovation and financing, companies evolution and dynamics), social (population and demographic indices) as well as from the point of view of access and absorption at the European structural funds.

The region Sud-Muntenia is one of the eight development regions of Romania, constituted by the voluntary association of the counties of Argeş, Călăraţi, Dâmbovița, Giurgiu, Ialomiţa, Prahova and Teleorman, corresponding to the NUTS II statistical level, in order to achieve the objectives of the regional development policy in Romania, according to the Regional Development Law no. 151/1998 (Gherghinescu, 2012) [14].

In terms of size, the Sud-Muntenia region is ranked third in Romania (with an area of 34,453 sq. km, representing 14.45% of the total territory of Romania). Depending on the area, the 7 counties are ranked as follows: Argeş (6.826 sq. km), Teleorman (5.790 sq. km), Călăraşi (5.088 sq. km), Prahova (4.716 sq. km), Ialomiţa (4.453 sq. km) and Giurgiu (3.526 sq. km).

A strong influence on the region is the existence in its center of Romania's capital, Bucharest (without being an administrative part of it), which is part of the Bucharest-Ilfov Region and which provides a real advantage to the Sud-Muntenia region through the economic infrastructure, social and institutional life, and Otopeni International Airport.

From the point of view of the number of cities and municipalities within each county it can be mentioned as number of cities per region - 48, of which: Arges - 7, Călăraşi - 5, Dâmboviţa - 7, Giurgiu - 3, Ialomiţa - 7, Prahova - 14 and Teleorman – 5, and as municipalities in the region - 16 of which by counties: Arges - 3, Călăraşi - 2, Dâmboviţa - 2, Giurgiu - 1, Ialomiţa - 3, Prahova - 2 and Teleorman - 3.

The population of the region numbered 3,258,775 inhabitants on 1 July 2010, accounting for 15.21% of the country's population. By age category, the demographic structure of the region reflects the existence of a slow but stable population aging process, mainly due to a decrease in birth rates, but also to a negative migratory balance, population migration from urban to rural or migration to the West Europe. Analyzed by area, we can observe a high share of the rural population (58.5%), compared to the urban population (41.5%).

The northern part (consisting of the Argeş, Dâmboviţa and Prahova counties) is more economically developed, concentrating a larger number of traditional or new industrial companies. In the north are located all the university centers in the region and most research institutes, in direct connection with the predominant industries: chemistry and petrochemistry, metallurgy and machine building, food, etc.

Also, the northern area of the region has considerable tourist potential, amid favorable natural conditions and existing cultural and historical traditions. The main tourist attractions for practicing winter sports and weekend tourism are located in the north - the mountain resorts on the Prahova Valley - Bucegi Mountains, which cover the accommodation needs and have a good quality infrastructure.

The southern part (consisting of the counties of Teleorman, Giurgiu, Călăraşi and Ialomiţa) is located in the Romanian Plain and is less developed, agriculture being the dominant sector. Compared with the northern area, the southern area of the region and especially the Danube riverside area have an untapped tourism potential to date, but which can become an alternative to traditional mountain tourism through sustainable investments.

The low level of development of the southern part of the South Muntenia region is due to the process of deindustrialization suffered during the transition period of the 90s due to the collapse or restriction of the activity of state-owned enterprises, having as a consequence, the increase in the phenomenon of human migration and the decline of economic activities.

The situation of enterprises registration at the level of the counties in the region during January 1, 2017 - December 31, 2017 was the following: Argeș - 3,903 of which LLC - 1,475, individual enterprise - 322, family enterprise - 92 and SP - 613; Calarasi - 1,203 of which LLC - 690, individual enterprise - 261, family enterprise - 19 and SP - 230; Dâmboviţa - total 3.302 of which LLC - 1.603, individual enterprise - 1.028, family enterprise - 87 and SP - 581; Giurgiu - 1,293 of which LLC - 924, individual enterprise - 93, family enterprise - 13 and SP - 262; Ialomiţa - 1,033 of which LLC - 601, individual enterprise - 226, family enterprise - 15 and SP - 191; Prahova - 3,942 of which LLC - 2,837, individual enterprise - 371, family business - 31 and SP - 701 and Teleorman - 1,132 of which LLC - 726, individual enterprise - 177, family - 18 and SP - 204. So, they could see the advance of the counties in the northern part of the region (Arges, Dâmbovita and Prahova) compared to those in the south of the region, by total and by categories of established companies.

According to data from the National Statistics Institute in Romania, the turnover developments in counties in the Sud-Muntenia region for the year 2016, as well as the 2016 vs. 2008 dynamics are the following: Arges (Lei 52.1 billion, + 242.5%), Calarasi (8.3 billion Lei, + 81.2%), Dambovita (11 billion Lei, + 76.4%) , Giurgiu (RON 5.7 billion, + 28.3%), Ialomita (7.3 billion Lei, + 68%), Prahova (Lei 41.5 billion, + 108.6%) and Teleorman , Lei 6 billion, + 47.5%). That shows the counties like Argeș and Prahova are between the most powerful 10 counties in Romania in terms of turnover.

As far as financial infrastructure is concerned, the territorial banking network adequately covers the regional territory and the

range of services offered by banks includes many elements dedicated to the development of the business environment. However, the regional network of active guarantee funds is limited, with only 3 points of contact in the Sud-Muntenia region, and there is no regional representation of EximBank.

According to the White Paper on SMEs in Romania, the 2012 edition, in the Sud-Muntenia Region, 54.19% of the total of the investigated companies do not carry out annual plans and policies, 8.38% of SMEs are developing strategies on 3-5 years, and 39.39% of enterprises do not carry out planning activities. This indicates the small importance that the Romanian entrepreneurs give to planning and the major role that financial education has to play in changing this entrepreneurial attitude in the region.

Regarding the perceptions of the obstacles to accessing the structural funds by development regions in 2011, in the Sud-Muntenia region was found to be more important: insufficient information on available funds (71.82%), excessive bureaucracy and instability of regulations (62,06%) and non-permissive eligibility criteria (41,19%).

Financial education through Romania Start Up Plus program

This qualitative research resulted from the author's participation as a trainer in the entrepreneurial training in the implementation of the SUCCESS Project; Priority Axis: Jobs for All; Operation: Increasing employment by supporting enterprises with non-agricultural profile in the urban area; State Aid Scheme: Romania Start Up Plus; Applicant: University of Bucharest. The author's study looked at the SUCCESS entrepreneurial training analysis, namely difficulties encountered in the transmission and understanding of information, the impact of choosing areas of activity on the nature of expenditures and revenues associated with setting up new firms, advantages and disadvantages at local level regarding the various enterprise types chosen and others.

The implementation of the project on the entrepreneurial training side aimed to adapt the theoretical courses of financial education to the necessities of understanding the concepts and particularities of the financial field and realistically completing the business plan on this section.

The financial section of the business plan referred to the sales forecast (income sources - products/services, pricing policy and actual forecast for 24 months sales) and the cost structure (fixed assets, current assets and wages, services and other types of expenditure).

The requirements for developing the business plan on the financial side were:

- the impossibility of selling fixed assets and inventory items for three years, except for the current assets;
- drawing up additional acts after the completion of the business plan as a result of the inflationist phenomenon, which would allow the acquisition of the assets at prices different from those highlighted in the previous financial projections;
- alerting on statutory expenses or financing requirements, such as: accounting services expenses, salary costs for two employees, expenses related to the initial labor protection file (about 500 lei) and, additionally, monthly salaries for labor protection (about 150 lei / month for two employees), labor medicine expenses (150 lei / month), labor

insurance contributions (2,25% of the gross salary fund, the only contributions payment for the employer on 1 January 2018), promotion and advertising expenses, rent expenses, rents with the company's establishment, utilities / maintenance, expenses for goods / assets insurance (if necessary), cleaning expenses and fitting out the workspace;

- it is forbidden to buy fixed assets such as land or buildings;

- VAT was taken into account in the asset price to be covered by de Minimis Aid.

Within the entrepreneurial training program on the financial section of the business plan, the author revealed a whole issue related to the knowledge, understanding and application of the financial elements attached to the functioning of a real business, and, therefore, to the elaboration of the plan business. Thus, the participants in the training courses faced the following problems:

- not taking into account all expenses that may occur in the development of a business;

- the wrong dimensioning of expenses due to inaccurate determination of the needs of fixed assets and circulating assets;

- errors in investments budgeting in terms of specification the technical characteristics needed for assets, knowledge of market prices and suppliers, as well as of the ways of buying and payment that can be used; in this sense, the lack of all or part of the information regarding equipment and / or raw materials was revealed;

- impediments in understanding the cost structure as variables and fixed costs and in calculating the final complete cost per product / service;

- the difficulty of correctly understanding the characteristics of the products and services provided by the object of activity so that the quantities produced, the specific unit of measure and the related prices can be correctly quantified;

- difficulty in establishing units of measure for certain businesses profiled on the provision of services (cleaning, beauty and wellness, fashion etc.);

- misunderstanding the impossibility of introducing in the patrimony the old fixed assets by buying (not supported by the non-reimbursable European funds) or as a new capital contribution (real estate, warehouse or production facilities, means of transport); here was the risk of losing these assets as a result of the insolvency of the future business;

- difficulties in understanding important financial and accounting notions: fixed assets versus current assets, income versus profit, profit versus liquidity balance, depreciation, provision etc .;

- inconvenience in understanding the advantages of using operational leasing in contrast to the actual purchase of fixed assets (manifested by desire to be the owner of the assets);

- difficulties in understanding the liquidity circuit in a cash cycle and their importance in the proper functioning of a business;

- difficulties in understanding the recognition as inventory items of fixed assets with a value of less than 2,500 lei, according to the law, due to accounting and fiscal differences; this results, on the one hand, from the necessity of recording in the accounts and considering the lifetime on which a fixed asset is depreciated and, on the other hand, from the necessity of calculation the tax on profit;

- intention to move to the fixed assets

rental as a result of disuse in production; that is possible, but with financial implications on the business development;

- difficulties in the proper execution of financial calculations, hence the need to create and use financial programs for calculating small and medium business investments or, better, to buy such programs.

Regarding the content of the entrepreneurial training on the financial section of the business plan, the author considers that the lack of preliminary financial calculations based on taking into account the concept of time value of money can be an impediment to the future functioning of new businesses; in this respect, it was considered acceptable in the drafting phase of the business plan only the forecasts based on the nominal monetary values and not on the discounted monetary values, highlighted over a two-year period as a result of the sustainability of the project only on 18 months.

After some time after the end of the entrepreneurial training program, some types of financial-accounting threats from the external environment started to appear and with important, if not major, implications, on the initiation of the business proposed by the written business plans. These include:

- repeated changes made by the government and legislators in respect of the Labor Code and the Tax Code and other economic regulations. Thus, one can notice: the introduction of the minimum differentiated wage depending on studies and length of service, which has an impact on the use of de Minimis Aid to cover the full financial needs;

- the impact of macroeconomic developments on the national economy, especially in terms of inflation and GDP growth, developments in monetary and credit markets;

- multiplying constraints on foreign trade markets, with reference to possible or already introduced high customs duties in international trade relations with probable effects on newly created or emerging small and medium-sized businesses.

Conclusions

The main conclusions that results from the author's study are revealed as following:

- there are multiple difficulties encountered in the transmission and understanding of information, in choosing areas of activity, regarding the nature of expenditures and revenues associated with setting up new firms, and regarding the various enterprise types chosen and others;

- a whole issue related to the knowledge, understanding and application of the financial elements attached to the functioning of a real business, and, therefore, to the elaboration of the plan business conduct to the conclusion Romanian potential entrepreneurs have lack of financial knowledge in theoretical and practical terms;

- recently, some types of threats from the external environment started to appear and with important, if not major, implications, on the initiation of the business proposed by the written business plans.

REFERENCES:

1. European Commission.. (2011). *Entrepreneurship Education: Enabling Teachers as a Critical Success Factor*. "A report on Teacher Education and Training to prepare teachers for the challenge of entrepreneurship education.". Final Report. [pdf]. European Commission: Directorate-General for Enterprise and Industry. Available at <http:www.ec.europa.eu/DocsRoom/documents/9272/ attachments/ 1/translations/ en/...> (Accessed 1 September 2018)
2. **Ursache M.** (2018). *Care sunt puncte tari si puncte slabe ale antreprenorilor romani in 2018.* [online]. Available at: <https://www.smartbill.ro/blog/trasaturile-antreprenorilor-romani> . [Accessed 15 September 2018]
3. European Commission. (2017). *SME access to finance conditions 2017 SAFE results – Romania.* [online]. Available at: <https://ec.europa.eu/docsroom/documents/26627>. {Accessed 14 September 2018]
4. **Seun, A.O**. (2017). *Exploring entrepreneurial readiness of youth and startup success components: Entrepreneurship training as a moderator*. Journal of Innovation & Knowledge 2 (2017) p.160-162
5. TNS Opinion and Social. (2012). *Flash Eurobarometer 354. Entrepreneurship in the EU and beyond.* [pdf]. European Commission: Directorate-General for Communication. Available at <http://ec.europa.eu/public_opinion/flash/fl_354_en.pdf> (Accessed 2 September 2018)
6. **Hisrich R.D.** (2018). *Solutions to the 13 Biggest Finance, Management and Marketing Problems that Affect Entrepreneurs and Businesses.* [pdf]. US Department of State. Available at < https://photos.state.gov/libraries/vietnam/171343/PDF/Solutions%20to%20the%2013 %20Biggest%20Finance_%20Management%20and%20Marketing%20Problems.pdf> (Accessed 3 September 2018)
7. **Boldureanu, G**. (2015). *Entrepreneurship education in Romania in comparison to the European Union.* International Journal of Communication Research. Vol. 5. Issue 3. p176-182
8. **Pânzaru, S**. (2016). *Actuality and trends in the entrepreneurship in Romania*. Review of General Management. Vol. 24. Issue 2. p.57-65
9. **Grigore, A.M. & Mitroi, A.** (2012). *Romanian Culture and its Attitude Towards Entrepreneurship*. Review of International Comparative Management. Volume 13, Issue 1, p. 149-157
10. **Chimucheka, T. & Rungani, E.C**. (2011). *The impact of inaccessibility to bank finance and lack of financial management knowledge to small, medium and micro enterprises in Buffalo City Municipality, South Africa*. African Journal of Business Management Vol. 5(14), pp. 5509-5517, 2011. Available online at <http://www.academicjournals.org/AJBM> (Accessed 3 September 2018). DOI: 10.5897/AJBM11.806
11. Ministerul Fondurilor Europene, 2016. *„România Start-up Plus": 105 milioane de euro pentru antreprenoriat și crearea de locuri de muncă.* [online]. Available at: <http://www.fonduri-ue.ro/presa/arhiva-noutati/1963-romania-start-up-plus-105-milioane-de-euro-pentru-antreprenoriat-si-crearea-de-locuri-de-munca> [Accessed 11 October 2018]
12. Ministerul Fondurilor Europene, 2016. *Lista administratori Romania Start Up Plus.* [online]. Available at: <https://docs.google.com/spreadsheets/d/1xdGlMxUEr96HC0xA_Og08qa0VCznOILw5pMZOr9Zyfs/edit#gid=0> [Accessed 23 October 2018]
13. CILV Consulting, 2018. *Romania Start Up Plus.* [online]. Available at: <https://planul-de-afaceri.ro/plan-de-facere-finantare-fonduri-europene/romania-start-up-plus/> [Accessed 11 October 2018]
14. **Gherghinescu, O.R., Floria, A., Marian, M., Nitoi, M., Lungu, M**. (2012).
15. . ADR Sud-Muntenia - Calarasi

Cultural Dimensions Of Japanese Management

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Abstract: *TIn a period of less than two decades (mid-1950 and early 1970s) Japan succeeded in achieving high economic growth rates and becoming the world's second economic superpower. Both macroeconomic and microeconomic factors, such as the Japanese government's economic policies, institutional reform, high saving rates, land reform, and high-competitive corporate management contributed to this performance. Based on a strong cultural framework, the so-called "Japanese style management" represents one of the many explanations of the Japanese economic miracle. In this sense, the Japanese culture and its influence on Japanese management have been subject of numerous researches in the last decades. The paper aims to help readers to identify and understand some of the main cultural dimensions of the Japanese management. The research methodology is based on a quantitative method.*

Keywords*:* culture, management, values, Japan

JEL Classification: M00

Introduction

At the end of the Second World War, Japan (Nippon/Nihon-koku) or "Land of the Rising Sun" was a defeated and literally destroyed country. After the war Japan lost around 25.4% of its total assets and the total output collapsed to only 30% of the prewar period (Ohno, 2006). Moreover, the Japanese economy encountered several main difficulties: unemployment, shortage in resources (e.g., oil), the balance of payments crisis and inflation (Nakamura, 1981; Hamada and Kasuya, 1992). The Allied forces occupied the country and nominated the American Army General Douglas MacArthur as the head of the General Headquarters (Ward, 1968). However, it was rather an indirect occupation as the Japanese government continued to function. On the other hand, the cooperation between the Japanese government and the Allied forces greatly facilitated the rapid recovery of the country (Stultz, 2014) and showed how a country can be "liberalized and democratized 'from above'" (Swann, 1999, p. 3). The survival of Japan until the end of the 1940s was possible thanks to the American aid (Tsunekawa and Yoshida, 2010): two thirds of its imports were covered by the United States of America (USA) (Ando, 1975).

Japan experienced four major phases in its postwar economic development: "the reconstruction period (1945-1953), the high growth period (1954-1973), the slowing-down phase (1974-1990), and the structural crisis period (1991-2011)" (Valli, 2012, p. 3). In a period of less than two decades (mid-1950 and early 1970s) Japan succeeded in achieving high economic growth rates, especially in the so-called catch-up period (Naka, 2002), and becoming the world's second economic superpower (Yamamura, 1976; Ito, 1996; Yoshioka and Kawasaki, 2016). Both macroeconomic and microeconomic factors, such as the Japanese government's economic policies, institutional reform, high saving rates, land reform, and high-competitive corporate management contributed to this performance. The excessive competition among the Japanese companies and the high economic growth rate acted together as driving forces of the postwar Japanese economy (Miyazaki, 1967). The astonishing economic success of postwar Japan constituted a remarkable example for many countries around the world.

Based on a strong cultural framework, the so-called "Japanese style management" represents one of the many explanations of the Japanese economic miracle. In this sense, the Japanese culture and its influence on Japanese management have been subject of numerous researches in the last decades (Firkola, 2006; Muhammad, 2009; Haghirian, 2016). The paper aims to help readers to identify and understand some of the main cultural dimensions of the Japanese management. The rest of the paper is organized as follows. The literature review is displayed in the next section. The following sections deal with the research methodology, results and discussion. The paper ends with conclusions.

Literature review

The concept of culture is treated in various ways and has different meanings for researchers. It is defined as:

- "a pattern of shared basic assumptions, invented, discovered, or developed by a given group, as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to

be considered valid, and, therefore, is to be taught to new members of the group as the correct way to perceive, think, and feel in relation to those problems" (Schein, 1991, p. 313).

- "a shared system of meanings" (Trompenaars, 1993, p. 13).
- "a complex set of learned, shared, and interrelated behavioural patterns which distinguish one society from another" (Harrison et al., 2000, p. 103).
- "a socially transmitted or socially constructed constellation consisting of such things as practices, competencies, ideas, schemas, symbols, values, norms, institutions, goals, constitutive rules, artifacts, and modifications of the physical environment" (Fiske, 2002, p. 85).
- "a metaphor, a lens for examining organizational life" (Martin, 2002, p. 4).
- "the collective programming of the mind that distinguishes the members of one group or category of people from others" (Hofstede et al., 2010, p. 6).

Thus, culture represents a complex and multidimensional concept. There are several characteristics of culture as follows (Schein, 1991; Mead, 2000; Spencer-Oatey, 2012):

- Culture has many dimensions (e.g., individualism and collectivism, uncertainty avoidance).
- Culture implies conceptual sharing, patterning and dynamics (involves gradual change).
- Culture is learned and transmitted from one generation to another across the time.
- Culture embodies specific values.
- Culture promotes stability.
- Culture is associated with social groups, refers to all aspects of group life and affects its behaviour.
- Culture is not only a social construct but also an individual construct.
- Culture evolves over time.

Since the emergence of the Japanese economic miracle, the cultural dimensions of the Japanese management have constituted a topic of interest for researchers and practitioners worldwide. In this respect, two main theories about the origin of Japanese management were launched as follows (Firkola, 2006):

- One theory asserts that the Japanese management has developed since the end of World War II. Therefore, the historical and cultural roots are of little importance.
- The other theory argues that Confucianism, Buddhism and Bushido represent some of the possible factors that should be taken into account.

"Tidiness, timekeeping, efficiency, following through, and attention to detail are deeply ingrained traits of the business culture" (Picken, 2007, p. xii) as these values are essential to the Japanese culture. Also, seniority, conservatism, masculinity, collectivism, harmony and hierarchy are other important cultural elements that were found within the Japanese management (Namiki and Sethi, 1988; Schwartz, 2006; Firkola, 2006; Hofstede et al., 2010; Yoshikawa et al., 2018). Therefore, culture constitutes a key component of the background of Japanese management.

Research methodology

In order to reach the aims of the paper the authors used a quantitative method. The literature review was based on a comprehensive search into numerous sources of secondary data, such as articles and books from the domains of management, culture, history

and economics. The research was carried on in the Central University Library where several electronic databases (e.g., Springer, Wiley Online Library, BRILL) were located and consulted.

Results and discussion

In the 1950s and 1960s the majority of Japanese managers learned about the Western management practices. After the economic boom, things changed: Western managers showed their enthusiasm towards learning more about Japanese management practices (Fukuda, 1988). On their turn, researchers have begun to extensively study the Japanese-style management since 1970s when the "Land of the Rising Sun" succeeded in becoming the world's second largest economy. Some of them concluded that (Pascale and Athos, 1982; Abegglen and Stalk Jr., 1992; Lewis, 2000; Jackson and Tomioka, 2004; Firkola, 2009):

- lifetime employment, seniority and enterprise unions represent the three pillars of Japanese management;
- the Japanese culture asserts its invisible presence in all Japanese companies and emphasized the influence of time, space, language, religion (Table no. 1) and of its long history of isolation.

Table no. 1. The Japanese religions: a short characterization

Shintoism	Confucianism	Buddhism
• the roots of a tree, imbedded in the very heart of Japanese people	• the trunk and branches; • politics, morality, and education	• the flowers; • religious feelings bloom as flowers

Source: Davies, 2016, p. 39

As any culture, the Japanese culture is defined through its values, beliefs and norms. From a multidimensional perspective the Japanese culture is seen as follows (Trompenaars, 1993; Lawrence and Yeh, 1994; Javidan and House, 2001; Hofstede et al., 2010):

- Hierarchical nature: rigid in rank, blurred in authority and responsibility.
- Individualism versus collectivism: highly collective, based on group harmony.
- Obligation towards society: high.
- Attitudes toward work: working hard with patience and perseverance.
- Time orientation: future oriented.
- Approach to problem solving: holistic.
- View of human nature: intrinsically good.
- Assertiveness: low level.
- Performance-oriented: medium oriented.
- Uncertainty avoidance: high level.
- Power distance: medium.
- Masculinity: high level.
- Belief in individual decision: low level.
- Decision-making: collectivist.
- Exhibiting emotions: low level.
- Emotional orientation in relationships: neutral.
- Controlling nature: low level.
- Inner/outer directedness: outer-directed culture.

Numerous values specific to Japanese culture are embedded in the Japanese management. Among them it is worth to enumerate the following:

- Amae (feeling of dependence);
- Bushido (the way of the warrior);
- Chih (wisdom);
- Gi (integrity);
- Jen (humanism);
- Jin (benevolence);
- Li (loyalty, faithfulness);
- Makoto (honesty);
- Meiyo (honor);
- Ninjo (human feelings);
- Rei (respect);
- Ringisei (decision making by consensus);
- Uji (extended family or clan);
- Yuuki (courage);
- Wa (harmony).

Most of these above values are to be found in the Japanese companies. The Japanese management example imposes the acceptance of the belief that culture is a key element of management across the world.

Conclusions

The paper shows that culture represents a complex and multidimensional concept. Also, it demonstrates that there are several important cultural dimensions of the Japanese management such as integrity and harmony.

The importance of the paper resides in emphasizing the strong relationship between culture and management in Japan. Further researches might take into account other values specific to Japan culture in influencing the Japanese management.

REFERENCES:

1. **Abegglen, J. C. and Stalk Jr., G**., 1992. *Kaisha- The Japanese Corporation.* 7th edition. Tokyo: Charles E. Tuttle Company.
2. **Ando, Y.,** ed., 1975. *Outline of Economic History of Modern Japan*. Tokyo: University of Tokyo Press.
3. **Davies, R. J.**, 2016. *Japanese Culture: The Religious and Philosophical Foundations*. Tokyo: Tuttle Publishing.
4. **Firkola, P.**, 2006. *Japanese management practices past and present*. Economic Journal of Hokkaido University, 35, pp. 115-130.
5. **Firkola, P.**, 2009. *Human Resources Management Practices within Japanese Companies*. In: Newlands, D. J. and Hooper, M. J., eds., 2009. The Global Business Handbook: The Eight Dimensions of International Management. Farnham: Gower Publishing Limited, Ch. 14, pp. 227-242.
6. **Fiske, A. P**., 2002. *Using individualism and collectivism to compare cultures—A critique of the validity and measurement of the constructs: Comment on Oyserman et al.* (2002). Psychological Bulletin, 128, pp. 78–88.
7. **Fukuda, K. J.**, 1988. *Japanese-Style Management Transferred: The Experience of East Asia*. London: Routledge.
8. **Haghirian, P.**, 2016. *Japanese management in the twentieth century.* In: Haghirian, P., ed., 2016. Routledge Handbook of Japanese Business and Management. Abingdon and New York: Routledge, Ch. 2, pp. 21-32.
9. **Hamada, K. and Kasuya, M**., 1992. *The Reconstruction and Stabilization of the Postwar Japanese Economy: Possible Lessons for Eastern Europe?* Center Discussion Paper, No. 672, Yale University, Economic Growth Center, pp. 1-54. [online] Available at: <https://www.econstor.eu/bitstream/10419/160594/1/cdp672.pdf > [Accessed 02 October 2018].

10. Harrison, A. L., Dalkiran, A. and Elsey, E., 2000. International Business: Global Competition from a European Perspective. Oxford: Oxford University Press.
11. Hofstede, G., Hofstede, G. J. and Minkow, M., 2010. Cultures and Organizations: Software of the Mind. 3rd edition. New York: McGraw Hill.
12. Ito, T., 1996. Japan and the Asian Economies: A "Miracle" in Transition. Brookings Paper on Economic Activity, 2, pp. 205-272. [online] Available at: <https://core.ac.uk/download/pdf/6340492.pdf> [Accessed 08 October 2018].
13. Jackson, K. and Tomioka, M., 2004. The Changing Face of Japanese Management. London: Routledge.
14. Javidan, M. and House, R. J., 2001. Cultural acumen for the global manager: Lessons from project GLOBE. Organizational Dynamics, 29(4), pp. 289-305.
15. Lawrence, J. J. and Yeh, R.-s., 1994. The influence of Mexican culture on the use of Japanese manufacturing techniques in Mexico. Management International Review, 34(1), pp. 49-66.
16. Lewis, R. D., 2000. When Cultures Collide: Managing Successfully Across Cultures. 3rd edition. London: Nicholas Brealey Publishing.
17. Martin, J., 2002. Organizational Culture: Mapping the Terrain. Thousand Oaks: Sage Publications.
18. Mead, R., 2000. International Management: Cross-Cultural Dimensions. 2nd edition. Oxford: Blackwell Publishers Ltd.
19. Miyazaki, Y, 1967. Rapid economic growth in post-war Japan- With special references to "excessive competition" and the formation of "Keiretsu". The Developing Economies, 5(2), pp. 329-350.
20. Muhammad, B., 2009. Post-War Economy. In: Haghirian, P., ed., 2009. J-Management: Fresh Perspectives on the Japanese Firm in the 21st Century. New York: iUniverse, Inc., Ch. 2, pp. 4-28.
21. Naka, S., 2002. The postwar Japanese political economy in an exchange perspective. The Review of Austrian Economics, 15(2/3), pp. 175-197.
22. Nakamura, T., 1981. The Postwar Japanese Economy. Tokyo: University of Tokyo Press.
23. Namiki, N. and Sethi, S. P., 1988. Japan. In: Nath, R., ed., 1988. Comparative Management: A Regional View. Pensacola: Ballinger Publishing Co., Ch. 3, pp. 55-96.
24. Ohno, K., 2006. The Economic Development of Japan: The Path Traveled by Japan as a Developing Country. Tokyo: National Graduate Institute for Policy Studies. [online] Available at: <http://www.grips.ac.jp/forum/pdf06/EDJ.pdf> [Accessed 05 October 2018].
25. Pascale, R. T. and Athos, A. G., 1982. The Art of Japanese Management. London: Penguin Books.
26. Picken, S. D. B., 2007. The A to Z of Japanese Business. Lanham: Scarecrow Press.
27. Schein, E. H., 1991. What is Culture? In: Godwyn, M. and Gittell, J. H., eds., 2012. Sociology of Organizations: Structures and Relationships. Los Angeles: SAGE, Ch. 29, pp. 311-314.
28. Schwartz, S. H., 2006. A theory of cultural value orientations: Explication and applications. Comparative Sociology, 5(2-3), pp. 137-182.
29. Spencer-Oatey, H., 2012. What is culture? A compilation of quotations. GlobalPAD Core Concepts, pp. 1-21. [online] Available at: https://warwick.ac.uk/fac/soc/al/globalpad/openhouse/ interculturalskills/global_pad_-_what_is_culture.pdf [Accessed 13 October 2018].
30. Stultz, J. C., 2014. Planning for MacArthur: Harnessing the complexity of postwar Japan. School of Advanced Military Studies, United States Army Command and General Staff College, Fort Leavenworth,

AY 2014-01. [online] Available at: <https://apps.dtic.mil/dtic/tr/fulltext/u2/a612190.pdf> [Accessed 09 October 2018].

31. Swann, S., 1999. Democratization and the Evasion of War Responsibility: The Allied Occupations of Japan and the Emperor. Discussion Paper, No.IS/99/370, pp. 1-47. [online] Available at: <http://eprints.lse.ac.uk/6902/1/Reflections_on_the_Allied_Occupation_of_Japan.pdf> [Accessed 09 October 2018].
32. Trompenaars, F., 1993. Riding the Waves of Culture: Understanding Cultural Diversity in Business. London: Nicholas Brealey Publishing.
33. Tsunekawa, K. and Yoshida, K., 2010. State-building, economic development, and democracy: The Japanese experience. World Development Report 2011, April 2010, pp. 1-21. [online] Available at: <https://www.jica.go.jp/jica-ri/publication/other/jrft3q0000002ajw-att/WDR_2011_Case_Note_Japanese_State_Building.pdf> [Accessed 04 October 2018].
34. Valli, V., 2012. Growth and crisis in the Japanese economy. Department of Economics "S. Cognetti de Martiis", Working Paper no. 07/2012, pp. 1-26. [online] Available at: <https://www.researchgate.net/publication/254455835_Growth_and_crisis_in_the_Japanese_economy> [Accessed 03 October 2018].
35. Ward, R. E., 1968. The American Occupation of Japan: Political Retrospect. In: Goodman, G. K., ed., 1968. The American Occupation of Japan: A Retrospective View. Center for East Asian Studies, The University of Kansas, Ch. 1, pp. 1-10. [online] Available at: <https://kuscholarworks.ku.edu/bitstream/handle/1808/1189/CEAS.1968.n2.pdf;sequence=1> [Accessed 04 October 2018].
36. Yamamura, K., 1976. A Retrospect and Prospect on the Postwar Japanese Economy. Explorations in Economic Research, 3 (2) (Conference on International Trade, Finance, and Development of Pacific Basin Countries, December 6-7, 1974), pp. 253-287. [online] Available at: <https://www.nber.org/chapters/c9921.pdf> [Accessed 11 October 2018].
37. Yoshikawa, K., Kokubo, A. and Wu, C.-H., 2018. A cultural perspective on gender inequity in STEM: the Japanese context. Industrial and Organizational Psychology, 11(2). pp. 301-309.
38. Yoshioka, S. and Kawasaki, H., 2016. Japan's high-growth postwar period: The role of economic plans. ESRI Research Note No. 27, pp. 1-94. [online] Available at: <http://www.esri.go.jp/jp/archive/e_rnote/e_rnote030/e_rnote027.pdf> [Accessed 10 October 2018].
39. Local Level in Romania, Executive and Legislature at Local Level: Structures and interrelations in countries of South-East Europe, Friedrich Ebert Stiftung, Zagreb;

Leadership And Organisational Strategies At Country Level. The Destiny Of A Nation

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Abstract: *Starting from the micro-social level and ending with the macro-social one, organising everything around us on the grounds of sound strategies and of a leadership-based approach represents a key element for achieving the established goals, irrespective of their nature, in terms of maximum possible efficiency. If when dealing with an organisation, be it lucrative or non-profit, small or large as size, adopting the right strategies and choosing the best leadership methods and techniques might look reasonably accessible, when coming about conceiving and applying the same to large aggregates, as it is the national economy, things could turn into real challenges very difficult to deal with. For these reasons, the present paper tries to render the most important issues to consider from such perspective, treating them both under the form of an experience-based analysis and under the one of proposed directions to follow for getting better results for all stakeholders.*

Keywords*:* leadership, organisational strategies, macroeconomic framework, fiscal-budgetary and monetary policies, welfare

JEL Classification: E52, E61, E62, E63

1. Introduction

The present paper is about how entitled entities, by virtue of the authority with which they are vested, do act and should act at macro-social level, from an economic perspective, the consequences thereof being analysed in terms of related efficiency and arising welfare.

When talking about organisational strategies and leadership, we indubitably think of well organised, open minds, scientifically basing their decisions, therefore avoiding the rule-of-thumb approach (Taylor, 1911), having the necessary knowledge, experience, innate and acquired abilities allowing the same to spread positive energy around them and to gather such positive energy from others, succeeding, thus, not necessarily based on the official position, but on the power of personal example, in synergically reaching the established goals in the most desirable way.

If we conceive this from a macroeconomic point of view, we should take into account the large impact factors and the huge implications that both the micro and macro-environment generate at such level. The strategies to adopt involve a very deep preliminary research, with the construction of multiple scenarios, considering miscellaneous, more or less expected possible outcomes, as, given the extensive framework considered, any corrections, if necessary, involve high waiting times and, sometimes, fail in being successful. Discussing in terms of leadership at macro-level, we talk about overall vision, about strategic planning in the medium to long run, rather than on simply tactical approaches (Gosling, Jones and Sutherland, 2012), therefore exceeding the narrow microeconomic-specific pattern.

All these aspects are dealt with herein, considering the specific instruments being at the disposal of the entitled macro-organisms in order to act into the right direction – the fiscal and budgetary, respectively the monetary policies.

Save for this brief introduction, representing the first section of the paper, the work is structured as follows: Literature review, encountered in section 2, Research methodology, revealed by section 3, Results and discussions, emerging from section 5 and, finally, Conclusions, in section 5, synthesising the main findings of the present research.

2. Literature review

The aspects related to organisational strategies and leadership have been largely approached in the international literature, most of them being, however, mainly oriented towards the microeconomic side (Bennis and Townsend, 2005, Blanchard, 2007, Rainey, 2010, Stack, 2013, Miller, 2014, Fuller, 2015, Sparrow, 2016 and many others), and slowly less towards the mezzoeconomic one (Poirier, 1999, Aspatore, Inc., 2005 or Gammelgaard and Dörrenbächer, 2013), the macroeconomic one (Calleo and Morgenstern, 1990, Gray and McPherson, 2000, Campbell and Fuhr, 2004 or Han and Heith, 2005) or the world-related one (Bens, 2006, Braveboy-Wagner, 2016 or Majgaard et al., 2016).

While the mezzoeconomic perspective is indirectly related to the macroeconomic one, the decisions made at the level of a nation impacting on that country branches or sectors of activity, and the world perspective is deemed, usually, to be too complex to be subject to this type of study, the macroeconomic-related discussions in terms of leadership and organisational strategies should be

carefully considered, this representing basic guidelines for making adequate steps for achieving the welfare of citizens.

Issues previously approached, from various angles, by the author of the present paper (Hudea, 2016a, 2016b), the best organisational strategies and the true leadership should be always identified and taken into consideration and optimum decisions should be made in the matter, as the success, in a highly competitive environment, is achieved only under such circumstances.

By extrapolating the sixth management principle (Fayol, 1916), stating that the individual interest should be subordinated to the common interest, we understand that adequate individual actions and reactions contribute to positive effects at higher levels: at internal level, microeconomic level and mezzoeconomic level and further on, at macroeconomic level, with subsequent backward favourable impact.

A manager-leader endeavouring to do everything possible in outperforming, in leading his/her subordinates towards the achievement of organisational goals would position himself/herself very well in that organisation but he/she would also succeed in positioning very well that company on the market. If most of the managers-leaders in a branch of activity would do the same, that branch would outstand before other branches at national level. Going even forward, if all managers-leaders acting in all fields of activities would take the most appropriate steps in terms of efficiency, we would assist to beneficial results at national level, and all this would be translated into increased welfare of all citizens of that country. We should not forget, however, that the decision organisms at macroeconomic level are the ones having at their disposals the mechanisms necessary for stimulating, via adequate decisions, the proper functioning of the previously mentioned lower stratified levels, as well as for bringing back the arising corresponding benefits to the population.

Analysing the larger, national context, the idea of leadership, doubled by the one of official authority, allowing not only for the choice of the most appropriate acting strategies and for the related decision-making process, but also for the implementation of such decisions with effects at country level, can be perceived from various perspectives.

We can talk about presidents-leaders (Han and Heith, 2005) (having, in some countries, more prerogatives than in others), like Franklin Delano Roosevelt, one of the most remarkable personalities of the 20th century, Ronald Wilson Reagan, having turned the United States of America into a world super-power, or Nelson Mandela, the first democratically elected president of South Africa, a symbol of the fight for peace, social justice and general welfare for his nation or we can see such leaders from their position of prime-ministers, such as Winston Spencer Churchill, having strongly developed the British foreign affairs, or Margaret Hilda Roberts Thatcher, having transformed the domestic economy into an entrepreneurial one (Hudea, 2016a), or, we could go even further and look at some sub-national, local government decision entities, such as governors (Gray and McPherson, 2000), acting in a decentralisation-based democratic society (Campbell and Fuhr, 2004).

But, what interests us the most as for the current paper, is to analyse, separately, in terms of leadership and organisational strategies (Calleo and Morgenstern, 1990), the

main two organisms with the most powerful impact on the well-being of a nation, normally acting at the level of country via specific means, namely the fiscal and budgetary organism (the Government) and the monetary one (the Central Bank). As these two "institutions" are able, by their actions, in smoothly exceeding the unfavourable periods and in stimulating the economic growth (Hudea, 2016b), they can be considered engines for making an economy operate properly not only in the short run, but also on long term.

3. Research methodology

The present paper was conceived having in mind a theoretical approach, the research being focused upon testing the existing theory, however based on pieces of information provided by real life, therefore turning into a deductive type of study, partly descriptive, partly analytical.

As reflected by the literature dedicated to the analysis of macroeconomic policies, mainly by the post-last economic crisis one, their adoption, in a counter-cyclical manner, at national level, either by the Government (Weeks, 2009 or Jha, 2010) or by the National Bank (N'Diaye, 2009 or Jackson et al., 2016), should be considered (Sutherland et al, 2010 or Francis et al., 2017).

Acting counter-cyclically means that the entitled authorities should adopt expansionary macroeconomic policies in economic growth declining moments and restrictive macroeconomic policies in boom economic times.

In order to understand the way such policies operate, we should look backwards, to the well-known basic IS-LM model (Hick, 1937), with its equilibrium relationships, on the market of goods and services (1) and on the money market (4):

$$Y^S = Y^D \quad (1)$$

$$Y^D = C + I + G \quad (2)$$

$$Y^S = \frac{1}{1 - c(1-t)} \times \left[C_0 + cTR + I_0 - gi + G\right] \quad (3)$$

$$M^S = M^D \quad (4)$$

$$\frac{M^D}{P} = L_0 + kY^S - hi \quad (5)$$

$$Y^S* = \frac{1}{1 - c(1-t) + \frac{gk}{h}} \times \left[\begin{array}{c} C_0 + cTR + I_0 + \\ + G - \frac{g}{h}\left(L_0 - \frac{M^S}{P}\right) \end{array}\right] \quad (6)$$

$$i* = \frac{1}{h}\left[L_0 + kY^S* - \frac{M^S}{P}\right] \quad (7)$$

where YD and YS reflect the aggregate demand and the aggregate supply, in monetary expression, MD and MS, the money demand and the money supply, C and I, the overall private consumption and private investment level, G, the overall public consumption and investment level, c, the marginal propensity to consumption, t, the tax rate, C0 and I0, the autonomous consumption and investment level, TR, the transfer level, g, the sensitivity of investment to the interest rate, P, the price index, L0, the autonomous money demand, k, the sensitivity of the real monetary mass to the aggregate income, h, the sensitivity of the real monetary mass to the interest rate, i, the interest rate, and YS* and i*, the gross domestic product, respectively the interest rate on the simultaneous equilibration of the market of goods and services and of the monetary market

4. Results and discussions

By analysing the Investment-Savings related basic equations (1), (2) and (3), rendered in the previous section, it arises that, in critical economic times, when the aggregate demand should be pushed forward so as to lay the bases for stimulating the aggregate supply, the steps to take are related to the increase of both private and public consumption and investment levels.

Thus, the Government, via its fiscal and budgetary interventions, is able to influence, directly as well as indirectly, the positive adjustment of the aggregate demand.

If the decision-makers concerned decide on working in an ascendant way over the budgetary side, more exactly on the level of public spending, the G element of equation (2) would directly determine a higher value of the aggregate demand, but the latter will also increase, indirectly, based on the chain reactions of private consumption and investment, as augmented public wages stand for upper levels of consumption, while augmented public investment creates the premises, on one hand, for the need for more labour force, with beneficial effects in terms of both increase of financial means to use for consumption or investment purposes and decrease of the unemployment rate, and, on the other hand, for stimulating private investment as well (supported, for instance, by a more adequate infrastructure).

The same favourable effects may be achieved when working over the fiscal side, either by increasing the level of transfers or by decreasing the level of taxes, as both of them are supportive for the population as concerns the related private consumption and investment and, after all, for the general welfare.

If the stimulation of consumption is, definitely important, especially in the short run, the encouragement of investment is the basis for medium to long run sustainable economic growth, given the above-specified reasons (more labour force effectively involved in production, with its related consequences), but also given that, this way, the premises for increasing the aggregate supply, that is the gross domestic product level, are set.

When separately talking in terms of monetary authority decisions, related to the monetary policy control, the same positive adjustment of the aggregate demand can be obtained, however the path for doing so being different (see the Preference Liquidity-Money Supply related basic equations (4) and (5)).

The demand for money, perceived in its real form, therefore adjusted with the price index, depends, besides its autonomous component, on the production activity arising financial available funds (the gross domestic product), as well as on the interest rate. Upon this latter indicator, the Central Bank can act in a decreasing way, therefore setting lower level for the monetary policy interest rate and, as a consequence thereof, influencing in an ascendant way the monetary mass volume on the domestic market.

The monetary authority has also other means at its disposal for augmenting the monetary mass volume, such as the open market operations, reflecting the acquisition of governmental bonds or treasury bills, or the decrease of the reserve fund level, namely of the level of deposits that commercial banks should keep at the National Bank (Hudea, 2017).

The above-depicted aspects represent countercyclical macroeconomic policies to

be adopted in case of economic unfavourable times, such measures ranging, otherwise, up to the full opposite direction, in economic overheated, boom cases.

Up to this point, everything seems quite simple as concerns the appropriate organisational strategies to be enforced, true leadership consisting, in such circumstances, just in the knowledge, ability and dedication of the empowered entities in correctly selecting the instruments necessary for implementing the same. But it just looks like being simple.

Beside the political corruption, the growing underground economy and many other undesirable elements, we discuss also about second stage arising effects, about intricate cases, about unexpected situations or unanticipated reactions of the population, among others.

Considering that the aggregate demand is finally oriented upwards, as desired, by corresponding macroeconomic policies, this would generate not only an ascendant movement of the aggregate supply, accompanied by an increase of the demand for labour force, but also an inflationist process, the producers being in the position of taking advantage from the former. This would be beneficial for the society, via the decreased unemployment level (Philip curve), but would limit, on the other hand, the initially generated growth of the overall demand, unless the level of wages is adjusted accordingly (Hudea, 2017).

It should be mentioned that, for simplicity of explications, the model approached herein is a closed economy specific one, therefore not considering the trade balance. In real life, however, the aggregate demand is just in part covered by the domestic production, the remainder being satisfied based on imports, as most economies are open to the exterior, therefore being involved in import-export relationships, resulting in shortage or surplus of net export, component included in the Mundell-Fleming model (Mundell, 1963). In such circumstances, more the increased aggregate demand is satisfied with imported products, lower the decrease of the unemployment rate, the inflationist process not being properly balanced with the latter.

More than that, the IS-LM model construed in this paper was analysed, up to here, from the perspective of the macroeconomic measures to be assumed by the related authorities, separately for the market of goods and services and for the monetary market, without taking into account the simultaneous equilibration of the two (see equations (6) and (7)).

When dealing with such simultaneity, the arising issues may be so complicated and difficult to deal with even for the most well-intentioned and high-performance leaders, as an expansionary monetary policy, for instance, dedicated to the decrease, directly or indirectly, of the interest rate, can be counterbalanced by an expansionary fiscal and budgetary policy meant for increasing, after all, the aggregate supply, because, as rendered in equilibrium equation (7), the gross domestic product has a positive impact, via the GDP to interest rate real monetary mass sensitivity coefficient ratio, on the interest rate level. On the other hand, the same expansionary monetary policy can generate an undesired increase of the level of prices, via the augmentation of the monetary mass volume, with negative effects especially in cases where such money is not adequately coverable via the domestic production, the latter even diminishing in some cases, subject to the lowering of the purchasing power

resulting in a drop down of aggregate demand. However, as revealed by equation (6), the real money supply is directly correlated with the gross domestic product, via the ratio between the sensitivity of investment and the sensitivity of the real monetary mass to the interest rate, this misleading sometimes the decision organisms by virtue of the various divergent effects.

Analysing things from a different perspective, we could sate, overall, that adopting both an expansionary fiscal and budgetary policy and an expansionary monetary policy would favour the increase of the gross domestic product, the evolution of the interest rate level being dependent on the intensity of the related policies and on the general acting framework (Hudea, 2017).

Also, the unpredictability can be an extremely important factor, sometimes significantly distorting the outcomes of the decisions made and applied.

The rational expectations of people relating, for instance, to a future increase of the level of taxes of any kind, given, let's say, some signals on the market in the matter (maybe just false information), would make those individuals rush into augmenting the demand in the short run, therefore putting unnecessary pressure on the level of prices. In such circumstances inadequate or untimely adopted policies might delay a desirable state of affairs.

5. Conclusions

The paper is mainly conceived as a picture of some basic organisational strategies to be considered, at macroeconomic level, by the entitled organisms, in circumstances expressly related to declining economic contexts, the leader-like characteristics of the latter being tremendously important for a successful achievement of the related objectives.

The basic idea is that being a great specialist in the matter is not always enough is making things work properly, especially when dealing with high aggregates that should be managed based on the simultaneous actions of various forces involved and subject to multiples threats coming from the internal and external market, the tight and convergent cooperation with various entities, more or less powerful, reflecting, certainly, a very wise approach of issues.

Therefore, appropriate organisational strategies and true leadership go hand in hand, but this should be doubled by the support of all stakeholders, so as to allow the entities vested with authority to make pertinent decisions from a privileged position, taking advantage of as many opportunities as possible, among the arising ones, and avoiding, to a maximum extent, all undesirable situations.

Clearly, reaching a high level of performance is not easy at all to accomplish, especially at macro level, but given the generated positive chain effects for the public welfare, the efforts would not be in vain.

REFERENCES:

1. Aspatore, Inc. (2005). Consulting Leadership Strategies : Industry Leaders on the New Benchmarks for Success, Series: Inside de Minds, Boston: Aspatore Books
2. Bennis, W.G., Townsend, R. (2005). Reinventing Leadership: Strategies to empower the organization, New York: Harper Collins
3. Bens, I. (2006). Facilitating to Lead!: Leadership Strategies for a Networked World, San Francisco: Jossey-Bass Gosling, J, Jones, S and Sutherland, I. (2012). Key Concepts in Leadership, Sage Publications Ltd.
4. Braveboy-Wagner, J. (2016). Diplomatic Strategies of Nations in the Global South: the Search for Leadership, New York: Palgrave Macmillan US
5. Calleo, D.P. and Morgenstern, C. (1990). Recasting Europe's Economies: National Strategies in the 1980s, Lanham: University Press of America
6. Campbell, T. and Fuhr, H. (2004). Leadership and Innovation in Subnational Government: Case Studies from Latin America, Washington, DC: World Bank
7. Fayol, H. (1916). Administration industrielle et générale. Translated by Coubrough, J.A., Industrial and General Administration, London: Sir Isaac Pitman & Sons
8. Francis, N, Jackson, L.E. and Owyang, M.T. (2017). Countercyclical Policy and the Speed of Recovery After Recessions, St. Louis Federal Reserve Bank, Working Paper 2013-032E
9. Fuller, C.P. (2015). Organizational Culture : Leadership Strategies, Outcomes and Effectiveness, New York: Nova Science Publishers, Inc.
10. Gamelgaard, J. and Dörrenbächer, C. (2013). The Global Brewery Industry: Markets, Strategies and Rivalries, Cheltenham: Edward Elgar Publishing
11. Gray, C., McPherson, M. (2000). The Leadership Factor in African Policy Reform and Growth, African Economic Policy, Discussion Paper No. 29
12. Jackson, L.E., Owyang, M.T. and Soques, D. (2016). Nonliniarities, Smoothing and Countercyclical Monetary Policy, St. Louis Federal Reserve Bank, Working Paper 2016-008A
13. Jha, S. (2010). Effectiveness of Countercyclical Fiscal Policy: Time-series Evidence from Developing Asia, Asian Development Bank, Working Paper No. 211
14. Han, L.C. and Heith, D.J. (2005). In the Public Domain: Presidents and Challenges of Public Leadership, SUNY Series on Presidency: Albany: State University of New York Press
15. Hicks, J.R. (1937). Mr. Keynes and the "Classics"; A Suggested Interpretation, Econometrica, 5(2), pp. 147-159
16. Hudea, O.S. (2016a). The Power of Political Leaders in Stimulating Economic Growth¸ Manager Journal, 23, pp. 46-54
17. Hudea, O.S. (2016b). Impact Mechanisms of True Leadership on Economic Welfare¸ Manager Journal, 24, pp. 162-172
18. Hudea, O.S. (2017). A Short Way to Macroeconomics Core, 2nd Edition, Bucharest: Pro Universitaria
19. Majgaard, K., Nielsen, J.C.R., Quinn, B and Raine J.W. (2016). Developing Public Managers for a Changing World, Series: Critical Perspectives on International Public Sector, vol.5, Emerald Group Publishing Limited

20. Miller, A. (2014). Redefining Operational Excellence : New Strategies for Maximizing Performance and Profits across the Organization, New York: Amacom
21. Mundell, R. A. (1963). Capital mobility and stabilization policy under fixed and flexible exchange rates, Canadian Journal of Economic and Political Science 29 (4), pp. 475-485
22. N'Diaye, P. (2009). Countercyclical Macro Prudential Policies in a Supporting Role to Monetary Policy, International Monetary Fund, Asia and Pacific Department, Working Paper No. 09/257
23. Poirier, C.C. (1999). Supply Chain Strategies: from Optimization to Industry Leadership, FDX Corp.
24. Rainey, D.L. (2010). Enterprise-Wide Strategic Management : Achieving Sustainable Success Through Leadership, Strategies, and Value Creation, Cambridge UK, New York: Cambridge University Press
25. Sparrow, J. (2016). The Culture Builders: Leadership Strategies for Employee Performance, London: Routledge
26. Stack, L. (2013). Leadership Strategies for the Four Stages of Change: Moving your employees to commitment, Highlands Rach, Colo.: Productivity Pro, Inc.
27. Sutherland, D., Hoeller, P., Égert, B and Röhn, O. (2010). Counter-cyclical Economic Policy, OECD Economics Department Working Paper No. 760
28. Taylor, F.W. (1911). The Principles of Scientific Management, Harper & Brothers
29. Weeks, J. (2009). The Global Financial Crisis and Countercyclical Fiscal Policy, African Caucus: Global Crisis and Africa - Responses, Lessons Learnt and the Way Forward, Centre for Development Policy & Research, School of Oriental & African Studies, University of London

Modern Trends In Tourist Entrepreneurship

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Abstract*: The authors aim in this paper to identify the possibilities to improve the tourist activity by measuring indicators. Recent research on highlighting the influence of tourism on the economies, societies and culture of various countries stipulate that it should be encouraged, even if there are notices some cases which result in the exploitation by rich countries, issuing tourist resources of the receiving countries, thus claiming a review of the terms to perform the tourist exchanges.*

At the level of the economy of a country, the effects of tourism are analyzed in general, starting from their connection with the objectives of the entire economic system. The interdependence between the development of the tourism and the economic growth is natural as it triggers the demand for goods and services which would not have been produced or delivered otherwise.

Keywords*:* entrepreneurship, tourism

The Importance of the Tourist Entrepreneurship in the Economic Growth

Recent research on highlighting the influence of the tourism on the economies, societies and cultures from various countries stipulate that it has to be encouraged if there are also found some situation resulting in the exploitation by rich countries, issuing tourist resources from the receiving countries, thus claiming a review of the terms to perform the tourist exchanges.

At the level of the economy of a country, the effects of the tourism are generally analyzed starting from their connection with the objectives of the entire economic system. The interdependence between the tourism development and the economic growth is natural as it triggers the demand for goods and service which would not have been produced or delivered otherwise.

The indirect effects of the economic results of some fields of economic activity derived from tourism development consist in:

- Growth of the commercial field;
- Development of the food industry for delivering food products and drinks according to the tourist demand;
- Involvement of the service delivery for the tourists' benefit (urban and interurban transport, post service, internet, telephone, telegraph, hair dressers' parlors, hair styling, repair-maintenance service etc.);
- Development of the sectors providing for the investments of the technical-material premises for tourism;
- Involvement of the sectors providing the general and tourist infrastructure arrangements;
- The cultural-artistic and sports events frequented by tourists coming occasionally or especially for the event.

Tourism development is directly connected to the increase of the living level due to the logical and complete change of the labor force.

The influence of the international tourism on the balance sheet for external payment is deciding, as the commercial balance as constitutive element of it, creates a tight connection between the international tourism on one hand and the commercial balance and the balance of external payments on the other one, by their active or passive balance which set the final balance for the external payments of the involved countries. The increase of influx from the international tourism influences its value size in the external payments balance of various countries. The international tourism finds a comparison element in the volume of the foreign trade from the following considerations:

- The way of origin of the foreign currency in tourism is the equivalent for the amounts resulting from merchandise exports;
- There are countries where the main source of export is the international tourism;
- In most of the countries, there isn't a clear distinction between the international tourism and the traditional export industries considering the importance of this branch in the economies of many countries.

The multiplying effect is not an exclusive attribute of the tourism, as this exists in any chain of companies or persons depending on a producing or service-delivery unit and which blend in various degrees and sectors of the national economy.

In case of the economic effect of the tourism on the overall or regional economic growth, there are three important multiplying effects resulting from the specialized literature:

- The multiplying effect of the tourism;
- The multiplying effect of tourism investments;
- The multiplying effect of foreign trade.

The money cashed from the tourists can be spent few times being distributed in various fields of the national economy, each time generating new incomes until the final withdrawal of the respective funds from the circulation by imports payment, treasury or other reasons.

As higher the number of economic sector benefiting from the visitors' money, as more important are the effects on the gross national product.

In the contemporary times, tourism represents one of the main forms of direct connection between people at national and international levels, and the entrepreneurs in this field have to take seriously into account of it. The tourism satisfy the thirst for information and knowledge, the curiosity, this human treat of the visitors providing more possibilities for knowledge of the objective reality than those offered by publications, prints, and internet.

The tourist entrepreneurship must consider that tourism expresses itself as an active mean of education, of raising the training level, people's level of culture and civilization, favoring the exchange of ideas, stimulating the development of the cultural and intellectual horizon, of inter-relation between the locals and the visitor, thus influencing the dimensions and the structure of the consume.

Tourism contributes in the capitalization of the universal culture, to the preservation and further transmittal of the traditions, customs from various geographic areas.

Trend of the worldwide tourism

The entrepreneur in tourism has to take into account the predictions on the future of tourism, which are based on the exploitation of the various factors' influence, anticipating a continuous growth of this economic sector.

This is caused by the existence and the globalization of some premises, namely:

- Accentuated increase of the worldwide population and, implicitly, the growth of those travelling nationally or internationally;
- The economic growth and the implications on the incomes;
- The extension of the spare time assigned for holidays and weekends;
- Development of the transport means;
- Occurrence of new emerging markets;
- Occurrence of the issues related to environmental deterioration and natural resources.

The overall tourist activity is characterized synthetically by the indicator of global world circulation, evaluated in the specialized literature, to over 5 billion of travels. Within it, according to the statistics, 70-85% represents domestic tourism and 25-30% international tourism.

Predictions on the evolution of the tourism in Romania

Preoccupations of organization of the tourist activity in Romania are known since the 19th century. They belonged to the private initiative of some associations, organizations, societies or clubs. Their concern moved towards the capitalization of the tourist potential of our country and especially to the development of the tourism in the area of the Romanian shore of the Black Sea; their

actions concretized in the attraction of some social categories with material possibilities, in sponsoring the arrangement of constructions of the material tourist facilities on the seaside.

Their activity was carried out before the first world war and between the two world wars; they concretized especially in the building of chalets, road constructions, markings, organization of ski classes, the publication of monographs, almanacs, guides, maps, etc.

During the communist regime, the Romanian tourism knows a new impetus, by involving our country in the international circuit of reception; thus, it appears again the need for coordinating the tourist activity on national level.

The economic analysts assess the real sizes of the tourist movement depending on the available sources of collecting statistic information. However, currently, the tourist statistics do not prove themselves sufficiently comprehensive as they do not comprise reporting on the self, semi-organized tourism, of the rural tourism, and no concrete image on the multiplying effect of the tourism on the visited resorts.

The tourist demand at the level of our country is influenced by the changes occurring in the Romanian society during the last years. The decentralization, the economic restructuring, the inflation, the beginnings of the privatization, the new initiatives in the field of the tourist legislation, the re-directing of the group and individual interests, the new directions of aggressive promotion of the Romanian tourism on the domestic market, and especially of the international one had sensitive and chaotic effects on the social-economic mechanisms and on the individual behaviors.

It is found out that the tourism on the seaside and the mountain tourism represent major points of the Romanian tourism in the last years, being on the top of the first places on the evolution of the destinations.

The value, the diversity, the political, socio-economic transformations led to an evolution of the Romanian and foreign tourists. Thus, analyzing the dynamics of the tourist flows in Romania, their continuous growth is highlighted; in 2017, the number of accommodated tourists represented 77.2% compared to the tourists' number of 2016, of which foreign tourists represented 22.8% compared to foreign tourists accommodated in 2016. In addition, the value of the indicator of the number of overnights increased to 7.1% in 2017.

Modern forms of entrepreneurship in tourism

The statistic reports prove that the tourism development influences largely the economic growth of a country and represents an intensification of the local entrepreneurship. Therefore, the entrepreneurship encouragement and the development of sustainable tourism enjoy both political and funding support.

As for the tourism, the entrepreneurship takes innovative and much diversified forms. The development of the tourist activity relies on its turning into a more attractive one for the potential domestic and international visitors. Certain tourist destinations have been re-vitalized by local entrepreneurs who capitalized the natural and cultural-popular inheritance of the respective area.

The transit tourism made the entrepreneurs to develop accommodation and

restaurants units, as well as tourist stopovers on the main traffic and transport ways. This kind of tourists have the possibility to pleasantly spend some hours by visiting the main tourist sites or the entertainment areas in the towns and their surroundings.

The health or spa tourism developed especially in areas with rest and therapy resorts. The entrepreneurship for this tourist sector gave value to natural resources which are capitalized by the development and diversification of all industrial branches related to balneo-spa resorts or to the thermal beach facilities of local interest.

The tourism for rest, recreation and entertainment represents another sector where the entrepreneurship had impetus during the last years. Thus, weekend or longer stays are offered depending on guests' demand.

The cultural and historic tourism capitalizes the cultural sights of some towns or areas, and the entrepreneurs involved in this economic field consider it more seriously. Adjacent to this type of tourism, the museums and other cultural institutions (theaters, cinemas, philharmonics, etc.) also develop.

Tightly connected to this type of tourism, there is the tourism of conferences. This sector is constantly developing. More often national and international conferences, symposia, scientific sessions are organized, and this field is also under tourist entrepreneurship consideration, which developed constantly the offer by offering thematic trips, visits of the host-towns, and of the surroundings of them.

Considering the process of economic development taking place lately, by the penetration of the foreign capital in the Romanian business environment, the tourism for business constitutes itself as a market segment in full progress. This materializes into various actions organized by the companies in the area such as fairs, exhibits, seminars, symposia, trainings, while trips, visits, performances, wine tasting or local cooking are organized for the spare time.

The freedom of religious events brought along the development of the religious tourism or pilgrimage. Lately, the tourist entrepreneurship did not avoid this field, the offer being extremely diversified. It is taken under consideration the visiting of some cult sites (churches or monasteries) full of history both at domestic and international levels. Between the religious events, regardless on the cult, an important place from tourist point of view is taken by the yearly organization of pilgrimage at the main cult sites of Romania, and abroad. For international tourism, there are more and more often offers on pilgrimage to Jerusalem and Holy Country, for Greece and other destinations, as well.

There is in full development the scientific tourism. For those interested in studying the nature, Romania gives them the possibility to know the domestic flora, having many protected species in its natural protected areas, reservations and dendrology parks.

The rural tourism or agri-tourism is an excellent development sector for the local entrepreneurs in particular. For those loving the nature, enjoying the silence and the ecological food, the possibility to spend few days in the rural environment in one of the numerous agri-tourist pensions, established during the last years, is given. In addition, there, the tourists have also to possibility to participate actively in the perpetuation of the local traditions, inherited from our ancestors. Especially the foreign tourists are delighted to take part in manual milking of the cattle,

in manual woodcutting or to other activities specific for a traditional household.

The sport tourism is developed in the mountain area in particular, where there are arranged sports facilities meant especially for the winter sports fan. However, recently, there is also the possibility to perform extreme water sports and other sports as well. In this field, the entrepreneurs try to present an increasingly diversified offer in order to satisfy the more demanding claims.

The wish to escape at least for a few hours from the daily stress led to the extension of the demand on mountain tourism and hiking. In the same time, the entrepreneurs saw the profit for such actions, increasingly developing this tourist branch. Thus, there are offers for each and everybody, from the easiest hikes to some very demanding. This way, the most picturesque tourist areas of Romania are capitalized.

The tourism entrepreneurs also target the tourism for hunting and fishing by providing more destinations for them. For the hunting lovers, there is given the possibility to practice such hunting activities, also providing accommodation and meals facilities in the units of the Counties Forestry Departments. Fishing can be practiced on both rivers and lakes in Romania. In addition, a sector in full-development is the arrangement of private units for professional and amateur fishing, having all the necessary utilities.

On one hand, there are identified in Romania numerous elements which could be comprised in the tourist holding as sites with various possibilities as level of interest and of capitalization and, on the other hand, with an infrastructure in rehabilitation process on the main directions.

The ecological impact of the tourist entrepreneurship

The tourist entrepreneurship, just like that from all economic fields, has to take into account the impact of the human activity on the environment and to try to reduce almost to zero the negative effects.

There are to be appreciated the advances at international level towards greater ecological and social responsibility. Part of these changes is due to the development of tourists' ecological awareness, as they look for tourist products enjoying the quality of being environmentally friendly.

Most changes in the tourist industry are motivated by financial reasons, but also by ecological concerns. The deterioration of the environmental quality draws in the leaving of the destination by a great number of tourists having direct implications on the acquired profits of the tourist entrepreneurship. On the other hand, ecologically "cleaner" destinations are more attractive and lead to the increase of the profit resulting from tourist activities.

Numerous entrepreneurs in tourism, and tourist agencies, hotels, etc., as well as investors in other fields, perform actions by which they try to restructure their management and marketing ecologically, by reducing the consume of water, power, by the waste management etc. The concerns on the reduction of the negative impact of the environment on the transport sub-system have a very complex character. The impact of the transport activity may be assessed as a unitary whole causing pollution, the destruction of the ozone layer or the acid rains or individually for each of the transport categories. This is the reason why, ecological transport alternatives are offered especially in the field

of rural tourism (such as tourists' transport with animals).

The impact on the relief must be seen: as attractive resource and as material substrate of all activities related to tourism practicing. As result, the anthropic intervention on the material support is to produce changes of its structure, but with consequences on its attractive dowery.

As for the relief, the forms of the anthropic impact of tourist origin aims for the way and the place of the accommodation facilities, the type of access ways, and the action of arranging the tourist objectives and area.

The climate impact of the tourism. The weather is an element of the natural framework which the tourism is constantly facing, even if not appealing to own recreational valences. The climate created the general "atmosphere" for performing the recreational act. Thus, it results an inter-relation between man and weather, which receives real consistency in the context of high visitors' numbers whose movement or concentration disturbs or influences the evolution of the topographic-climatic parameters.

The tourism and hydrography are in tight relation, depending on each other. The totality of the hydrographic elements is comprised in the tourist resources. The river networks, lakes, karst springs, waterfalls, the water in the seas and oceans in the adjacent area, the ground waters (thermal or mineral) possess major recreational and curative dowry, intensely exploited by various forms of tourism. The impact of tourism on the hydrosphere is expressed in two main directions on the quantitative aspect when the excessive anthropic action leads to exhausting and deterioration of the resources, while the second aims for the quantitative side.

Flora, fauna and tourism. The development of the recreational activities affects the integrity and the composition of the flora. Thus, in the process of building the access way and premises with recreational purpose, the vegetation of the stripes and zones under arrangements is to be removed entirely. Often, the wood is used as construction material for the chalets or tourist villas.

Notable damages are brought to the integrity of the vegetal carpet by the practice of un-organized tourism. The tourists' overloading some wooden parts, mostly those from pre-town area, leads to the damaging of the respective vegetal associations.

The game and fishing fauna is an attractive resource causing the practicing of two types of recreational tourism: hunting and fishing. How the fauna resources of a territory are managed influences the balance or imbalance relations in its holding.

The tourists' action on the soil layer is expressed with increased intensity, the soil interposing itself between the relief the shapes of which are usually covered by it, and the human being. Building the elements of infrastructure removes from the circuit of the natural evolution the soils from more and more extended areas.

The analysis of the negative component of the tourism ecological impact leads to highlighting some solutions, which are to be applied by the tourist entrepreneurship for limiting or stopping the harmful consequences, namely:

- Ergonomic arrangement of the tourist objectives or areas in order to assign to their exploitation an organized and controlled character;
- Diversification of the tourist offer in

order to regularize the flows and to reduce the overloading;

- Corrections brought to the strategy of tourist exploitation where the trend of the instant gain by any cost has to be re-considered; the social and ecological sides of tourism must prevail compared to the economic ones;
- The intensification of the process of tourist education, with precise revealing of the consequences for destructive acts for nature and society;
- Legal measures for protection of the attractive dowry and of the adjacent landscape.

Conclusions.

The need for knowledge on the entrepreneurship importance in tourism and, implicitly in adjacent industries, became a topic of study which is more and more approached lately since the service suppliers have to focus their entrepreneurial skills and techniques in order to be able to respond to the tourist consumers' more and more diversified demands and expectations.

The tourism represents one of the most dynamic sectors of the contemporary economy and, for many countries or areas of the world, it represents one of the main factors of progress and prosperity. A process of diversification of the delivered products and destinations accompanies the development of the tourism, expressed by the increase in the tourists' number and of the cashing in the field.

Triggering large masses of persons, with their temporary displacement from one region to another, inevitably, the tourism has an impact of first offer on the eco-geosphere.

REFERENCES:

1. **Albu, Ruxandra** (2007), *Evaluarea potențialului turistic în perspectiva dezvoltării turistice durabile*. Braşov: Editura Univ. Transilvania.
2. **Ardelean, A**. (2001), *Ocrotirea naturii în județul Arad*. Arad: Editura Gutenberg.
3. **Oskar S. Baron** (2010), *Economia Turismului,* Bucureşti, Editura Expert.
4. **Cocean, P., Dezsi,** Şt. (2009), *Geografia turismului*. Cluj-Napoca: Presa universitară clujeană.
5. **Dumescu F. ş.a.** (2003) *Studiul potențialului touristic al municipiului Arad şi împrejurimi*. în Studia Universitatis "Vasile Goldiş" Arad, nr.13/2003.
6. **Glăvan, V**. (2000), *Turismul în România*, Bucureşti: Editura Economică.
7. **Iojă, C.I.** (2013) *Metode de cercetare şi evaluare a stării mediului.* Bucureşti: Editura Etnologică.
8. **Pădurean, M.A., Nica, A.M., Nistoreanu, P.**, (2014), *Antreprenoriatul în turism şi finanțarea prin intermediul programului operațional regional*, în „Amfiteatru Economic" (Bucureşti), nr. 17(38), pp. 183-197.
9. **Țuțuianu, O**. (2006) *Evaluarea şi raportarea performanței de mediu – indicatorii de mediu*. Bucureşti: Editura Agir.

The perspectives of management in the era of networking expansion

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Abstract: *As a process, management aims at achieving the organisational objectives by using limited resources and by guiding systems within the context of a dynamic environment. Trends of global market evolution have influenced the emergence and development of clusters which are very well structured and, at the level of companies, they have encouraged the development of individual and professional networking processes. Networking thus becomes a resource that represents an opportunity offering potential organisational benefits, while being a process in which management principles and organisational communication elements are found.*

Keywords*:* networking, management, branding, planning.

1. Foreword

The article aims to emphasize the way networking facilitates the development of certain environments (e.g. society, business environment), using methods and management techniques. Companies are increasingly putting forward the networking in synergistic combination with marketing plans. There are concerns for analysing professional networking and social networking. It is evident that the information that employees identify in social networking can be used with surprising results in professional networking. To present some of the benefits that networking brings to the company it is desirable to define the theoretical components of the term.

The networking is represented by two directions at the theoretical level. The first direction is defined by Feneuille (1990) and Huey (1994) and is considering the correlation and structuring of the managerial matrices with the purpose of creating performing organisations, and the second direction refers to the way in which, at the level of small and medium organisations, are created the links between individuals who have common goals in achieving the objectives, and in which leaders are noticed within the processes and activities developed within the network, catalysing the activity of the team. Both perspectives have as a common concern the way in which hierarchical structures and the types of authority, which occur within them, are coagulated. In such networks one can identify power sources and the way in which they can be turned to advantage for increasing the performance of the organisation. Thus, networking can be beneficial in detecting personal and professional opportunities (Wolff and Moser, 2009). The revolution in Information and Communication Technologies (ICT) has created a huge space for developing the business environment by contributing with the help of the facilities it offers to consolidate the management. If initially there were some concerns about the facilities offered by the online environment (Baker, 1994), subsequently there were analyses from which it results that access to resources and optimization of existing flows in the organisation (Forret and Gougherty, 2004) are supported by quality of networking.

In fact, networking, through its components, can contribute to the success of any project starting from planning a structure, from allocating resources, from identifying possible opportunities and evaluating managerial performance (Toma and Marinescu, 2018). To set up a successful brand (personal or organisational), following networking the following are needed: knowledge, experiences and skills. The components specific to management are also used in networking and constitute the basis of any project; we refer here to the setting of targets, planning a structure, identifying possible opportunities and materializing the management control and assessment function.

2. Literature review

In literature, networking is a common theme because, in the cause and effect relation it is the generator of competitive advantages being influenced by social and economic contexts. For many small and medium-sized enterprises one of the advantages that networking is offering is the correct identification of opportunities and possible partnerships that facilitate the penetration of companies onto larger markets (Valkokari and Neda, 2007).

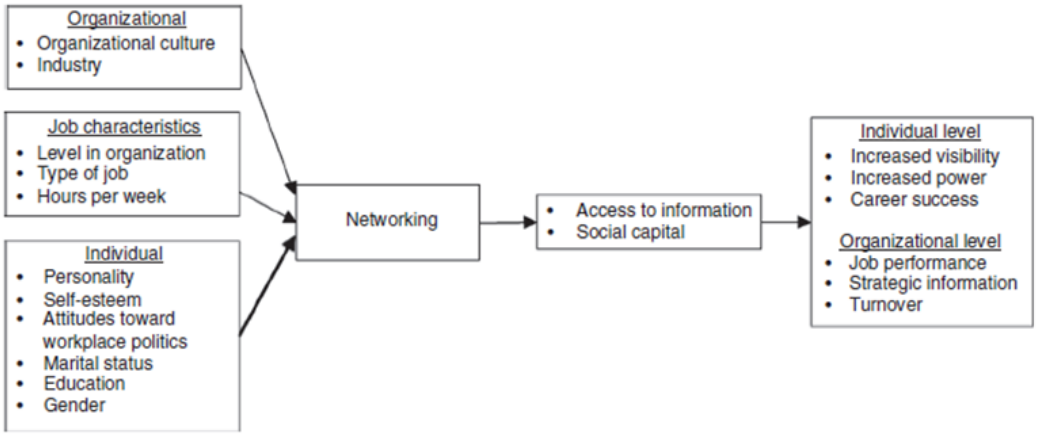
Some authors assert that networks can lead to the obtaining of professional knowledge required by companies. This advantage is decisive including for small companies that have clearly defined specializations. There is a tendency for some companies to grow without consolidating and their expansion or development can create great difficulties in achieving quality products and services (Dennis, 2000). In such companies, their vision is difficult to follow and the mission does not always provide relevant data on objectives and partnerships can burden relations with the market. This observation can lead us to the idea that a small company with a highly developed networking can be much more flexible and adapted to various situations, while large companies may have difficulty adapting to the market.

The rapid accumulation of knowledge at the level of an organization, but also an efficient networking management can offer great advantages if they are correctly used, but also great disadvantages, if their use does not relate to the priorities that the company has in its relationship with the environment (Wills, 1994). The strategies of the company are constantly reported to the quality of knowledge, but they must consider the quantity and quality of resources and business opportunities. Starting from the aforementioned idea, Valkokari and Neda conclude that:

"For SMEs, knowledge and network management can be difficult tasks as their characteristics often hamper the leverage of the resources and competencies needed within the organization in order to yield new opportunities. Knowledge sharing is essential for the functioning of business networks as it influences the co-operation and outcomes that firms are able to achieve. Without the capacity for sharing knowledge, no strategic SME network can utilize the specialized resources and capabilities of its members, nor can it create new knowledge about future business opportunities."

For example, we can highlight the way in which an organisation creates a networking plan starting from an input-output model. Within this model three types of elements are mentioned: organisational (organisational, culture, industry), the characteristics of the job (level of organisation, type of job, and hours of week) and individual (personality, self-esteem, attitudes towards workplace politics, marital status, education, and gender). These three inputs facilitate access to information and contribute to the realization and consolidation of the social capital. In turn, they facilitate the individual level increase (increased visibility, increased power, career success) and organisational level (job performance, strategic information, turnover). A well-accomplished networking plan can help to obtain valuable strategic information, to increase turnover and last but not least to improve performance in the workplace (Toma et. al, 2016).

Title: Theoretical model of the antecedents, mechanisms, and outcomes of networking



Source: Gibson et. al, 2014

3. Milestones in the evolution of networking

We can tell that, in fact, networking has existed since human civilization existed. On the way, the conditions have changed because the evolution of technologies has provided unexpected facilities in connection with the speed and quality of the information transmitted. The ICT Revolution has created unexpected modalities to improve inter-human relations. In fact, this evolution encouraged the creation of a large number of events contributing to the increase of their density for predetermined periods of time. One of the first effective forms of networking in ICT era was blogging. It starts from a very simple idea and materializes itself through the interactive mode of communication with the reader and by the way of "story update" facilitates the easy transmission of knowledge, but also of the moods, and thus the authors become the real managers because they manage resources with the purpose of achieving clearly defined results(Harris and Rae, 2011). Thus, a blog becomes a means of creating added value using elements of branding and marketing elements as well. The creator of the blog can assess the effort and the level of performance through the economic outcomes it achieves.

In fact, in this case there is also a demand and offer relation because, on this virtual market, a "producer" and "a consumer" meet. The platform becomes the environment in which individuals interact, thus contributing to the exchange of information, but also to the creation of an essential economic component: the profit.

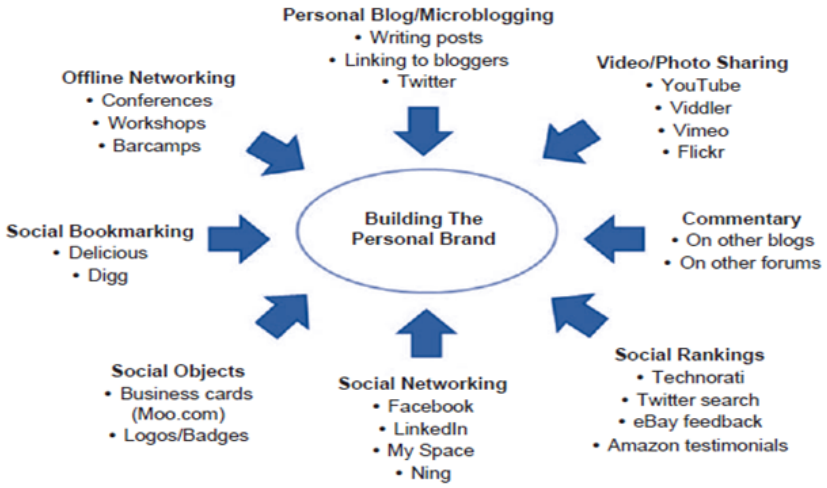
Professional networks appear as a necessity because they provide professionals from various fields the possibility to inform themselves about their professional skills on the one hand, but also in connection with the necessities of the companies related to the needs of specialists on the other hand. Currently, LinkedIn has 590 million members from over 200 countries and territories, 30 million companies and over 20 million job

ads available in real time (according to the statistics provided by LinkedIn itself).

Another way of socialization is represented by Twitter that offers images and short messages (limited to a fixed number of characters) to create a flow focused on information transmitted efficiently and easily comprehensible. The platform also offers the possibility of shaping a business through the presence on the platform, starting from the facilities it offers to create an online marketing space at the level of the profile created.

Networks become a component of reality and platforms are genuine nodes at the level of these networks with the help of which even personal brands are being put forward. Management becomes an "organisational condition" in which personal brands can manifest themselves. Starting from the personal brand one can develop the professional brand. We must distinguish between the content of a brand and the image of a brand because, very often, there is a risk that we do not notice the actual ratio between image and content. That is why there are a multitude of means by which we can build our personal brand as a form, as well as content. In the following figure the elements that can contribute to the construction of a brand are mentioned.

Title: Personal branding



Source: Harris and Rae, 2011

Thus, networking offers unlimited possibilities in connection with the use of information, but also creates unavoidable risks related to validating the quality of information transmitted through various channels. Decision making requires the use of quality filters regarding the accuracy of information because, in such conditions, time is the most important restrictive element.

4. Conclusions

Networking becomes an environment full of opportunities for organisations and

individuals. Access to information is more accessible through networking and the relationships created between individuals can provide highly needed partnerships for the organisational environment in the future. People can act or react in very varied organisational environments. In many situations, they cannot identify the opportunities that arise because of the large amount of information on the one hand (the amount of information is very large), and, on the other hand, many of them do not have the skills to seize the tricks that appear in the real economic environments.

As a process, networking requires a managerial style which is suitable for obtaining a competitive advantage at organisational level. The internal organisational network becomes part of many other networks that interfere with various information, varied interests, and multiple competencies. The society of the future, increasingly difficult to decipher, forces individuals, but also companies, to establish an optimal ratio between action and reaction as a form by which the individual and the organisation are forces to have initiative on the one hand, and, on the other hand to answer to the environmental stimuli.

REFERENCES:

1. **Baker, W.E**. (1994), *Networking Smart: How to Build Relationships for Personal and Organizational Success,* McGraw-Hill, New York, NY.
2. **Dennis, C.** (2000) *"Networking for marketing advantage"*, Management Decision, Vol. 38 Issue: 4, pp.287-292.
3. **Feneuille, S**. (1990), *"A Network Organisation to meet the Challenges of Complexity"*, European Management Journal, Vol. 8 No. 3, pp. 296-301.
4. **Forret, M.L., Dougherty, T.W**. (2004), *"Networking behaviors and career outcomes: differences for men and women?",* Journal of Organizational Behavior, Vol. 25 No. 3, pp. 419-437.
5. **Gibson, C., Hardy III, J.H.,Buckley, M.R**. (2014) *"Understanding the role of networking in organizations"*, Career Development International, Vol. 19 Issue: 2, pp.146-161.
6. **Huey, J**. (1994), *"The New Post-heroic Leadership",* Fortune, 21 February, pp. 42-50.
7. **Harris, L., Rae, A.** (2011) *"Building a personal brand through social networking"*, Journal of Business Strategy, Vol. 32 Issue: 5, pp.14-21.
8. **Toma, S.G., Marinescu, P**. (2018) *"Business excellence models: a comparison",* Proceedings of the International Conference on Business Excellence 2018, Volume 12: Issue 1, May 2018, pp. 966–974.
9. **Toma, S.G., Marinescu, P., Grădinaru, C.** (2016) *"Strategic planning and strategic thinking"*, Revista Economică, Volume 68, Issue 5.
10. **Valkokari, K., Helander, N**. (2007) *"Knowledge management in different types of strategic SME networks"*, Management Research News, Vol. 30 Issue: 8, pp.597-608.
11. **Wills, G**.(1994) *"Networking and Its Leadership Processes"*, Leadership & Organization Development Journal, Vol. 15 Issue: 7, pp.19-27.
12. **Wolff, H.G., Moser, K**. (2009), *"Effects of networking on career success: a longitudinal study",* Journal of Applied Psychology, Vol. 94 No. 1, pp. 196-206.

Organizational Development through Change

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Abstract: *Organizational development is influenced by the continuous improvement of the processes and activities carried out and, implicitly, of the results obtained. In this context, this paper offers a perspective on organizational development by exposing some reference approaches from specialized literature, highlighting the "management system – strategy – organizational culture" trinomial. Given that organizational development is achieved through the design and implementation of some change projects, several representative models of organizational change developed over time by recognized personalities in the field of change management are presented and analyzed. Based on the analysis of these models, the paper proposes a model of organizational change applicable to companies operating in the contemporary business environment.*

Keywords*:* organization, organizational development, change, change model.

JEL Classification: M10, M21, L21, O21.

1. Introduction

The activity of a company is subsumed to meet the objectives foreseen by the managerial team. The fulfillment of the objectives entails moving the organization into another stage of its evolution, therefore getting to a new stage on the organizational development scale.

Developing a product or service, introducing new technology, remodeling certain organizational culture components (behaviors, attitudes, values, good practices) are organizational development vectors.

The redesign of a company's decision-making system, organizational structure, information system, and the operationalization of management methods and techniques are strategic options for organizational development and increased competitiveness.

Organizational development is in fact reflected in gaining competitive advantages over competing companies on the market.

In the current business environment, the sustainability of organizational development is conditioned by the functionality of the management system, the creative-innovative potential of human resources, the technologies used, the strategy and the organizational culture.

Organizational development involves improving individual, group and organizational performance, as well as increasing internal capabilities to effectively respond to changes in the environment [13].

Organizational development is concerned with facilitating change in organizations through a holistic and humanistic approach that puts people at the heart of the process [14].

Organizational development involves designing and implementing changes that favor the efficient use of resources and, implicitly, increased competitiveness [4].

2. Literature review

In specialized literature there are many approaches to organizational development.

W. Burke believes that "organizational development is a planned process of change in the culture of the organization, using behavioral theory and practice" [5]. In R. Beckhard's conception, "organizational development is a planned effort, coordinated by top-level management, that targets the whole organization and is aimed at increasing efficiency, improving working conditions by means of intervening in processes, using the knowledge of behavioral science" [1].

M. Beer outlines a more comprehensive approach to organizational development, structured on three coordinates [2]:

- improving the consistency between the procedural and structural components of the organizational system, strategy, human resources and organizational culture;
- designing and implementing creative solutions that will increase the efficiency of organizational activities;
- developing the organization's capacity to renew through change projects.

Professor Eugen Burdus considers that organizational development brings together a set of actions to design and implement measures to improve the components of the management system (strategy, structure, information system, decision-making system, methodological system) aimed at increasing the performance and competitiveness of the organization [4].

Organizational development is a long-term process, initiated and carried out by the organization's leadership, focusing on "organizational learning" and problem-solving aspects, integrating all organizational dimensions and having as its "engine" the group efforts of the members of the organization [11].

In our view, organizational development is a complex process that takes place throughout a company's lifespan, has as a fundamental objective the increase of competitiveness and is structured on three main dimensions: (Figure 1):

- a powerful management system (functional, flexible and efficient);
- competitive strategy (ensuring the sustainable integration of the organization in the business environment);
- evolutionary (change-oriented) organizational culture.

Figure 1. Organizational development trinomial

The presented approaches lead to a few important conclusions regarding the organizational development, namely:

- it is an integrated and continuous process, aimed at increasing the performance of a company;
- involves planning and coordination from the company's senior management;
- is focused on the "management system - strategy - organizational culture" trinomial;
- it has to permanently streamline the managerial and executive processes of the organization;
- puts a major focus on organizational learning;
- involves creative solutions to solve the problems faced by the organization;
- aims at increasing the company's renewal capacity through successive projects of change.

3. Organizational change models

In this section of the paper, we present a few representative models of organizational change developed over time.

K. Lewin has developed a model of organizational change structured in three stages [9]:

- defrosting;
- change;
- refreezing.

It starts from an initial state (existence) of the organization that is no longer in line with the evolution of the main variables that

define the interior and exterior organizational environment. At this organizational stage, there is an increasing need to make changes.

Managers have an essential role in preparing the first stage of the process, communicating through clear, concise and consistent messages the necessity and opportunity of change.

In the defrosting stage, most employees are aware that the change is absolutely necessary and will have a favorable impact both on the organization as a whole and on each one of them, with added motivation, satisfaction and performance. At this stage, the managerial team will develop and present employees a coherent and realistic program of measures to get their support. It is important to note that the success of the proposed change project is determined by the credibility of the company's management.

The change stage involves the operationalization of the measures contained in the action plan elaborated and presented by the managerial team in the first stage. It is natural to start with smaller changes, which are most likely to be successful in implementation, to give employees confidence and an additional motivational incentive to make further significant changes.

In the third stage of the model, the refreezing phase, the stabilization of the new systems, structures, methods and working procedures introduced into the organization takes place. Practically, it is a step to consolidate the changes made and the organization's entry into a new stage of evolution.

Another representative model in the specialized literature is R. Beckhard's model, which starts from the hypothesis that the probability of success of a change is a function of several variables, namely [1]:

$$C = \frac{f\,(A, B, D)}{X}$$

where:

C = the probability of success of the change;

A = level of dissatisfaction within the organization;

B = the clarity of the definition of the desired future state;

D = the first practical step towards the desired future state;

X = resistance to change.

The model developed by Beckhard includes four main stages:

- initiating the study and attracting the staff (based on managers' decision to engage in a process of change, to allocate the necessary resources and to engage human resources in this process);
- diagnosis (aimed at identifying the problems faced by the organization, as well as its strengths in relation to the environment);
- planning and implementing changes (consists of drawing up a plan of measures aiming at the transition to a new state of the organization's system, as well as creating the conditions for their implementation);
- assessing and institutionalizing change (aimed at highlighting the effects of applied measures and the conditions that need to be created for the organization to maintain itself in the newly created state for as long as possible).

J. Kotter's model is based on a proactive approach to change and includes eight stages [8, 12]:

- convincing staff about the need for change (informing employees about the existing situation and the options for change);

• training the Reformers Team (made up of people with professional, managerial and leadership skills);

• defining the perspectives and formulating the strategy (outlining a vision appropriate to the future of the organization and the new strategic orientation);

• communicating the perspectives and strategy (sending clear and consistent messages during the sessions);

• involving the human resources in the process of change (the use of motivational tools by managers);

• obtaining quick results (validating the necessity and opportunity of change);

• strengthening the results achieved and continuing the process of implementing changes (increasing employees' confidence by attracting new people in the change process, while promoting those who have achieved success);

• institutionalizing changes in organizational culture (completing the process of change by integrating the changes implemented into the company's culture).

An interesting, pragmatic and comprehensive model is that of Richard Newton, structured in nine steps [10]:

◎ defining basic elements (source and impact of change, approaches to change);

◎ understanding the objectives (defining and testing the objectives, establishing the gap between the existing and the desired situation);

◎ creating a team of change (creating a team core, a network of agents and supporters of change, initial evaluation of support and opposition);

◎ planning for change (setting the main activities, delimiting the stages of the change process, cost planning and identification of benefits);

◎ assessing the capacity for change (the impact of change, identifying the capacity gap, improving the change plan);

◎ implementing the change (application of the plan of measures, monitoring process, problem solving, solution testing);

◎ strengthening the change (supporting human resources to adapt to the new situation, recognizing mistakes, completing the process);

◎ managing the communication (identifying communication managers, creating key messages, assigning communication responsibilities, implementing the communication plan);

◎ preparing for future changes (reviewing the change, identifying possible future changes, preparing for continual change).

4. Analysis and discussion

We will carry out a correlation analysis of the presented organizational change models, highlighting the main advantages, but also their limits.

Thus, Lewin's model only has three stages, is simple and easy to apply in any organization. The main limit is that it only addresses companies in difficult situations, not those having good results and willing to improve.

R. Beckhard's model is more complex and captures in a mathematical formula the variables that influence the probability of success of a change. It is and will remain a reference model in the organizational change literature.

As model minuses, we mention the reduced role of human resources in the process

of change, as well as the approach of culture as a variable with little impact on the company's performance.

Kotter's model has as its main strengths the proactive approach to organizational change and the priority given to culture in the success of the process of change.

In our opinion, organizational culture is an important variable for organizational changes [6].

Kotter shows that change can be better implemented when it is "anchored" in culture, which implies knowing that most changes in shared norms and values will occur when the transformation process is near completion [3.7].

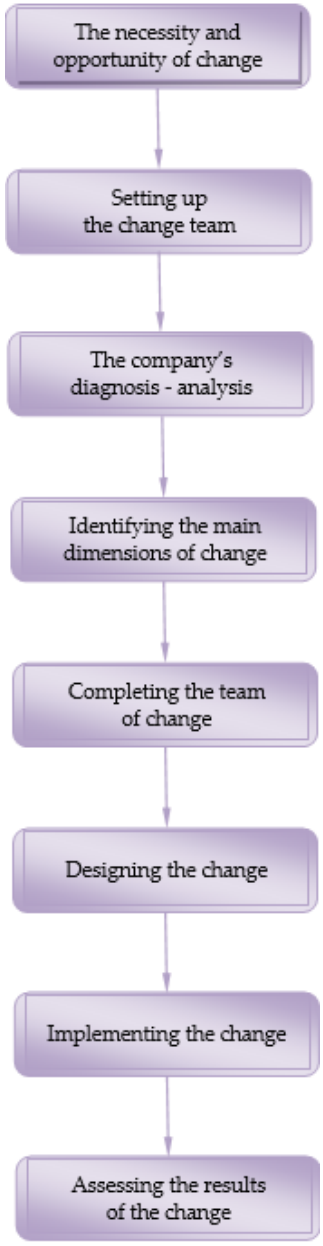
The limits of Kotter's model are oversizing the role of top-level managers as promoters of change and the lack of relevant and unitary criteria to assess the company's performance.

Richard Newton's model is laborious, well structured and has a pragmatic dimension. The structure of the model is logical, starting from basic elements (the source and impact of change), continuing with the understanding of objectives, team formation, planning, implementation and consolidation of change. A strong point of the model is that it has as its final stage "preparation for future changes". Consequently, after completing this model, the company acquires the skills needed to be prepared for future changes. Thus, the idea of continuous change, a reality that all organizations face in the current period, is induced. The limit of this model may be related to its complexity and, implicitly, to the difficulties that may arise in the implementation process. This limit could be canceled by adequate training of the managerial team and all human resources directly involved in the change process.

Starting from the analysis of these models, we propose a structured organizational change model in the following stages [Figure 2]:

- the necessity and opportunity of change (identification and presentation by the managerial team of necessity and opportunity factors triggering the change);
- setting up the change team (formed, in the first phase, of top-level managers and external consultants on change management issues);
- the company's diagnosis-analysis (assessment of the internal potential of the organization and in-depth analysis of the business environment, i.e. the activity branch, competition, legislative regulations, etc.).
- identifying the main dimensions of change (organizational, decisional, informational, methodological, strategic, etc.);
- completing the team of change (teaming of medium level managers with attributions, competences and responsibilities in the field of the envisaged changes, as well as informal leaders from the targeted areas of activity);

Figure 2. Proposed organizational change model



- designing the change (formulation of the change strategy with realistic objectives, well-defined strategic options, allocated resources, related deadlines, etc.);
- implementing the change (implementing the change strategy projected in the previous stage, monitoring the implementation process by the change team, making adjustments, etc.);
- assessing the results of the change (assessment of the performances obtained by reference to the foreseen objectives,

identification and analysis of the malfunctions registered in the implementation process, formulation of corrective or developmental recommendations for the next period).

5. Conclusions

Developing a product or service, introducing new technology, remodeling certain components of organizational culture are organizational development vectors.

Organizational development is a complex process that takes place throughout a company's lifespan, its fundamental objective is to increase competitiveness and is structured on three main dimensions: an efficient management system, a competitive strategy and an evolutionary organizational culture.

Organizational change models in the literature focus on understanding the source and the impact of change, the role of the managerial team in the design, coordination and implementation stages, the organizational communication process, the consolidation of the results obtained and the institutionalization of the changes in the organizational culture.

The organizational change model proposed in the paper comprises the following stages: the necessity and opportunity of change; setting up the change team; the diagnosis-analysis of the company; identifying the main dimensions of change; completing the change team; designing the change; implementing change; assessment of change results.

REFERENCES:

1. **Beckhard, R., Harris, R**. (1987), *Organizational Transitions: Managing Complex Change*, (2nd ed.), Reading, MA: Addison-Wesley.
2. **Beer, M**. (1980), *Organization Change and Development: A Systems View*, Goodyear Publishing, Santa Monica, California.
3. **Bradutanu, D**. (2012), *Studiu comparativ a două modele de schimbare organizaţională*, Management intercultural, Volumul XIV, Nr. 1 (25).
4. **Burdus, E., Căprărescu, G, Androniceanu, A**. (2008), *Managementul schimbării organizaţionale*, Editura Economică, Bucureşti.
5. **Burke, W** (1982). *Organization Development. Principles and Practices*, MA: Little Brown, Boston.
6. **Ionescu, V**. (2014), *Leadership, Culture and Organizational Change*, Revista MANAGER nr.20, Editura Universităţii din Bucureşti.
7. **Kotter, J.** (1996), *Leading Change*, Harvard Business School Press, Boston.
8. **Kotter, J., Heskett**(1992), *Corporate Culture and Performance*, The Free Press, New York.
9. **Lewin, K**. (1997), *Field Theory in Social Science*, Harper & Row, New York.
10. **Newton, R**. (2009), *Managementul schimbării pas cu pas. Tot ceea ce vă trebuie pentru a alcătui şi a realiza un plan*, Editura ALL, Bucureşti.
11. **Tripon, C., Dodu, M., Raboca, H**. (2013), *Dezvoltare organizaţională şi măsurarea performanţelor*, Editura Tritonic, Bucureşti.

12. **Verboncu, I.** (coord.) (2011), S*chimbarea organizațională prin reengineering*, Editura ASE, Bucureşti.
13. http://www1.humansynergistics.com/ro/abordarea-noastr%C4%83/dezvoltare-organiza%C5%A3ional%C4%83
14. https://www.roffeypark.com/expertise/organisational-development-hr/

Operational Research As Key Management Instrument

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Abstract: *When coming about making decisions, individuals endeavour to correctly address issues and to choose the optimum variant among the available ones. Often, the decisional process is made based on the decision-maker philosophy, intuition and/or experience. Depending on the rapidity with which the decision should be made, and on the style of the one adopting it, such process might involve one or many individuals, the latter laying the grounds, via the miscellaneous ideas considered, in providing better results. But in any circumstances, especially in cases where we talk about managerial decisions, if the scientific approach is not effectively involved in the decisional process, the outcomes are less likely to be the most desirable ones. Operational research proves to represent, in these circumstances, one of the key instruments in supporting efficient decision-making, it providing the entitled entities with a series of analytical methods and techniques, such as those related to mathematical optimisation, simulations, neural network, game theory and many others, all of them extremely useful for efficiently achieving the established goals.*

Keywords: operational research, management science, decision-making instrument, analytical methods, optimisation

JEL Classification: C18, C44, D81

1. Introduction

The decisional processes, encountered in our daily activity at any step, are very important for us, people, as the arising decisions are in the position of either improving our life, or, on the contrary, making it worse. This is the reason why we should carefully consider the decisional variants, filtering the same based on specific criteria, in order to identify any possible consequences, and choose the optimum one, the best of them for us, given our expectations.

Obviously, when going forward and discussing in terms of decisions made by us and affecting not only our life and activity, but also the life and activity of others, things dramatically change. And we do not talk about decisions affecting the members of a family or of a group of friends, but about the ones related to a number, more or less large, of employees, in their position of subordinates, expecting for their manager to decide the best for the interest of the organisation to which they belong, finally reflected in their own well-being.

Making decisions with serious impact on other individuals and entities involves a high level of responsibility, therefore forcing the decision-maker to seriously substantiate his/her decisions so as to lay the premises for positive outcomes for all parties concerned.

Scientifically basing the decisions to make becomes, in this context, the best possible approach, as, beside other elements, important as well in a decisional process, such as experience-based aspects, intuition or flair, science helps us in establishing a more precise pattern related to the real evolution of facts and events.

A key instrument reflecting the transposition of science into the decision-making process is represented by the operational research, which encompasses a large range of analytical methods and techniques, including, among many others, mathematical optimisation, simulations, neural network or game theory, elements to be seriously considered in order to lay the grounds for making timely and efficient decisions.

These issues, just mentioned within the present Introduction, are approached, in terms of Literature review, in section 2, are selectively analysed, from the perspective of the related Research methodology, in section 3, and are further construed, via Results and discussions, in section 4. The paper ends with Conclusions, in section 5, reflecting general pieces of information emerging from this study.

2. Literature review

In order to better understand what the above-mentioned management instrument - operational research - is about, we are going to render hereafter several definitions assigned to it.

According to Whatis.techtarget.com, operational research represents "an analytical method of problem-solving and decision-making that is useful in the management of organisations". The problems approached via such instrument "are broken down into basic components and then solved in defined steps by mathematical analysis".

Scienceofbetter.org sees operational research as "the discipline of applying advanced analytical methods to help make better decisions". By resorting to the use of specific "techniques such as mathematical modelling to analyze complex situations", operational research provides the entities

in charge with "the power to make more effective decisions and build more productive systems".

In the vision of bitiritannica.com, operational research is nothing else but the "application of scientific methods to the management and administration of organized military, governmental, commercial, and industrial processes".

A more complex definition is provided to us by the Business Dictionary, operational research reflecting the "application of mathematical (quantitative techniques) to decision-making". In operational research "the problem is first clearly defined and represented (modelled), as a set of mathematical equations". Subsequently, it is "subject to rigorous computer analysis to yield a solution (or a better solution) which is tested and retested against real-life situations until an optimum solution is found."

Decisionanalyst.com considers that operational research "is about deriving optimal solutions to maximize sales or profit and/or to minimize costs, losses or risks". It "refers to scientific methods (statistical and mathematical modelling) applied to the solution of complex business problems".

Given that the operational research is also known as the management science, the definition was also reached for in a mathematical-based environment. Thus, based on the considerations of Wolfram MathWorld, operational research "is a vast branch of mathematics which encompasses many diverse areas of minimization and optimization". Mainly related to this latter concept, operational research "has great many applications, for instance, in agricultural planning, biotechnology, data analysis, distribution of goods and resources, emergency and rescue operations, engineering systems design, environmental management, financial planning, health care management, inventory control, manpower and resource allocation, manufacturing of goods, military operations, production process control, risk management, sequencing and scheduling of tasks, telecommunications, and traffic control".

The list of definitions anyone might encounter is extremely varied, being more or less comprehensive, but all of them converge towards the same idea. We talk about a scientifically based instrument, where rationality is used to the detriment of other intuition based tools, where mathematics and statistics are involved rather than psychology, sociology or other less precise disciplines.

Given the accuracy characterising the decisions made via the use of such instrument, many researchers and practitioners started considering it as a key element in the decision-making process, therefore resorting to the same both in theoretical and practical approaches.

Thus, we encounter scientific papers and books treating such topic, since older times, it being perceived via its application to various fields and areas of activity, like politics (Spillius, 1957), marketing (Cross, 1961 or Kotler, 1967), management (Miller, Starr, 1969), economics (Beilby, 1975), demography (Cibej, 2002), transports (Hansen, 2006), with focus on security aspects (Lee et al., 2008), engineering (Cao, Nassari, 2014), health (Euro Working Group, 20111 or Brandeau, 2016), social issues (Lee, Kuo, 2017) and many others.

The spreading of the operational research approach arises also from the high number of journals specifically dedicated to the study of the same, such as: Management

Science, Operations Research, Interfaces, European Journal of Operational Research, Journal of the Operations Research Society, Omega, International Transactions in Operational Research or Journal of Multi-Criteria Decision Analysis (Ormerod, Ulrich, 2013)

On the other hand, operational research has become a field of interest largely required in terms of professional training, being deemed, nowadays, to be a premium, stand-alone profession.

3. Research methodology

Given the fact that our approach relating to operational research is highly general and theoretical, not being dedicated to the treatment of effective, practical aspects of the same, and subject to the restrictive maximum length of the paper, the research methodology used herein is rather descriptive, as an attempt to determine, depict or identify what is, unlike analytical research that stands for establishing why it is one way or another or how it came to be that way (Ethridge, 2004).

The linear programming or the basic optimisation problem, on one hand, and the specific distribution problem, usually known as the transportation problem, on the other hand, are tools at hand when discussing in terms of operational research, beside many others such as convex programming, dynamic programming, optimisation graphs or expectation-based problems.

The first mentioned one, namely the generic basic optimisation problem, is related to the optimisation of an established goal (f(x1…xn)), for instance, to either the maximisation (1) of profit, subject to the cost-specific constraints (g1(x1...xn)…gm(x1…xm)), or to the minimisation (2) of the incurred costs, given a certain desired level of outcome.

$$\begin{cases} \textbf{Max}\ f(x_1 \ldots x_n) \\ s.t. \begin{cases} g_1(x_1 \ldots x_n) \le b_1 \\ \ldots \\ g_m(x_1 \ldots x_n) \le b_m \end{cases} \\ x_1 \ge 0 \ldots\ x_n \ge 0 \end{cases} \quad (1)$$

$$\begin{cases} \textbf{Min}\ f(x_1 \ldots x_n) \\ s.t. \begin{cases} g_1(x_1 \ldots x_n) \ge b_1 \\ \ldots \\ g_m(x_1 \ldots x_n) \ge b_m \end{cases} \\ x_1 \ge 0 \ldots\ x_n \ge 0 \end{cases} \quad (2)$$

This type of problem can be solved by resorting to a graphical representation, by making use of the Simplex algorithm, based on the Gauss Jordan equations, or by appealing the Lagrange function.

A large variety of such basic or more complex optimisation problems can be built on the grounds of this principle, rendered above in a canonical form, the problem providing interesting pieces of information to the decision-maker, however the number of solution being, often, either infinite or inexistent.

The art of the manager, in such circumstances, consists in reformulating the optimisation problem to as to make it properly functional, this involving, sometimes, the decrease of the number of variables considered or of the number of restrictions taken into account, therefore opening the road for a scientific approach of the issue.

The particular optimisation-based specified tool, namely the transportation problem, is related to the discovery of the best way of distributing miscellaneous items, in various quantities (xij), from the m storage locations (Di) towards the n consumption destinations

(Cj), in terms of efficiency, namely by minimising the overall transportation cost, given the unitary expenses (aij).

	C_1	C_j	C_n	Avail
D_1	a_{11} / x_{11}	a_{1j} / x_{1j}	a_{1n} / x_{1n}	$T_{avail}{}^{D_1}$
D_i	a_{i1} / x_{i1}	a_{ij} / x_{ij}	a_{in} / x_{in}	$T_{avail}{}^{D_i}$
D_p	a_{p1} / x_{p1}	a_{pj} / x_{pj}	a_{pn} / x_{pn}	$T_{avail}{}^{D_p}$
Nec	$T_{nec}{}^{C_1}$	$T_{nec}{}^{C_j}$	$T_{nec}{}^{C_n}$	T_{avail} / T_{nec}

Identifying the best path for directing such items, with minimum costs for the sender, can be done via several methods, the largely known ones being the North-West corner method, the minimum per lines method, the minimum per columns method or the minimum per table method, the arising final values being compared against one another, the lowest of them being deemed the one to be considered. In this case too, various similar values can occur, situation in which additional analysis for identifying the best variant or variants, as the case may be, should be performed.

4. Results and discussions

The significant number of possibilities being at the disposal of decision-makers, be they quantitative or qualitative by nature, allows them in making seriously grounded, pertinent decisions.

However, in all circumstances when such decisions are tremendously important in the overall context, when the implications of the same are significant for many people or on long-term, when other processes are highly dependent of the quality of the same, the quantitative approach becomes a compulsory aspect.

Fortunately, operational research, also known, as above specified, as the management science, comes with various alternative tools, useful in treating different managerial decision-based aspects: for rendering the labour activity more efficient, for improving the logistic process, for making the organisation more profitable via the augmentation of the production volume or via the decrease of the associated costs and so on.

The solutions got by resorting to such helpful elements can be singular (the most precise case), multiple, up to infinite, or even missing, the last case imposing some serious measures related to the reconsideration of the entire situation.

If we talk about a basic optimisation problem related to the production of the highest possible quantity of products, with technological restrictions as for the available quantity of inputs necessary for obtaining the same, and the non-negativity restrictions for variables, standing for the existence of the said elements, we should find, in fact, that optimum production process making use in the most fruitful way of the existing resources, combining them so as to get the maximum of it, with minimum possible losses, therefore achieving the highest real level of efficiency.

We are going to find, in this case, how much of each input we might use for each type of product, considering the limited quantity of each such input and the need for it in order to create each type of product. Not too complicated at first sight when dealing with a quite low number of types of products to provide and with a quite low volume of the same. However, when having to do with important ranges and volumes, things become too complicated to be solvable without resorting to an optimisation instrument.

If this production problem succeeds in being solved in the best possible way, distributing the products to the storehouses of the organisation or from the same up to the selling points, or from the storehouses up to the customer door (mainly where talking about online orders), in due time, without investing too much in the transportation costs, while minimising also the delivery times, would become the concern of any manager in charge with such process.

Discussing about the latter case, the delivery of these products to customers, we can easily identify, especially by using a chart making us visualise the locations, which storehouse is closer to each customer. But the arising problem in this situation is that a limited quantity of products is to be found in each storehouse and, hence the difficulty in correctly approaching the issue.

The transportation problem, via its provided methods, supports our delivery-related decision, revealing the most cost-efficient network of paths from storehouses to customers usable in such context.

These are just simple examples of the usefulness of such instrument – operational research, via its briefly depicted tools out of the impressive "arsenal" of the same – in correctly dealing, in term of efficiency, with managerial decision-making processes.

Given the increasingly competitive environment we have to face in this quickly progressing, speed society, all managers desiring to stand in front of their opponents should strive for getting access to the state-of-the-art, cutting-edge means in scientifically grounding their decisions, without ignoring, on the other hand, the fact that, finally, such decisions are made by human beings, the only ones able in realistically appreciating the particular cases, in choosing the most appropriate tools and in properly construing the results provided by these supportive elements, therefore, the only ones able to reach, based thereon, the desired efficiency.

5. Conclusions

Operational research, a discipline incorporating a series of other sub-disciplines and covering, in terms of solutions provided, a large number of others, both related and unrelated to it, becomes an essential instrument in approaching decision making processes, its importance becoming more obvious when dealing with managerial issues.

Operational research is centred around the concept of optimisation, or, otherwise said, of finding the optimum solutions to the existing problems, the tools useful in this respect being quite extensive from the perspective of their number, as well as from the perspective of their complexity.

Starting from linear programming, passing towards the convex programming, up to the dynamic one, treating things via the theory of graphs and, going forward, by resorting to neuronal networks, operational research has far exceeded the tight circle of an academic discipline, the same turning into a real profession, somehow revolutionising the management activity as a whole.

REFERENCES:

1. **Beilby, M.H.** (1975). *Economics and Operational Research,* Elsevier, Academic Press
2. **Brandeau, M.L**. (2016). *Creating impact with operations research in health: making room for practice in academia,* Health Care Management Science 19 (4), pp. 305-312
3. **Cao, B.-Y., Nasseri, H**. (2014). *Fuzzy Information & Engineering and Operations Research & Management,* Springer Berlin Heidelberg
4. **Čibej, J.A.** (2002). *Operations Research Education for Forgotten Populations,* Europen Journal of Operational Research 140, pp.225-231
5. **Cross, J.S.** (1961). *Operations Research in Solving Marketing Problems*, Journal of Marketing 25(3), pp.30-34
6. **Ethridge, D.E**. (2004). *Research Methodology in Applied Economics*, Wiley-Blackwell
7. **Hansen, I.A.** (2006) *State-of-the-Art of Railway Operations Research,* International Conference on Computers in Railways – Proceedings, pp. 565-577
8. **Kotler, P**. (1967). *Operations research in Marketing,* Harward Business Review 45
9. **Lee, A.J., Nikolaev, A.G., Jacobson, S.H.** (2008). *Protecting Air Transportation: A Survey of Operations Research Applications to Aviation Security*, Journal of Trasportation Security, pp.160-184
10. **Lee, M.-Y., Kuo, Y**. (2017). *Efficient mixed integer programming models for family scheduling problems*, Operations Research Perspectives, 4, pp.49-55
11. **Miller, D.W., Starr, M.K**. (1969). *Executive decisions and Operations Research,* Englewood Cliffs: Prentice Hall
12. **Ormerod, R., Ulrich, W.** (2013). *Operational research and ethics: A literature review*, European Journal of Operational Research 228(2), pp.291–307
13. **Spillius, J.** (1957). *Natural Disaster and Political Crisis in a Polynesian Society: An Exploration of Operational Research,* Human Relations 10, pp.1-27
14. EURO Working Group *"Operational Research Applied to Health Services"* (2011). Special Issue on Operational Research and Health Care, Infor 49(4)
15. **Pintér, J.** *Operations Research. From MathWorld -- A Wolfram Web Resource,* created by Eric W. Weisstein, retrieved from http://mathworld.wolfram.com/OperationsResearch.html, on 2018, October 7th
16. https://whatis.techtarget.com/definition/operations-research-OR, retrieved on 2018, October 7th
17. http://www.scienceofbetter.org/what/, retrieved on 2018, October 7th
18. http://www.businessdictionary.com/definition/operations-reasearch-OR.html, retrieved on 2018, October 8th
19. https://www.decisionanalyst.com/analytics/operationsresearch/, retrieved on 2018, October 8th
20. www.britannica.com/topic/operations-research, retrieved on 2018, October 8th

The Economics of Cultural Heritage: The Case of Museums

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Abstract: *In this paper we discuss museums as cultural institutions, as important part of cultural heritage and creators of cultural capital. Museums are also credible economic actors: they generate revenue and, in many ways, they behave like a for-profit organization. We discuss the economics of museums in terms of supply, demand, competition on the marketplace and output. Since museums are community focused, they play an important social role acting as a cohesion factor and therefore generate social value. On the other hand, museums educate the public, therefore in a broad sense, they have a public mission which is valuable by definition. While monetary gains are measurable and becoming more important, we argue that social cohesion and museums' commitment to communities should prevail, as museums are creators of cultural capital and individual and collective meaning. Finally, some related discussions and future directions of research are proposed.*

Keywords*:* cultural heritage, museums, economic value

JEL Classification: Z11, Z32, M20

1. Introduction

If we talk about museums we also need to ask: is there a business? Most museums do not have a (profitable) business model. It is for a reason that museums do not generate their total income by themselves: they have a public mission. There is always external support involved in museum activities, be it from government, a private funder or volunteers' time (Weide, 2016).

Since external funding is part of the business model, the government, the private funders or volunteers are museum's biggest stakeholders and clients. But paradoxically, it is the government that increasingly wants museums to behave like businesses while generating more money out of the market. In other words, museums meet the demand of its biggest client/funder by meeting the demands of its audience. To make things even more confusing, the better museums become at serving their audience, the more money they make out of it, the more arguments they give to the government to cut down on their contribution to museum's funding (Weide, 2016).

Museums are a key stimulator of economic growth, but they also have their own resources. While private funding is becoming important in museum budget, public funding support for museums activities is in continuous decline. Therefore, it is important to encourage the entrepreneurial potential of the cultural heritage of which museums are part of. Museums generate economic, social and public value. By creating meaning across economic and non-economic sectors, museums may add value to local and national communities, to social cohesion and personal growth.

In this paper we tried to analyze museums with economic lens. In the first section we discuss the issue of cultural heritage, cultural capital and values that frame museums' mission and activities. In this sense, we overviewed relevant papers and studies in the cultural sector. In the second part we discuss museums as economic actors while the last section is dedicated to museums as generators of multiple types of value, namely economic, social and public.

2. Conceptual framework: cultural heritage, cultural capital and cultural values

As its dictionary definition indicates, cultural heritage refers to inherited things that have cultural significance where the term "cultural" is used in both its anthropological or sociological sense and also in its more artistic or aesthetic interpretation. It is helpful to distinct between tangible cultural heritage, existing as buildings, paintings, artifacts and intangible cultural heritage such as traditions and customs, etc. as well as artworks existing as public goods like literature or music.

Thinking about cultural heritage inevitably draws us into contemplation of some of the most fundamental emotional and spiritual aspects of human experience – the sense of continuity with the past provided by our cultural traditions or the transcendental qualities of art – all these are essential ingredients of different items of heritage that make them relevant to our contemporary lives.

Throsby (2001) disaggregates cultural value into several components in order to explain the concept "in such a way that its importance alongside economic value can be more vigorously asserted" (p. 31). His list of elements of cultural value includes: aesthetic, spiritual, social, historical, symbolic

and authenticity value. The distinction between economic value and cultural value creates a dilemma for the process of valuation, in Throsby's opinion (2010, p. 18). While the various types of economic value (use value, non-use value, externalities) can easily be summed due to the common measurement in currency, it is difficult to form an aggregate of cultural values even if one succeeds in measuring them individually (2001, p. 40). He acknowledges that to dissect the concept of cultural value into several pieces and assign values according to standardized (not necessarily numerical) scales is most likely impossible.

Cultural capital is another concept discussed in this paper, related to culture, in general, and to its serving institutions (museums included), in particular. While the term is used in sociological literature with a different sense (Bourdieu, 1984), Throsby uses it to suggest that "tangible and intangible manifestations of culture can be articulated as long-lasting stores of value and providers of benefits for individuals and groups" (2001, p. 44). Following the (conventional) distinction in relation to ordinary economic capital, Throsby differentiates between the stock of cultural capital (the quantity of available capital) and the "flow" that is creates (a stream of goods and services that may be consumed. While it is relatively easy to understand how cultural objects such as paintings can be counted as assets in this framework, Throsby argues that intangible cultural phenomena such as traditions can also be counted as assets in this sense. The cultural capital that is stored in these assets gives rise both to the cultural and economic value of cultural goods.

Like Throsby, Klamer (2004) uses the term "cultural capital"; however, he uses it with an entirely different meaning. For Klamer, cultural capital refers to people's inbred, acquired and developed ability to experience the sublime or sacred character of a good, to see its beauty or to recognize its place in cultural history. In short, it is the capacity to experience cultural value. Importantly enough, cultural capital accumulates in people and is increased through their consumption of cultural goods in Klamer's interpretation whereas it is stored in cultural objects, in Throsby's view (2011).

For Klamer, cultural capital is what lends us the ability to realize a meaningful life over and beyond its economic and social dimensions. The fact that cultural capital accumulates on the side of the consumers in Klamer's view explains why, for him, cultural policy needs to be at least partially focused on education and stimulating public discourse about culture and building cultural capital in the population.

Unlike Throsby and Klamer, Holden (2004, 2006) is more interested in the practical evaluation and policy making related to culture and cultural capital and valuing culture. He proposes a "valuing triangle" to illustrate the relationship between intrinsic, institutional and instrumental values. Intrinsic value, according to Holden, refers to "the set of values that relate to the subjective experience of culture intellectually, emotionally and spiritually" while "value is located in the encounter or interaction between individuals…on the one hand, and an object or experience on the other" (2006). Instrumental value encompasses both economic and social value and "relate to the ancillary effects of culture, where culture is used to achieve a social or economic purpose" (2006, p. 16). Holden associates these values with attempts

to measure "impacts", "outcomes" and "benefits" (2004, p. 16).

Holden also adopts a particularly broad definition of economic value. He specifies that economic value "is determined by the extent to which something enhances or detracts from our wellbeing" (2004, p. 31). To the extent that health related outcomes, social integration and other instrumental outcomes of cultural participation enhance our wellbeing, these can all be considered to have value in Holden's opinion.

For Holden, institutional value refers to the value that "organizations provide above and beyond the value of their products". The manner in which organizations conduct their business, their processes and techniques can be of value quite independently of their physical output" (2016, p. 17). In this way, organizations create trust, promote mutual respect and provide a basis for sociability. Some of the attributes that Holden mentions under the heading of institutional value, such as trustworthiness, transparency and fairness (2006, 18) might be referred to as "brand value" and "customer service" in commercial contexts. Holden also considers the role that cultural organizations play as arbiters of taste to be part of the service they provide to the public.

In a report to the UK's National Museum Director's Council (NMDC), Sara Selwood (2010) seeks to introduce the notion of "cultural impact" as a means of assessing the work of museums. Since NMDC represents a wide range of museums, including science, history and arts museums, Selwood adopts a broader definition of culture in this study which she sums up as "stories we tell ourselves about ourselves" and, by extension, "those that we tell others" (p. 10). Culture is thus closely related to (individual and collective) identity formation in which museums play a distinct and important role (Selwood, 2010).

Selwood also distinguishes cultural value from cultural impact, noting that value has "to do with worth and importance" while impact is about "effect". According to Selwood, cultural impact may best be understood as the impact created by culture rather than the impact something has on culture.

Museums are a distinctive and important part of cultural heritage. According to Wikipedia, a museum is a building or institution dedicated to the acquisition, conservation, study, exhibition, and educational interpretation of objects having scientific, historical, cultural and artistic value (https://wikipedia.org). According to the International Council of Museums (ICOM) definition, museums serve society and its development first; they do not serve private or individual interests. Their activities are based on their non-profit status. As trusted entities, they generate cultural capital and economic, social and public values. They also have an important impact on the communities they serve and educate.

3. Museums as an economic actor

Museums generate more tax revenues than communities spend on maintaining them (Leva, 2016). Moreover, they play an important role when local organizations are competing for investments and promote a positive image. Their profitability is improving because both the tourism sector and the creative industries are on the rise. In addition to this, the American Alliance of Museums (AAM) has published a study which shows

that museums are particularly instrumental in generating money for small businesses located nearby (2016).

This development has been driven by a distinct demand. New customers and new tasks challenge museum activities, despite the economic crisis, the growing proportion of elderly and the growing differential between rich and poor.

As for the supply side, museums have proven their worth by conducting research in education, social sector, tourism and creative industries in general. Most of them have adopted constructivist strategies – "museums change lives" - whereby they have set wider objectives for their work.

In spite of their positive economic impact, museums have not been the rightful beneficiaries. The money that museums make (that they need in order to maintain their service offering) is not commensurate with the money that they bring to an area. When it comes to tourism, for example, museums actually receive less than 4% of the revenue they generate. Based on the economic impact of museums study (2013), this money goes to accommodation (21%), restaurants (20%), travel tickets (20%) and shopping (11%).

Museums must realize that new services come at a price: museums cannot longer be seen as cultural institutions only, but also as a service with paying customers. According to Leva (2016), nowadays a museum is "a service organization that helps its customers to fulfill their needs and responsibilities in preserving, studying, teaching and exhibiting heritage and culture, as well as generating economic and social wealth" (p. 21). In other words, museums pay the price of accepting to turn into a business while preserving its cultural roots.

Museums and marketplace competition

Museums are not immune to the forces of competition. On the finance side, they compete for the limited public funding and private benefactors/sponsors that are available. Their visitors are also likely to be affected by what other museums (and cultural institutions) are doing. Since visitors are an important source of funds, museums strive to find new activities and tools to attract them.

There are at least three aspects of competition that need exploring. First, there is evidence that museum visitor numbers are affected by a product life cycle (Johnson and Thomas, 1991). Fashion and tastes change and museums play an important part in developing the public taste. If museums adapt to the continuous change in visitors preferences and tastes, they may have a chance to benefit a relatively constant flow of visitors in time.

Second, digital tools and technological innovations are constantly influencing museum operations and activities. From the supply side perspective, adopting new tools and technologies may be a "must" because otherwise a decrease in visitor numbers is likely to happen. In this respect, some museums made substantial progress: National Museum of Arts and "Grigore Antipa" Museum in Bucharest are representative for how they reached a certain degree of "expertise" in reaching their audiences via modern technologies.

Third, new entries in the museum sector are important. While countries such as Great Britain are constant in opening new museums since 1980, Romania does not seem to encourage supporting new museums openings. To be more specific, since 1989 only 14 new museums opened in the country, most

of them are private museums with private funding. Since new museums are a source of innovation and creativity, the relative small number of museums recently opened means that we do not have yet a critical mass of museums, big enough in terms of innovation spreading.

What kind of output can museums generate?

There are several special characteristics of museum output that deserve mentioning. First, most museums offer a diversified output. The mix of outputs changes over time (Hutter). Second, museums are producing not only for the current generation but also for future generations who cannot express their preferences on the market. Conservation of their current collections for future consumption may therefore be categorized as output. Given that future generations have no direct means of making their preferences known and given that limited resources mean that not everything can be conserved, the question that arises is what to conserve? Third, the visitor experience consists of a number of services, including viewing and engaging with different collections but also services such as shopping, learning how to make a film, pottering, and so on. The proportion of how different elements combine is crucial for determining customer satisfaction. It is also important to note that visitors may gain utility both prior to and after their visit. According to Caygill and Leese (1994), repeat visiting is likely to be strongly affected by post visit enjoyment of visitors.

Some modern forms of museum output may act as a substitute for a visit. For example videos, social networking, blogs and publications based on the museum's collection can reach a wider audience compared to what is possible based on traditional media (radio, TV, etc). Modern internet technologies may also provide a source of income for museums.

A particular interest presents the discussion about museum cost functions (Jackson, 1998). For typical businesses and for museums alike, costs may vary with changes in different types of output and with substitution between labor and capital. And yet, many museums have not been able to value their collections because they have not fully catalogued them. In this situation, museums may make allocation decisions without having access to key information. According to Frey and Pommerehne (1989), museums directors may have a management interest in not valuing their stock as such a process would make them more vulnerable to external performance appraisal and reduce their freedom to allocate resources on their own criteria.

One characteristic of museums that has important implications for their costs is the work of volunteers. Volunteers have a contribution especially in private museums where they receive utility from the "production" process, as they are both "producers" and "consumers".

It is important to understand that when we focus on the economic value of museums in the literal sense, this challenges the mission and social meaning of the museum in very strong ways. Of course, if we focus on the entertainment side of a museum, its economic impact can be measured. This leads to the expectation that museums should generate profit which is technically not possible and that efficiency standards and contribution to the development of tourism should become the primary concern. Do we want a

museum that has better income production but at the same time leaves its basic mission behind? Income production is linked to the audience response: how many people/visitors/customers does a museum bring? How popular is it and what should be done to make it more popular? What kind of mission should a museum pursue?

The idea of focusing on the income side is questionable at best because museum incomes are small from a local development perspective. According to Sacco (2016), the real sources of value creation rests into the local community's commitment to the museum, namely the rate of active cultural participation of the community into building the economic sustainability of a museum. Modern technologies play an important part in the "inner lives" of museums because digital production of content, social media etc. – blur the distinction between users and producers of cultural content, leading to a blend of active and passive participation (Sacco, 2016). There has been a complete change of roles. In cultural productions nowadays, one cannot think of an audience that is separate from the professionals. Instead of an audience, we now talk about a community that when engaged, it produces content by itself, both valuable and important. From this perspective, the social value that museums generate is of utmost importance.

4. Social values: museums as a social cohesion factor

Several studies have examined the relationship between participation in visits to museums and social outcomes such as increased educational attainment, reduced crime rates, health and overall wellbeing (Matarasso, 1997; Fujiwara, 2013; Tepper et al, 2014).

Some of the benefits created by visiting museums, for example, community cohesion and civic engagement, are difficult to appraise at the individual level since they are communal by their very nature (Throsby, 2001). However, some techniques have been developed in order to express social outcomes in monetary terms so as to render them comparable with other policy outcomes. Thus, studies have calculated the Social Return on Investment (SROI) for cultural activities (including museum visits), by consulting a wide range of stakeholders and beneficiaries and finding a financial equivalent that allows the monetary value of the benefit to be calculated (Museums, Libraries and Archives Council and NEF Consulting, 2009). Another approach has been to measure people's subjective wellbeing and then calculate how much more money they would need to earn in order to improve their wellbeing by an equivalent amount (O'Brien, 2010; Fujiwara, 2013).

As social outcomes of museum visits we should first mention higher levels of achievement of students who have learned more, improved health of people who may live longer and fuller lives and increased wellbeing – people just feel better about their lives. In short, by consuming cultural goods, people accumulate cultural capital in that they live a more meaningful life.

People today are socialized in cultural participation and engagement, even if they do not consider themselves to be participating. Museums can elaborate on this by also serving as participative platforms. In this way, the production of value moves to the social domain and connects to all of the main dimensions of its functioning: innovation and welfare, social cohesion and lifelong learning, social entrepreneurship and

sustainability, local identity and soft power (Sacco, 016).

The idea of visitors/customers as passive audience is gradually being substituted by forms of direct engagement - active audience. Today, there is a proven relationship between cultural participation and wellbeing. As European population is ageing, there are impressive numbers of people who do not know what to do with their free time and suffer from solitude and isolation. We know now that socializing these people into a cultural experience makes a big difference in terms of their psychological wellbeing. If cultural participation improves the psychological wellbeing of older people, it is less likely that these people will end up in hospitals or homes for the elderly.

A museum that significantly contributes to active ageing generates a clear economic and social benefit for the local community as a whole and therefore, it seems that museums may be changing the welfare system. This is the kind of economic impact museums should be interested in. The same applies to a museum that develops a culture of innovation, especially in young people. As the experience of the "Grigore Antipa" Museum and National Museum of Art reveal, museums open their collections to the possibility of creative appropriation and remix of their content by their visitors/customers. In the digital era, by helping transform passive visitors into active ones, museums may definitely contribute to the welfare of the community, namely to its sustainability.

5. The public value and museum's mission

Conceptually speaking, public value exists in a different plan than economic and social value. Public value is rather a way of thinking about, articulating and increasing the value of services that are provided by public agencies and organizations, and thus it is not a form of value itself.

The public value framework was developed in the field of management by Mark Moore (1995) and gained considerable influence in all areas of government, including the cultural sector. The basic idea is that public agencies and organizations should pay more attention to the value they create for the general public than to fulfilling bureaucratic performance measures set by their superiors. According to Scott (2013), public value is a theory, model and practice that address management issues. The public value approach in museums has been critiqued for its vague definitions and for failing to specify who the public is (O'Brien, 2014).

In the end, at least one big question needs a clear answer: what are museums trying to do? More specifically, what kind of public value do they generate? Some specialists consider that museums have as key objectives conservation, documentations and research into their collections (UK's Museums Association), but if we take a look at the mission of museums, as stated on their websites, we will notice a wide range of purposes such as: "to be a universal museum, continually striving for grater accessibility" (The Louvre); "to be a repository of knowledge and a public medium" (Wien Museum); "to collect, preserve, study, exhibit and stimulate appreciation for and advance knowledge of works of art that collectively represent the broadest spectrum of human achievement" (Metropolitan Museum of Art, USA); "appreciation of the mundane in everyday life, finding wonder and beauty in the simplest of

things and…knowing that there is always a story behind the cover" (The Umbrella Cover Museum, Peak Island, Maine, USA); "to bring the worst of art to the widest of audiences" (The Museum of Bad Art, Deadham, Massachussetts, USA).

As the above examples show, there are many forms of expressing public value: from the simple things that have meaning for a (small) community to the "Museum among museums" concept (The Louvre) that have a globally recognized, universal meaning. On the other hand, public value encompasses what Throsby (2001) names "components of cultural value": the aesthetic (beauty); the spiritual (sense of identity of the community and of the individuals); the social (stability and community cohesion); the historical (providing a connectedness with the past); symbolic (interpretation of identity and assertion of personality); authenticity (real and unique). In short, a museum's public value is profoundly correlated with its cultural value as perceived by stakeholders and clients/visitors alike.

6. Conclusions and future directions for research

In this paper discussed museums as cultural institutions but also as credible economic actors. They are perceived as generators of economic, social and public value. In terms of monetary impact, their contribution to GDP creation, for example, is difficult to appraise since museums' output has so many different source: tourism and associated services, jobs, etc.

Museums, on the other hands, compete on a market for visitors: they are not isolated from the activities of other institutions and organizations. But the evidence suggests that they are able to respond adequately to competition challenges if they adapt to supply and demand changes. We should highlight again that technological innovation and digital tools give museums a much wider market than that encompassed by the physical environment: besides those who visit the museum in person, there is an "army" of digital visitors who prefer virtual tours.

Museums have an important economic value – in addition to the value of their collections, in addition to their social value (and the impact museums have on social cohesion) and in addition to their educational value (how museums inspire, engage and explain the world). They also have an important public value rooted into their cultural value. What are the appropriate tools and measures to assess these values? What role museums play in supporting cultural diversity and creation of meaning in a rapidly changing world?

There are at least three more issues that deserve future research: one is museum operation and structure related to its capacity of innovation and innovation diffusion. For example, innovation may include new technological developments in managing visitors and organizing displays. In this case, what would be the implications for costs and revenues of adopting innovations? What specifically determines the rate of innovation diffusion inter and intra museums?

Secondly, as museums grow, we face the challenge of measuring this growth because different measures might yield different results. Visitor numbers, the most obvious measure of growth, represent only one dimension of a museum's growth. What drives museums' growth in the first place

and why do museums vary in their growth rates?

Third, more attention should be paid to the museum's production functions and, in particular, to the role played by volunteers. Donations and sponsorships have been studied to a far greater extent than donations of labor. There is some literature on the supply of volunteers but much less on the demand for such labor and the costs of employing volunteers.

Finally, there is a set of issues that need research related to policy towards museums. We know little about the interrelationships between different forms of funding. Does public funding (from whatever source) reduce or increase private funding? If a museum raises its own income, how does government react?

It is beyond the scope of economics to provide insights on society's cultural objectives and the mission and output of museums. But there is a clear role for economics in dealing with the costs of museums and the efficiency with which different outputs are produced. Since the term "museum consumer" made its entry into the language of museums, no doubt that museums are now an integrated part of the world of economics. They provide entertainment and fun and yet they are not simply amusement parks. They have an impact on tourism, but they are not mere marketing instruments. They create work and wealth, but not in the same way as private companies. Hopefully, the growing interest in cultural heritage and in museums, in particular, will ensure that some of this work will be carried out for the benefit of all of us and the society at large.

REFERENCES:

1. **Ashworth, J. A; Johnson, P. S**. *"Sources of Value for Money for Museum Visitors: Some Survey evidence"*. Journal of Cultural Economics, 20, pp. 67-83. (1996).
2. **Brown, A. S.** *"An Architecture of Value"*. In Grantmakers in the Arts Reader. 17, pp. 18-25. (2006)
3. **Caygill, M. L.; Leese, M. N**. *A Survey of Visitors to the British Museum.* British Museum Occasional Paper no. 101. London. (1994).
4. **Frey, B.; Pommerehne, W. W**. *Muses and Markets: Exploration in the Economics of the Arts.* Blackwell, Oxford. (1989).
5. **Holden, J.** *Capturing Cultural Value. How Culture Has Become a Tool of Government Policy*. Demos. (2004).
6. **Holden, J.** *Cultural Value and the Crisis of Legitimacy: Why Culture Needs a Democratic Mandate.* Demos. (2006).
7. **Hudson, K.** *Museums of Influence*. Cambridge University Press, Cambridge. (1987).
8. **Hutter, M. and Rizzo, I**. (eds). *Economic Perspectives of Cultural Heritage*. London: MacMillan. (1997).
9. **Hutter, M.; Throsby, D**. (eds). *Beyond Price: Value in Culture,* Economics and the Arts. New York: Cambridge University Press. (2006).
10. **Klamer, A**. *"Social, Cultural and Economic Values of Cultural Goods".* In V. Rao and M. Walton (eds) Cultural and public Action. Stanford University Press. (2004).

11. **Jackson, R**. "A Museum Cost Function". Journal of Cultural Economics, 12, pp. 41-50. (1988).
12. **Johnson, Peter; Thomas, Barry**. *"The Economics of Museums: A Research Perspective"*. Journal of Cultural Economics, 22, pp. 75-85. (1998).
13. **Leva, K.** *The Results Speak for Themselves, So Why Isn't Anyone Listening?* In Proceedings of the 4th Annual Conference NEMO, Germany. (2016).
14. **Mc Carthy, K. F.; Ondaatje, E. H.; Zakaras, L**.; **Brooks, A**. *Gifts of the Muse: Reframing the Debate About the Benefits of the Arts*. RAND Corporation. (2004).
15. **Naylor, R**. *Measuring the Value of Museums: Options, Tips and Benefit*s. Proceedings of the 4th Annual Conference NEMO, Germany. (2016).
16. **Sacco, P. L.** *How Do Museums Create Value?* Proceedings of the 4th Annual Conference NEMO, Germany. (2016).
17. **Selwood, S**. *Making a Difference: The Cultural Impact of Museums.* National Museum Directors'Conference (NMDC).
18. **Throsby, D**. *Economics and Culture.* Cambridge University Press. (2001).
19. **Throsby, D**. *The Economics of Cultural Policy*. Cambridge University Press. (2010).
20. **Weide, S**. *Looking Inside: Business Models of Museums- What Works, What Doesn't?* Proceedings of the 4th Annual Conference NEMO, Germany. (2016).
21. http://antipa.ro/ro
22. http://www.mnar.arts.ro/
23. https://www.louvre.fr/en
24. https://www.wienmuseum.at/
25. http://www.umbrellacovermuseum.org/UmbrellaCoverMuseum.org/Home.html
26. http://museumofbadart.org/
27. https://www.metmuseum.org/

Innovations in Manufacture with Some Evidence from Romania

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Abstract: *TThe aim of this article is to study the relationship between the type of industry and the rate of adoption of product innovation, process innovation and organizational innovation. In the traditional approach, being innovative is only effective in the short run because competition will begin to imitate that innovation. In an alternative approach, there is a distinction between innovative and non-innovative firms. We tried to capture this process by making two groups of industries: low-tech industries and high-tech industries. If they seek to be competitive in the long run, innovative firms are strategically proposing to adopt new technologies and to innovate in product, process or internally in the organization. A study is being conducted using the data provided by the European Bank for Reconstruction and Development through the Business Environment and Enterprise Performance Survey (BEEPS) database for Romania in the year 2012. At industry level, companies' innovative behavior is unclear, but after grouping them into low-tech and high-tech industries, results have become more robust, respectively, in high-tech industries, there is an average of more product or process innovations. An interesting observation is that the percentage of adopting organizational innovations remains constant for both low-tech and high-tech industries. An interpretation related to the long term competitive innovative behavior is that by product and process innovation, the firm has a strategic vision and will have a constant process of structural organization.*

Keywords: product innovation, process innovation, organizational innovation, low-tech, high-tech.
JEL Classification: L0, O3, M2

1. Introduction

There are at least two ways to differentiate innovative activity within the firm. In the traditional view, being innovative is efficient only on short term due to competition which will start to imitate that specific innovation. In an alternative view, there is a distinction between two behaviors of firms, some are innovative and some are non-innovative. The firms which have an innovative behavior, pursue to adopt new technologies or to develop new products and then follow an idiosyncratic organizational process to adapt specific technology to the internal conditions within the restrictions of economic efficiency. Tacit or explicit, firms must identify new technologies to adopt, or new products to develop. If the firm is willing to be competitive on long term by adopting new technologies, and willing to have a strategic vision on long term, they will have a permanent process of adaption to the market conditions and structural reorganization.

2. Literature review

In a traditional economic approach a producer adopts new technologies due to the rent offered by their ownership, and then they have a temporary monopoly until they start to be imitated by competitors. (Griliches, 1960), (Kogut and Zander, 1992), (Tire and Orlikowski, 1994). Viewed from this angle, the decision to invest in the new technology is related to the advantage of holding a temporary monopoly due to the increase in the market share, which gives the company a higher temporary profit and this is a competitive advantage. Alternatively to the vision of the company to adopt new technology for holding a rent is the vision where the innovative firm has a different structure from the non-innovative company, and develops specific "skills" and "features". Innovative companies have a different structural behavior than non-innovative firms and are strategically active for innovation. In order to adapt the newest technologies, efforts are needed from innovative companies consisting in allocating significant R & D expenditure stocks to a competitive position within an industry. Companies acquire specific knowledge and skills, and they give the firm some competitive advantages as they manage to leverage them through the market, relative to competitors. Zahra and Covin (1993) show that firms apply a set of strategies to explain the investment in new technologies by firms. Goedhuys and Veugelers (2011) show that Brazilian manufacturing companies which have both process and product innovations are constrained by companies' access to finance and workers' [human capital] skills and quality of management. Piergiuseppe and Giuseppina (2005) argue that firms that use process innovations increase their chances of having a higher level of revenue. Turcotte and Rennison (2004) show that there is an increase in firms' productivity when using more intensive technology in the company and as the share of workers using computer training.

Tether and Tajar (2008) studied 2500 firms from Europe and identified three patterns of innovations:

- Innovations based on research for products;
- Innovation based on technological processes;
- Innovations based on organizational changes.

In specialty literature is quite established the concept of technological innovations for the manufacture sector, and it includes both technological and product innovations, but Tether and Tajar (2008) argue that they can be statistical identified with organizational changes.

For a good understanding of the importance of the concept of an innovative firm as it will be addressed in the case study, it is reminded that the choices a firm has when it wants to benefit from specific technological changes are: (OECD, 2001)

1. Strategic - represents some internal decisions that a firm has to apply consistently, related to the mix of technologies they want to achieve, whether they want to operate on niche markets or seek to gain a more competitive position on the domestic or international market.

2. Research & Development includes: - Research to increase knowledge about technological processes within the firm; - Strategic research engagements applied in order to adopt patents, existing techniques or innovations made by other companies in the production process;

- Developing concepts, prototypes and testing or modifying them.

3. Non-Research & Development can influence the innovation process of the firm by:

- Identifying new products or new technological processes through suppliers or customers;

- Acquisition of technological information, patents, or collaboration with consultancy firms;

- Developing employee skills through training; - Acquisition of equipment incorporating the innovative work of other firms;

- It can reorganize the company's internal structure.

4. The adoption process of new technologies

In literature, it is argued that a new technology is not instantly adopted in the firm but it involves an adaptation process that requires a dynamic learning process from the firm that also leads to the accumulation of knowledge. Almeida and Fernandes (2008) argue for the question in the questionnaire "Have you introduced a new technology that has significantly changed how to obtain the main product?" for Business Environment and Enterprise Performance Survey (BEEPS) database that the manager's response captures both the creation of new knowledge and the adoption and adaptation of the production process. This knowledge may be new to the firm, to the industry or to the world. Parente and Prescott (1994) show that there are some barriers to technology adoption by firms. This variable captures the company's innovative behavior and involves its commitment to an innovative strategy. Some technologies - such as patents – can't be directly redeemed through new processes or products, and therefore firms are undergoing an internal restructuring process that may involve some innovations. Throughout this process of implementing new technologies, companies acquire knowledge and skills that give them a heterogeneous character. There are practical limits in the BEEPS database to highlight the heterogeneity of innovative firms, but these arguments have been brought to the idea that innovative firms

have different and idiosyncratic behavior different from non-innovative ones. Empirical studies show statistically significant that innovative firms "[...] develop some skills and behavioral patterns that allow them to face market changes better than non-innovative ones. Also, the effect of innovation on profitability is greater as companies innovate more. " (Cefis and Ciccareli, 2005)

Goedhuys and Veugelers (2011) show that there is a relationship between "technology make", "technology buy" and company growth and in order to study the relationship between innovation and growth, also takes into account the conditions for effective technology creation and technology absorption, and firms in developing countries prefer to acquire technologies that are embedded in production equipment and not to develop new technologies within the firm. A "new" technology has different meanings for industries in the sense that industries that use top-level knowledge also involve greater risks when, for example, changing a production line. For example, for a car industry, a new car model may require a new production line, and if the model is not well marketed, there is a risk of bankruptcy for the entire company. Also as an example for the automotive industry, there are repeated product innovations such as small facelift changes that can give the car the "innovation" status without significant changes in process innovation within the production line.

5. Differentiating product innovation from process innovation and organizational innovation

The OECD Manual (2001) states that "organizational innovation" is present in both the manufacturing and service industries. For example, "the introduction of just-in-time systems should be treated as process innovations as it has an effect on the production of products for the market," and in the service sector, "Innovations include improved skills embedded in the organization and routines that alter the measured output . For example, the implementation of ISO 9000 quality standards are not technological innovations in the product or process [...]".

Tether and Tajar (2008) distinguish between "hard" technology innovations specific to R&D intensive activity and between "soft" innovations that they associate with the service sector by showing that it involves innovations within the distribution chain, such as marketing innovations; on European companies the authors point out that several companies have introduced organizational innovations than technological innovations. High-tech manufacturing firms are more likely to achieve product innovations, low-tech firms are making process innovations, and service firms are innovating in the distribution chain rather than traditional research through technology innovation. Specialty literature shows that the innovation trend has a different pattern for service sector firms, meaning that there is more emphasis on innovation on the sales side than on the fundamental innovation of the equipment. This makes a distinction between innovation for manufacturing firms that is established in the literature and is associated with primary R&D activity to invent new production means or significantly modify existing production processes.

6. Innovations in Romanian manufacture firms

Becheikh, Landry and Amara (2006) show that process innovations are an indicator for firms that compete through cost and thus seek economies of scale. In Eastern European countries, workforce is cheaper and thus allows a competitive advantage for companies operating in the region, in relation to the same industries operating in more expensive Western European regions. In the "Business Environment and Enterprise Performance Surveys" questionnaire, abbreviated BEEPS, coordinated by the European Bank for Reconstruction and Development, interviews were conducted with business managers with the objective to produce a statistical sample of company-level data on income levels, inputs of factors, outputs of factors, perception of competition intensity, etc. with the purpose of researching economic indicators on the dynamics of the business environment both in transition countries and for developed countries. The questionnaires collect data on the business environment, how it is perceived by firms, how it changes over time, and about the various constraints that affect the company's performance and growth. The full set of data is valid for the researchers and includes all the questions at the firm level. Specific series of data for some countries and standardized data sets are available. The standardized data sample allows for comparative economic analyses across countries and some country-specific questions are sacrificed. The data sample was simply random, and more information is available on the European Bank for Reconstruction and Development website, where an on-line form has to be filled in, and once the confidentiality agreement is given, company-level data is available https://ebrd-beeps.com/data/. The samples were randomly designed on the basis of national company registers or equivalent, and in some cases with a larger number of sampled firms than needed to ensure sample comparability. Sampled companies represent 4 categories of sectors: Manufacturing, Retail and Core. The boundaries of the BEEPS data series are related to the fact that there are relatively few firms surveyed, for Romania we have for the year 2012, 540 observations.

From the BEEPS 2012-20016 data, there are 540 valid observations for Romania, for the year 2012. Within the manufacturing sector we find 177 valid observations within: Garments, Food, Machinery and equipment, Fabricated metal products, Wood, Tobacco products, Textiles, Tanning & leather, Paper & paper products, Publishing, printing and recorded media, Coke & refined petroleum, Chemicals, Plastics & rubber, Non-metallic mineral products, Basic metals, Office machinery, Electronics, Communication equipment, Precision instruments, Motor vehicles, Other transport equipment, Furniture, Recycling.

Table 1 - Innovations in manufacturing sector in Romania in the year 2012

Industry	Frequency (%)	Product innovation (%)	Process innovation (%)	Organizational innovation (%)
Garments	32 (18%)	9 (28%)	15 (47%)	13 (41%)
Food	25 (14%)	14 (56%)	11 (44%)	10 (40%)
Machinery and equipment	19 (11%)	13 (68%)	8 (42%)	4 (21%)
Fabricated metal products	16 (9%)	10 (63%)	11 (69%)	8 (50%)
Wood	14 (8%)	4 (29%)	3 (21%)	4 (29%)
Other*	71 (40%)	38 (54%)	33 (46%)	28 (39%)
Total	177 (100%)	88 (50%)	81 (46%)	67 (38%)

Source: Author's calculations with data from https://ebrd-beeps.com/

Other include: Tobacco products, Textiles, Tanning & leather, Paper & paper products, Publishing, printing and recorded media, Coke & refined petroleum, Chemicals, Plastics & rubber, Non-metallic mineral products, Basic metals, Office machinery, Electronics, Communication equipment, Precision instruments, Motor vehicles, Other transport equipment,Furniture, Recycling.*

The data is distributed to industries according to the number of observations it has, respectively their weight in the total number of observations. For example, Garments has 32 observations and has a weight of 18% of the total of 177 observations, then Food has 25 observations representing 14%, etc. "Other" industries have a total of 71 observations representing 40%. Although the industries have been hierarchized according to the number of observations, they have not been ordered by an economic or other criterion. However, due to the large number of observations we appreciate that the results are robust and the variables observed are: Product innovation (%), Process innovation (%) and Organisational innovation (%). For example, in the Garments industry, 47% process innovation is higher than 28% product innovation. The highest product innovation rate is 68% in Machinery and Equipment, and the highest rate of process innovation is in Fabricated metal products. The smallest product innovation is found in Garments and Wood of 28-29%. The smallest process innovation is in Wood, 21%. In the Fabricated metal products industry we can see high innovation rates in the three analyzed forms, Product innovation 63%, Process innovation 69% and Organizational innovation 50%. On average, we have the following innovation rates for all manufacturing industries: Product innovation 50%, Process innovation 46%, Organizational innovation 38%.

The disadvantage of grouping "Other" from Table 1 in the same group of industries both in the low-tech, high-tech is due to the heterogeneity of firms, with the risk of offsetting effects when companies from intensive industries are simultaneously analyzed technology and industry firms with traditional technology. Paris, Schiantarelli and Sembenelli (2006) propose to control the heterogeneity of manufacturing technology, with two groups of industries: high technology industries ("high-tech") and traditional technology industries ("low-tech"). The authors argue that companies operating in a high-tech industry are forced to adopt more innovative behavior than firms operating in a low-tech industry. For industries with high technology it proposes the automotive industry and automotive components, chemicals and pharmaceuticals, electronics, metallurgy and machinery. It associates low technology to those industries: soft drinks, food, textiles, leather, plastics and non-metallic and other manufacturing. I have mentioned here the classification of the industries proposed by the authors, because in the literature there is a distinction between companies choosing to compete by cost advantage compared to cheap labor or to try to develop some competitive advantages resulting from the accumulation of tacit knowledge and innovations. Low technology industries offer fewer opportunities to gain knowledge about a particular technology relative to high technology industries.

Piergiuseppe and Testa (2005) associate traditional sectors: food, juice and tobacco production; textile or clothing manufacture; leather clothes; manufacture of handbags, footwear, etc.; manufacture of furniture and wood products. Piergiuseppe and Testa (2005) consider these industries vulnerable to international competition, especially from countries where the workforce is less paid, thus highlighting the comparative advantage of using a relatively cheaper workforce. The author argues that the probability of exclusion on the international markets of small-scale

intensive firms operating in countries where the workforce has on average high incomes will increase. He points out that Italian firms operating in the traditional sectors will have in the future a serious domestic competition on national markets and will be excluded from international markets precisely because of labor migration from less developed countries where the workforce has, on average, lower incomes.

Table 2 - Innovations in low-tech and high-tech manufacturing sector in Romania in the year 2012

Industry	Frequency (%)	Product innovation (%)	Process innovation (%)	Organizational innovation (%)
Low-tech*	91 (60%)	36 (40%)	39 (43%)	37 (41%)
High-tech*	61 (40%)	35 (57%)	31 (51%)	25 (41%)
Total	152 (100%)	71 (47%)	70 (46%)	62 (41%)

Source: Author's calculations https://ebrd-beeps.com/

Low-tech include: Food, Wood, Furniture, Tobacco products, Textiles, Garments, Tanning & leather, Paper & paper products.*

High-tech include: Publishing, printing and recorded media, Chemicals, Plastics & rubber, Non-metallic mineral products, Fabricated metal products, Electronics, Precision instruments, Coke & refined petroleum, Office machinery, Communication equipment, Motor vehicles, Other transport equipment, Recycling.*

In order to see if there is an innovation behavior distinction between economic sectors, two groups of industries were made in Table 2 for manufacturing sector: "high-tech" industries and "low-tech" industries, with the objective of capturing some effects generated by industries using advanced technologies or traditional technologies. In Table 2, Low-tech include: Food, Wood, Furniture, Tobacco products, Textiles, Garments, Tanning & leather, Paper & paper products and High-tech include: Publishing, printing and recorded media, Chemicals, Plastics & rubber, Non-metallic mineral products, Fabricated metal products, Electronics, Precision instruments, Coke & refined petroleum, Office machinery, Communication equipment, Motor vehicles, Other transport equipment and Recycling. We can see that the results are becoming more robust: In high-tech industries, both product and process innovations are higher than in low-tech industries.

7. Conclusions

In order to see if there is an innovation behavior distinction between economic sectors, two groups of industries were made for manufacturing sector: "high-tech" industries and "low-tech" industries, with the objective of capturing some effects generated by industries using advanced technologies or traditional technologies. In high-tech industries, both product and process innovations are higher than in low-tech industries An interesting observation is that Organizational innovation is the same in low-tech and high-tech industries, of 41%. An interpretation related to the long term competitive innovative behavior is that by product and process

innovation, the firm has a strategic vision and will have a permanent process of adaption to the market conditions and structural organization.

8. Future research

For a better understanding of the sources of innovations, future research could be interesting related to the sources of innovation regarding the product innovation, process innovation and organizational innovation. A different grouping of industries could generate different coefficients for the rate of adoption of innovations by firms. Interesting results could also be achieved if large companies and SMEs are ranked in order to understand better the relationship between company size and the type of innovation for Romanian companies. Because the BEEPS database is constantly updated, research can be done at the company level and increasingly complex studies on data panels.

REFERENCES:

1. **Almeida, R., Fernandes, A.M.,** (2008), *Openness and technological innovations in developing countries: evidence from firm-level surveys*, Journal of Development Studies 44, pp. 701–727
2. **Becheikh Nizar, Landry Rejean şi Amara Nabil,** (2006), *Lessons from innovation empirical studies in the manufacturing sector: A systematic review of the literature from 1993–2003*, Technovation 26, pp. 644–664
3. **Cefis, E. şi Ciccarelli, M**., (2005), *Profit Differentials and Innovation, forthcoming in Economics of Innovation and New Technology*, 14(1-2), pp. 43-61
4. **Goedhuys Micheline, Veugelers Reinhilde**, (2012), *Innovation strategies, process and product innovations and growth: Firm-level evidence from Brazil*, Structural Change and Economic Dynamics, Volume 23, Issue 4, Pages 516-529
5. **Griliches, Zvi.**, (1960), *Hybrid Corn and the Economics of Innovation*, Science, New Series, Vol. 132, No. 3422., pp. 275-280
6. **Kogut, Bruce and Zander, Udo.** (1992), *Knowledge of the Firm*, Combinative Capabilities, and the Replication of Technology, Organization Science, Vol. 3, No. 3, pp. 383-397
7. **Parente, Stephen L. şi Prescott Edward C**., (1994), *Barriers to Technology Adoption and Development* The Journal of Political Economy, Vol. 102, No. 2 (Apr., 1994), pp. 298-321
8. **Parisi, M., Schiantarelli, F., and Sembenelli, A.** (2006), *Productivity, innovation and R&D: micro evidence for Italy,* European Economic Review, 50(8), pp. 2037-2061
9. **Piergiuseppe Morone & Giuseppina Testa**, (2005), *What Makes Small and Medium Enterprises Competitive,* Quaderni DSEMS 18-2005, Dipartimento di Scienze Economiche, Matematiche e Statistiche, Universita' di Foggia
10. **Tether Bruce S., Tajar Abdelouahid**, (2008), *The organisational-cooperation mode of innovation and its prominence amongst European service firms*, Research Policy, Volume 37, Issue 4, pp. 720-739
11. **Turcotte, Julie şi Rennison Lori Whewell,** (2004), *The Link between Technology Use,* Human Capital, Productivity and Wages: Firm-level Evidence, International Productivity Monitor, Centre for the Study of Living Standards, vol. 9, pp. 25-36

12. **Tyre Marcie J. and Orlikowski Wanda J.**, (1994), *Windows of Opportunity: Temporal Patterns of Technological Adaptation in Organizations*, Organization Science, Vol. 5, No. 1, pp. 98-118

13. **Zahra, Shaker A. and Covin, Jeffrey G**. (1993), *Business Strategy, Technology Policy and Firm Performance*, Strategic Management Journal, Vol. 14, No. 6, pp. 451-478

14. Business Environment and Enterprise Performance Survey (BEEPS), [online], Available https://ebrd-beeps.com/

15. OECD, 2001, „The Measurement of Scientific and Technological Activities – Proposed Guidelines for Collecting and Interpreting Technological Innovation Data – European Commission", [online], Available http://www.oecd.org/sti/

The Influence Of Fiscal Accounting On Entrepreneurial Decisions In Romania

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Abstract: *Entrepreneurship is the soul of any economy and is based on the ability of entrepreneurs to combine the resources they have to create and maintain a business that generates profit. An essential element for entrepreneurial decisions is information. Accounting is one of the most important sources of information that can influence management choices about their business development strategies and the exploitation of the investment opportunities they identified in the market. A quality accounting information accurately reflects economic reality and can lead to better risk management for the entrepreneurs in a competitive and continuously developing economy.*

Romanian accounting professionals are often victims of a fiscal stance in addressing economic transactions, caused on the one hand by the interests of the entrepreneurs in reducing tax burden and on the other hand, by the existence of an unstable and complicated tax legislation.

Through this paper our intention is to analyze the impact of the fiscal accounting on the quality of the information provided by the financial statements and implicitly on the entrepreneurial decisions which are based on this information, as well as to identify possibilities to restore the role of accounting for mirroring the reality of the business environment.

Keywords*:* accounting data, economic substance, entrepreneurial decisions, financial statements, fiscality

JEL CODES: M41, K34

1. Introduction

In the competitive economy of our century, the activity of small and medium-sized entities is an important factor of long-term development, with a significant contribution to job creation. The role of entrepreneurship in the evolution of a country's economy is an extensive subject of research and debate in the relevant literature.

In the context of the assumed risk and the resources involved in their business, the goal of any entrepreneur is to obtain profit. In this respect, the management structures of the economic entities are particularly interested in reducing the costs generated by the economic activity they carry out, especially those with a fiscal incidence. On the other hand, the State, as a regulatory and tax administration body, seeks to obtain information from business accounting for determining the tax situation in the process of collecting taxes and duties.

In Romania, the applicable tax laws are quite strict and in this context accountants are tempted to subordinate to fiscal issues, which may distort the quality of the information provided by the financial statements. With the adoption of International Financial Reporting Standards (IFRS), the fiscal impact on accounting policies tends to decrease, at least formally. However, small and medium-sized enterprises not applying these standards particularly use the so-called "fiscal rule".

This paper seeks to analyze how the use of fiscal accounting influences the quality and credibility of accounting information provided by the financial statements of the economic entities, as well as to identify possible solutions to optimize the presentation of this information.

2. Relevant Literature

Black, G. (2004) defines accounting as "the process of identifying, measuring, and communicating economic information about an organization or other, in order to permit informed judgement by users of the information".

In order to ensure the improvement of the quality of accounting information, accounting systems have been developed over time, encompassing the theories, techniques and concepts of recording and disclosing the necessary data for the entities to make economic decisions. Under the conditions of the economic globalization, the tendency to transform accounting systems into economic models aimed at providing more precise and accurate accounting information has materialized.

The credibility of accounting science requires the harmonization of accounting regulations on a global level so that the provided information is comparable. According to Epuran, M., Megan, O. (2006), the main impediment in the convergence of the accounting systems identified in the scientific world is the strong impact of fiscality, especially in continental European countries, where the primary objective of national accounting regulations is to provide information on the fiscal bases of taxes. At the same time, the above mentioned authors point out that the financial statements drawn up in accordance with International Financial Reporting Standards are mainly directed to providing the necessary information to the capital markets, which are fundamentally different from those used by the fiscal authorities.

In the same note, Zeff, SA (2007) draws attention to difficulties in ensuring the comparability of accounting information at a

global level for reasons of interpretation, language, terminology or political interference.

Cuzdriorean, D.D. (2014) addresses the issue of the influence of taxation on the accounting of Romanian entities, especially regarding the following aspects: depreciation, provisions, devaluation, revaluation of assets, valuation of incoming or exit stocks, the accounting treatment of certain categories of expenditures (sponsorship, interest, protocol expenses, etc.) as well as accounting policies and accounting errors.

The relationship between accounting and taxation is complex and derives from the need of the fiscal body to obtain information based on data recorded in the accounting. A representative work in this respect is Accounting and the state in a post-communist Romania (Deaconu, A., Cuzdriorean, D.D., 2016, which provides a complex analysis of the influence of fiscal policies on accounting in the historical context of our country. The state has a double role: it is the one regulating and, on the other hand, the one who uses the accounting information.

3. Research Methodology

The research methodology considers several steps to enable the necessary data to be obtained and analyzed in order to formulate some final conclusions that would improve the presentation of the financial statements by increasing the transparency and accuracy of the information provided by the accounting.

a) Motivation of research and establishment of the research theme

The fiscality is the system by which a state collects the taxes and duties. In order to achieve its main objective, the tax system primarily pursues taxpayers' financial results, which determine the basis of taxation or the tax base. The State as a fiscal body is therefore an important user of the financial statements of the companies and has as main purpose the satisfaction of budgetary needs.

The ultimate goal of accounting is to present a true image of the financial position and financial performance of economic entities, useful for a wide range of users: management structures, investors (existing and potential), fund lender (bonds, banks, leasing companies), suppliers, customers, social partners (employees, trade unions), tax authorities.

Different interests of the users of the financial statements cause the degree of subjectivity in the presentation of accounting information, which can alter the perception of the financial statements of entities and tends to discard accounting science from its main purpose. That is why we considered it important to analyze the fiscal influence on the presentation of the accounting information.

b) Documentation

From the necessity of understanding specific events and processes, we have carried out theoretical investigations and documentation by using the specialized literature in the field of chosen theme.

c) Research strategy

In order to identify the technical details that lead to valid information useful in obtaining the results, we have documented the practical aspects at the level of an entity in Arad. This research process has a qualitative, inductive and interpretative character and starts from the factual reality in order to clarify and improve some theoretical concepts.

d) Information processing

The obtained data have been synthesized in case studies, in which we have

formulated different assumptions for obtaining a general answer on the addressed topic: the way in which the fiscal orientation of entities' accounting in Romania alters the information presented to the users through the financial statements.

e) Communication of results

The conducted comparative analyzes led to concrete conclusions on the topic and allowed to formulate possible solutions for improving the practical work in the field of accounting and for the development of the accounting profession.

4. The Time - The Main Unknown In The Economic Reality

The accounting policies and procedures of each entity are the basis for determining and providing accounting information that is useful in making decisions based on rational considerations. The principle that governs the entire activity of the professional accountant is that of the true and fair image of the financial statements. The accountancy has on the one hand an operational and administrative role to record chronologically and systematically the economic operations and, on the other hand, a strategic one, of evaluation and estimation of various events and transactions, with a strong influence on the decision-maker.

In a first approach, reducing the tax burden on the entity is a prerequisite for fiscal accounting, but an in-depth analysis of the phenomenon reveals a number of motivations that lie on the one hand with the technical and informational difficulties encountered by professional accountants valuations and estimates of value and, on the other hand, in an often unpredictable and unstable evolution of tax legislation over time.

In a philosophical sense, time is one of the most enigmatic ingredients of the universe, and therefore any form of anticipation is a tremendous challenge in the process of formation and development of human society. Economically, time is the only variable that specialists can not control, but which intervenes consistently and unswervingly in all the processes and transactions, and has therefore required the development and refinement of numerous techniques and prediction models.

Time is thus the main unknown that requires resolution in the respect of the principle of true representation of the economic reality by the financial statements and is therefore a challenge for the accounting professionals in the processes of valuation and estimation of the balance and result elements.

Evaluation is an accounting process that gives monetary expression to various structures related to the financial position, financial performance and cash flows for their presentation in the financial statements. Any evaluation process is susceptible to uncertainty that arises either because of the evaluator's experience or knowledge, or by the inability to obtain sufficient information to measure the value of the respective phenomenon. For this reason, the value of an element or process is always considered uncertain, representing an opinion or an image of its users on that element or process at a given point in time. The notion of evaluation is close to identification with that of the estimate and reflects the value measurement process that is based on incomplete data.

The economic concept of value regards, on the one hand, the most likely price that could be paid in a hypothetical and balanced

transaction (exchange value), and on the other hand is the measure of the future benefits that may result from the entity's ownership of an asset (value of use). In both approaches to the notion of value, the time factor plays an essential role and is the decisive challenge for specialists in attempting to represent, using appropriate techniques and professional reasoning, a transparent picture of the carried out processes and transactions.

The uncertainty of the value of the economic elements and the multitude of variables that require deepening in the estimation process can lead to subjective or questionable options and choices in the application of specific accounting treatments. For this reason, the tendency to standardize and uniformize the methods is becoming increasingly on a global level. Nevertheless, the dynamics of the economy has increased the complexity of transactions and thus the need for particular treatments to reflect the economic substance of each process, so that accounting referentials provide alternative options based on economic considerations.

On the other hand, the Romanian tax legislation has a strict and rigorous character, coming from the state's interest in collecting taxes and fees from the contributors. In the process of elaborating the fiscal regulations, the Romanian legislator often omits the prevalence of the economic character, the fiscal policies being oriented towards the realization of the budgetary needs. The multiple political influences on the fiscal measures adopted by the Romanian state have led to numerous changes and adaptations in the legislation. An example in this direction is the legalization of tax treatment of revaluation surpluses, which has undergone several changes in the legislative approach in recent years, as shown in Table 1:

Table 1 - The evolution in time of changes in tax legislation regarding the reserves from the revaluation of fixed assets

Reference time interval	Deductibility of depreciation expense related to revaluation reserves
until 31.12.2003	deductible expenses
between 01.01.2004 and 31.12.2006	non-deductible expenses (excluding those recorded before the reference period)
between 01.01.2007 and 30.04.2009	deductible expenses (but the depreciation expense of the reserves incurred between 01.01.2004 and 31.12.2006 remains non-deductible)
from 01.05.2009 to present time	deductible expenses (but taxation of the reserves treated as income as a result of the decrease in the respective assets has been introduced)

Source: adaptation after Rapcencu, C. (2012), p. 176

Although the trends in the harmonization of accounting regulations that are emerging globally produce a positive impact on the quality of the accounting information reflected by the financial statements of the entities, most accounting specialists in our country are influenced in their professional reasoning by the fiscal system and the fiscal accounting approach is predominant in those economic processes that are most influenced by the time factor: estimating the value of provisions, revaluing and depreciating assets.

5. Case Studies Concerning The Impact Of The Use Of Fiscal Accounting On The Decision-Making Process Of Romanian Enterpreneurs

Example 1 - Accounting and fiscal treatments of provisions

An entity that operates in the construction field has highlighted as non-current receivables the performance execution guarantees retained by its clients for the executed work contracts in the amount of 863,359 lei. In order to comply with the principle of prudence, for these guarantees the entity registered provisions.

The amount of the recognized provisions in the fiscal and accounting (economic) approach differs as follows:

Fiscal approach: the recognized amount of provisions corresponds to the value of the guarantees retained by the beneficiaries = 863.359 lei.

Economic approach: the recognized value represents the best estimate of the future expense for settlement of the current liability at the end of the reporting period = 150.000 lei.

The impact of the two types of approaches on financial-accounting information is compared in Table 2:

Table 2 - Comparative analysis of the main indicators in the financial statements according to the economic and fiscal approach of the provisions

Profit and loss account at 31.12.2017				
No.	**Elements**	**Value in fiscal approach**	**Value in economic approach**	**Differences**
1	Turnover	6.267.149	6.267.149	
2	Operating revenues - total	6.504.120	6.504.120	
3	Expenses related to inventories	3.503.861	3.503.861	
4	Personnel expenses	821.537	821.537	
5	Depreciation	460.222	460.222	
6	**Provisions**	**863.359**	**150.000**	**713.359**
7	Other operating expenses	641.633	641.633	
8	**Gross result (rd 2 - rd 3 - rd 4 - rd 5 - rd 6 - rd 7)**	**213.508**	**926.867**	**-713.359**
9	**Tax on profit (16%)**	**34.161**	**148.299**	**-114.137**

Balance sheet at 31.12.2017				
No.	**Elements**	**Value in fiscal approach**	**Value in economic approach**	**Differences**
10	Total assets	4.475.104	4.475.104	
11	Non curent liabilities	757.230	757.230	
12	**Provisions**	**863.359**	**150.000**	**713.359**
13	Equity	**1.313.967**	**2.027.326**	**-713.359**
Key indicators for the interpretation of financial statements				
No.	**Elements**	**Value in fiscal approach**	**Value in economic approach**	**Differences**
14	Patrimonial solvency $\frac{Equity}{Total\ assets}$	0,29	0,45	-0,16
15	Return of Capital Employed $\frac{EBIT}{Capital\ Employed}$	0,10	0,33	-0,23
16	Debts to equity ratio $\frac{Non\ curent\ liabilities}{Equity}$	0,58	0,37	0,20

Source: authors projection

A first analysis of the profit and loss account presented in our case study reveals that the fiscal approach to the treatment of collateral provisions has a major influence on the tax burden, the profit tax due to the state budget being significantly reduced in this case.

But at the level of the balance sheet, the fiscal treatment of the provisions affects the level of the company's equity, by diminishing it. In the context of an entity's equity being the main source of financing for its economic activity, its level is of particular interest to users of financial statements.

Considering the need for entrepreneurs to attract external resources (from banks or other funding), we notice an alteration of the main financial analysis indicators in the fiscal accounting approach to the economic one:

- the patrimonial solvency, which expresses the entity's ability to self-finance and the extent to which it can honor its payment obligations, is in a fiscal approach below a threshold of 0.30 considered reasonable;

- the return of capital employed is also low, given that this indicator is compared with the cost of the capital employed; a level of 0.10 denotes that the resources attracted to the entity's development will generate lower profits compared to the costs of attracting them;

- in terms of the debts to equity ratio, at 0.58 in the fiscal approach, we can say that the entity's possibilities to indebt on a long run are lower compared to the economic view.

In conclusion, although through the fiscal accounting the entity significantly reduces its tax on profit, the possibilities of developing its activity by attracting external financing sources are reduced. At the same time, the accounting information that emerges from the financial statements presented by the entity is significantly affected by the fiscal impact.

Example 2 - Revaluation of tangible assets

On December 31st 2016, an entity owns a bulldozer equipment used in the construction activity it carries out. As of 31.12.2016, the equipment had an entry value of 790,968 lei, a cumulative depreciation of 428,440 lei and the remaining duration of use of 22 months.

The entity's accounting policies provide the historical cost disclosure in the financial statements, as the fiscal regulations do not require revaluation of the equipment and the entity has taken into account the costs of such revaluation as well as the considerations of simplifying the accounting activity in the context of future tax treatments (the fiscal law imposes tax on income-assimilated reserves with the decrease in fixed assets).

In this approach, the accounting treatments in 2017 are as follows:

Remaining value at 31.12.2016 = Entry value - Cumulative depreciation = 790.968 lei - 428.440 lei = 362.528 lei

$$\text{Monthly depreciation} = \frac{\text{book value}}{\text{remaining time of use}} = \frac{362.528 \text{ lei}}{22 \text{ months}} = 16.479 \text{ lei}$$

Depreciation of the year 2017 = 12 months x 16.479 lei = 197.743 lei

Remaining value at 31.12.2017 = 362.528 lei - 197.743 lei = 164.785 lei

If we analyze from an economic perspective, for financial informations to be credible, they must be neutral and verifiable. Fair value reflects the price that would have been received for the sale of the assets to which it relates in a regulated transaction at the valuation date, according to the International Financial Reporting Standard no.13 (IFRS 13) Fair value measurement. Because it is based on market data at a given point in time, fair value provides a more transparent view for users than historical cost and thus increases the informational value of the financial statements.

The fair value of the equipment determined by an authorized valuer on December 31, 2016 was 400.000 lei.

The disclosure of the equipment at revalued amount influences the entity's financial position and financial performance through the following accounting treatments:

- the cumulative depreciation in the amount of 428.440 lei is canceled by imputing it on the input value of the equipment;
- there is recognized in the revaluation reserves the difference of 37.472 lei between the fair value of the equipment (400.000 lei) and its book value (362.528 lei);
- the monthly expense with depreciation is recorded in 2017 starting from the revaluated value:

$$\text{Monthly depreciation} = \frac{\text{book value (revaluated)}}{\text{remaining time of use}} = \frac{400.000 \text{ lei}}{22 \text{ luni}} = 18.182 \text{ lei}$$

Depreciation of the year 2017 = 12 months x 18.182 lei = 218.182 lei

Remaining value at 31.12.2017 = 400.000 - 218.182 lei = 181.818 lei

The impact of the two accounting treatment options is presented in Table 3:

Table 3 - Comparative analysis of the main indicators of the financial statements according to the policy for the recognition of tangible assets

Profit and loss account at 31.12.2017				
No.	**Elements**	**Value (asset recognition at historical cost)**	**Valoare (asset recognition at fair value)**	**Differences**
1	Turnover	5.100.400	5.100.400	
2	Operating revenues - total	5.100.400	5.100.400	
3	Expenses related to inventories	3.345.700	3.345.700	
4	Personnel expenses	821.000	821.000	
5	**Depreciation**	**197.743**	**218.182**	-20.439
6	Other operating expenses	618.000	618.000	
7	**Gross result (rd 2 - rd 3 - rd 4 - rd 5 - rd 6)**	**117.957**	**97.518**	20.439
8	**Tax on profit (16%)**	**18.873**	**15.603**	3.270
Balance sheet at 31.12.2017				
No.	**Elements**	**Value (asset recognition at historical cost)**	**Valoare (asset recognition at fair value)**	**Differences**
9	Non-current assets	164.785	181.818	
10	Current assets	1.593.840	1.593.840	
11	**TOTAL ASSETS**	**1.758.625**	**1.775.658**	-17.033
12	**Equity**	**1.180.000**	**1.197.033**	-17.033

Source: authors projection

Depending on the company's choice through accounting policies, the financial statements at 31st of December 2017 show significant differences:

- the gross result in the fair value approach is significantly lower, with a downward impact on the profit tax burden;

- the policy of recognizing the equipment at a revalued amount leads to a higher level of equity compared to its presentation at the historical cost.

We can conclude that, also in terms of asset revaluation, fiscal accounting implies distortions as to the accuracy and fidelity of the information it presents to users.

Example 3 - Depreciation of tangible assets

On December 31st, 2016, a company acquires a construction equipment for the cost of 790.968 lei. The duration of use is 4 years. We continue to outline how the use of the three asset depreciation methods is reflected in the entity's financial statements:

Straight-line depreciation:

- depreciation rate = = 25%

- annual depreciation amount = 790.968 lei x 25% = 197.742 lei

Degressive depreciation:

- depreciation rate = 25% (straight-line rate) x 1,5 = 37,50%

- depreciation of the year 2017 = 790.968 lei x 37,50% = 296.613 lei

- depreciation of the year 2018 = 593.226 lei (remaining value) x 37,50% = 185.383 lei

- depreciation of the years 2019 and 2020 = $\frac{395.484 \text{ lei (remained value)}}{2 \text{ remained years}}$ = 154.486 lei (starting in 2019 was used the straight-line method)

Accelerated depreciation:

- depreciation rate = 50%

- depreciation of the first year = 790.968 lei x 50% = 395.484 lei

- depreciation of the next three years = $\frac{395.484 \text{ lei (remained value)}}{3 \text{ remained years}}$ = 131.828 lei (starting in 2018 was used the straight-line method)

Table 4 reflects the differences in the elements presented in the financial statements according to the entity's accounting policies regarding depreciation.

Table 4 - Comparative analysis of the main financial statement indicators according to the method of depreciation of tangible assets

Profit and loss account at 31.12.2017				
No.	**Element**	**Value (straight-line depreciation)**	**Value (degressive depreciation)**	**Value (accelerated depreciation)**
1	Turnover	5.100.400	5.100.400	5.100.400
2	Operating revenues - total	5.100.400	5.100.400	5.100.400
3	Expenses related to inventories	3.345.700	3.345.700	3.345.700
4	Personnel expenses	821.000	821.000	821.000
5	**Depreciation**	**197.742**	**296.613**	**395.484**
6	Other operating expenses	618.000	618.000	618.000
7	**Gross result (rd 2 - rd 3 - rd 4 - rd 5 - rd 6)**	**117.958**	**19.087**	**-79.784**
8	**Taxable profit**	**117.958**	**117.958**	**117.958**
9	**Tax on profit (16%)**	**18.873**	**18.873**	**18.873**
10	**Net result (rd 7 - rd 9)**	**99.085**	**214**	**-98.657**
Balance sheet at 31.12.2017				
No.	**Element**	**Value (straight-line depreciation)**	**Value (degressive depreciation)**	**Value (accelerated depreciation)**
11	Non-current assets	593.226	494.355	395.484
12	Current assets	1.593.840	1.593.840	1.593.840
13	**TOTAL ASSETS**	**2.187.066**	**2.088.195**	**1.989.324**
14	**Equity**	**1.180.000**	**1.081.130**	**982.259**

Source: authors projection

In the first year of use, the application of the linear depreciation method results in the highest gross result. The tax on profit does not differ, as the depreciation expenses are tax deductible only within the limit of the straight-line depreciation. Using a degressive depreciation method, the company greatly reduces its profit in the first year of use of the equipment and, in the case of accelerated depreciation, it registers loss under an equal profit tax.

An important change is also noted in the balance sheet, both in assets and in equity, which have lower levels if the depreciation method used by the entity is degressive or accelerated.

In Table 5 the information on the equipment's depreciation over its entire lifetime is pointed out.

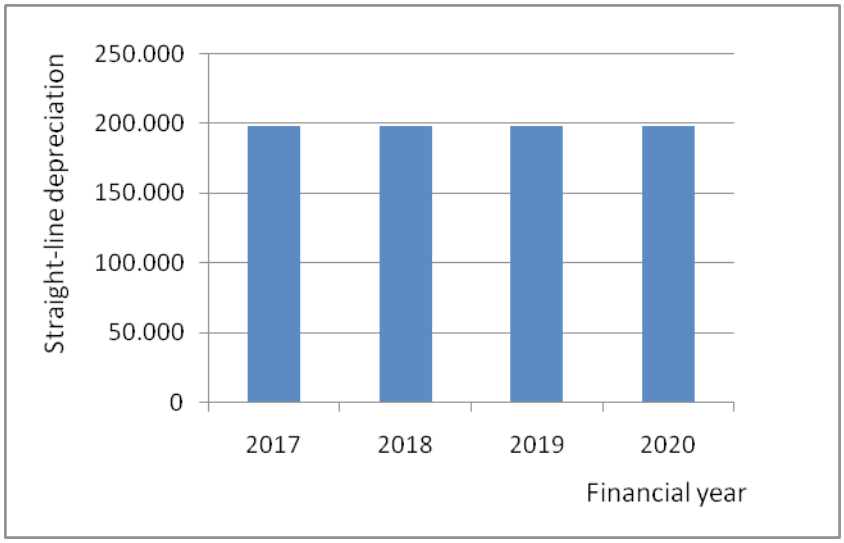
Table 5 - Comparative depreciation panel

Financial year	Amortizable value			Yearly depreciation value			Remaining value		
	straight-line	degressive	accelerated	straight-line	degressive	accelerated	straight-line	degressive	accelerated
2017	790.968	790.968	790.968	197.742	296.613	395.484	593.226	494.355	395.484
2018	790.968	494.355	395.484	197.742	185.383	131.828	395.484	308.972	263.656
2019	790.968	308.972	263.656	197.742	154.486	131.828	197.742	154.486	131.828
2020	790.968	154.486	131.828	197.742	154.486	131.828	0	0	0

Source: authors projection

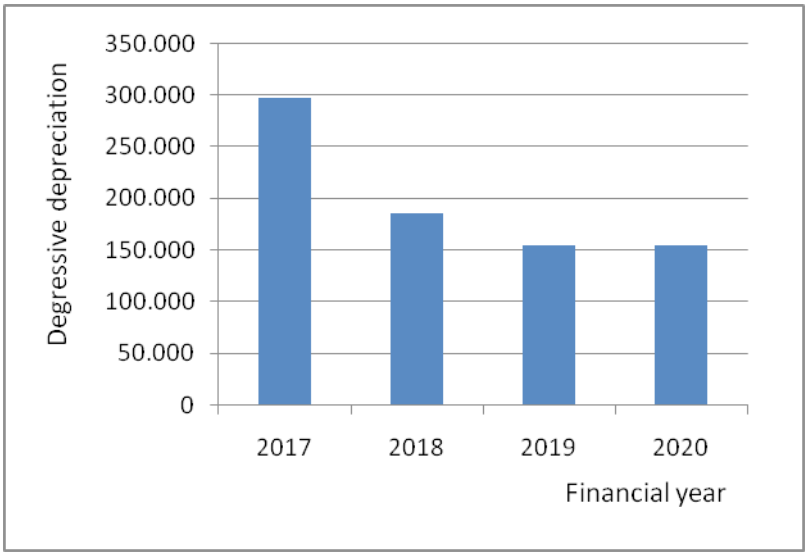
To visualize the evolution of depreciation in time in each of the three methods for which the entity can opt for through its accounting policies, we reproduce in the figures below the eloquent graphical representations:

Fig.1. Annual expenditures over the life of the equipment on straight-line depreciation



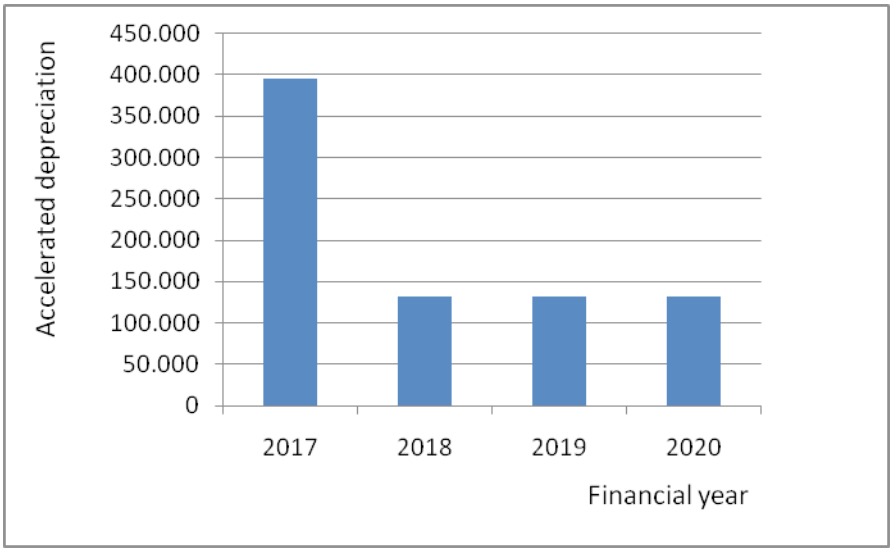
Source: authors projection

Fig.2. Annual expenditures over the life of the equipment on degressive depreciation



Source: authors projection

Fig.3. Annual expenditures over the life of the equipment on accelerated depreciation



Source: authors projection

It is noted that after the first year of use, degressive and acceleration depreciation costs would be significantly lower than in the case of straight-line depreciation and the value of the equipment disclosed in the financial statements would be lower as well, as a significant portion would be consumed in the first year.

Depreciation costs are tax deductible subject to the use of the straight-line depreciation method, so that it is preferred by most entities in Romania. However, the straight-line method does not always accurately reflect the way in which an asset is depreciated, but it proportionally includes a fixed amount to the operating expenses, proportionate to the duration of its use. The main disadvantage of the straight-line method from an economic point of view is the fact that it deals with depreciation only in terms of the time factor. This approach is incomplete, since the way in which the future benefits of an asset are consumed is also influenced by other elements regarding the conditions of its use. In other words, there are situations where a degressive method of depreciation is more appropriate, although it does not fully benefit from tax deductibility.

As regards accelerated depreciation, this is very rarely used, since it is unlikely that an asset will depreciate 50% in the first year.

6. Final Conclusions

In the fiscal approach, provisions for performance guarantees for construction works were constituted at the level of the retained guarantees, having as a base the Romanian fiscal referentials, which allow the recording of such provisions within the limits of the quotas stipulated in the contracts concluded with the beneficiaries.

On the other hand, the starting point of the economic approach on the provisions transactions is the Directive 2013/34/EU, which stipulates in paragraph (22): "The recognition and measurement of some items in financial statements are based on estimates, judgements and models rather than exact depictions. As a result of the uncertainties inherent in business activities, certain items in financial statements cannot be measured precisely but can only be estimated. Estimation involves judgements based on the latest available reliable information. The use of estimates is an essential part of the preparation of financial statements. This is especially true in the case of provisions, which by their nature are more uncertain than most other items in the balance sheet. Estimates should be based on a prudent judgement of the management of the undertaking and calculated on an objective basis, supplemented by experience of similar transactions and, in some cases, even reports from independent experts. The evidence considered should include any additional evidence provided by events after the balance-sheet date."

The use of a fiscal treatment on provisions for performance guarantees for construction works lies on the one hand in reducing the entity's fiscal cost but on the other hand in the difficulties encountered by professional accountants in making a precise estimate of their value. In this direction, we believe that a thorough research is needed to achieve an econometric model useful in calculating provisions for performance guarantees so that their recognized value represents the best estimate of future expenditure for settlement of the current obligation at the

end of the reporting period.

Regarding the revaluation of equipment, the use of the fiscal rule in accounting does not necessarily lead to a reduction in the tax cost. As can be seen from case study no. 2, the tax burden would be significantly reduced in an economic approach based on fair value. In this situation, fiscal accounting manifests under the difficulties in transposing tax legislation into the treatment of revaluation reserves, especially in the case of successive revaluations. However, in the situation of buildings, things are different: if they are not revalued at a minimum of 3 years, the local tax may significantly increase. Although such tax measures have taken into account real estate market development trends in order to increase the tax burden, they have a positive impact on the way in which accounting information is produced, requiring that the buildings held by entities be presented in the financial statements at revalued amounts, which is actually the closest to economic reality.

In terms of asset depreciation, the entity's management structures should consider, in addition to the times of use, the economic conditions in which they are used. Analyzing the nature of the activity and making appropriate forecasts can compete in determining how assets will depreciate over time. In choosing the depreciation plan all these aspects are of particular importance and result in the disclosure of complete and transparent information to users.

Based on our case studies, we affirm that most often a fiscal accounting approach fundamentally damages the way in which financial statements are presented with significant effects on entrepreneurial decisions and on the possibilities of streamlining the economic activities of entities.

Considering the obtained results, we believe that a change in the Romanian professional accountants' attitude by returning to economic values and principles is necessary. The exercise of the accounting profession requires the assumption of responsibility to act in the public interest and must take into account the important role of accounting in any organization and the contribution of the information provided by the financial statements to the efficiency, development and viability of the entity's activity.

On the other hand, we believe that in the fiscal regulatory process, it is necessary for the competent bodies of the Romanian state to deepen economic reasons and to lean towards the needs of entrepreneurship, by approximating the tax references to the economic substance of processes and transactions. A stable and comprehensive fiscal legislation that transcends the political sphere and meets the needs of the business environment can result in the evolution of the Romanian economy, the stimulation of entrepreneurs and the optimal realization of the budgetary resources.

REFERENCES:

Books:

1. **Andone, I.I. et. al.** (2013), *Metodologia și etica cercetării științifice în contabilitate și sisteme informaționale,* Editura Tehnopress, Iași, p. 31-35
2. **Black, G.** (2004), *Applied Financial Accounting and Reportin*g, Oxford University Press, New York, p.12
3. **Cuzdriorean, D.D**. (2014), *Relația dintre contabilitate și fiscalitate: o abordare tridimensională*, Ed. Casa Cărții de Știință, Cluj Napoca, p.212
4. **Mateș, D., Bunget, O., et al** (2017), *Contabilitate aprofundată*, Eurostampa, Timișoara, p. 201-202, 213
5. **Rapcencu, C**. (2012), *Contabilitatea și fiscalitatea imobilizărilor corporale*, Editura CECCAR, București, p. 176
6. **Talpoș, I.** (1995), *Finanțele României, vol. I,* Editura Sedona, Timișoara, p.51
7. Asociația Națională a Evaluatorilor Autorizați din România ANEVAR (2017), *Standardele de evaluare a bunurilor,* ANEVAR, București, p. 21
8. Corpul Experților Contabili și Contabililor Autorizați din România CECCAR (2015), *Standardele internaționale de raportare financiară (Partea A + Partea B)*, CECCAR, București
9. Corpul Experților Contabili și Contabililor Autorizați din România CECCAR (2015), *Ghid practic de aplicare a reglementărilor contabile privind situațiile financiare anuale individuale și situațiile financiare anuale consolidate aprobate prin OMFP nr. 1802/2014*, CECCAR, București

Articles:

10. **Deaconu, A., Cuzdriorean, D.D.** (2016), *Accounting and the state in a post-communist Romania*, African Journal of Accounting, Auditing and Finance, vol.5, no. 1, p. 64
11. **Ecobici, N**. (2010), *Comparative Study of Financial Statements in Anglo-saxon and Romanian Accounting*, Analele Universității Constantin Brâncuși din Târgul Jiu, Seria Economie, nr. 2, p. 143
12. **Epuran, M., Megan, O**. (2006), *Convergența contabilă în condițiile regionalizării, Revista de economie teoretică și aplicată - suplimen*t, Asociația generală a economiștilor din România (AGER), p. 167-174
13. **Feleagă, N., Feleagă, L**. (2006), *Models and Rules of Evaluation in International Accounting*, Theoretical and Applied Economics Magazine, AGER, no. 4 (499), p. 35
14. **Lenghel, R.D.** (2011), *Armonizare, convergență și conformitate contabilă internațională*, Anuarul institutului de istorie Gheorghe Barițiu din Cluj Napoca, ed. 9, p. 247-258

Regulations:

15. Directiva 2013/34/UE a Parlamentului European și a Consiliului din 26 iunie 2013 privind situațiile financiare anuale, situațiile financiare consolidate și rapoartele conexe ale anumitor tipuri de întreprinderi, de modificare a Directivei 2006/43/CE a Parlamentului European și a Consiliului și de abrogare a Directivelor 78/660/CEE și 83/349/CEE ale Consiliului
16. Hotărârea Guvernului nr. 1/2016 pentru aprobarea Normelor metodologice de aplicare a Legii nr. 227/2015 privind Codul fiscal, publicată în Monitorul Oficial nr. 22/13.01.2016, cu modificările și completările ulterioare
17. Legea nr. 227/2015 privind Codul fiscal, publicată în Monitorul Oficial nr. 688/10.09.2015, cu modificările și completările ulterioare

18. Legea contabilității nr. 82/1991 actualizată, cu modificările și completările ulterioare
19. Ordinul ministrului finanțelor publice nr. 1.802/2014 pentru aprobarea Reglementărilor contabile privind situațiile financiare anuale individuale și situațiile financiare anuale consolidate, publicat în Monitorul Oficial nr. 963/30.12.2014, cu modificările și completările ulterioare

Considerations On European Union Institutional System

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Abstract*: The present paper aims to analyse, using logical analysis, the institutional system of European Union. The purpose of the paper is to provide a logical model for the institutional system of European Union,*

From methodological point of view, I will use the System Theory and the instrument of logical analysis.

Firstly, I will define the concept of system and institutional system, using the method of sufficiency predicates-logical analysis.

Secondly, I will design a logical model for describing Institutional System of European Union.

Keywords*:* system; institutional system; Lisbon Treaty; European Union; logical analysis.

JEL Classification: F49, O43, R11

Introduction

While we are speaking about European Union, we are thinking of a cumulation of states working together to fulfilling a common goal. These member states are functioning together based on an institutional system comprised of formal and informal rules/norms, enforcement mechanisms and organizations.

In our attempt to analyse the institutional system of European Union, we will define the concepts of System and Institutional System using the sufficiency predicates method-logical analysis.

Next, I will design the Institutional System of European Union using the System Theory and I will analyse the elements of the Model's Input, State and Output.

Methodology

Using the instrument of logical analysis in defing concepts, implies, according to Mr. Dinga[1],to identify the list of those attributes (predicates) that are sufficcient to thoroughly define an abstract concept. Therefore, the process of defing an abstract concept, using the sufficiency predicates method entails the following:

To identify the list of attributes

To perform a qualitative analysis of the identified attributes:

Checking the independence of the pairs of attributes

Checking the consistency of the pairs of attributes

Checking the completeness of the list of attributes

Thus, we define an abstract concept AC outlining the multitude of its attributes:

As = {A1, A2, ...,An}

The concept of Sustainable Development

In the following, we will identify the sufficiency predicates for the concept of System (S).

Complexity-C

The system is comprised of a multitude of distinct elements (material or immaterial), that together form a structure having different characteristcs and functionality than its components

Interconnectability–I

The multitude of relationships between system's components and between system's components and external environment

Teleology- T

The existence and the functionality of a system is dedicated to the fulfilment of an objective

Therefore, from the logical point of view the concept of System may be describe as it follows:

S=(C) /\(I)/\(T), where:

/\ is the symbol for logical conjunction

C-the Complexity attribute

I- the Interconnectability attribute

T-the Teleology attribute

Hence, the concept of System may be defined as a structure aiming to fulfil a certain objective, comprised of distinct elements (material or immaterial), that together form a composition having different characteristcs and functionality than its components and the multitude of relationships between these

[1] Dinga, Emil, Studii de Economie. Contribuții de analiză logică,epistemologică și metodologică- Economics studies. Contributions of logical, epistemological and methodological analysis, Editura Economică, 2009, Bucharest

components and between components and external environment.

The next step is to analyze the sufficiency predicates for the concept of System from the point of view of their:

Completeness

Independence-none of the attributes is the logical result of another

Consistency -None of the predicates is contradictory with another

Completeness analysis

The property Complexity-C describes the multitude of distinct elements (material or immaterial), that together form a structure having different characteristcs and functionality than its components

The attribute Interconnectability–I reflects the multitude of relationships between system's components or between system's components and external environment

The attribute of Teleology- T reflects that the existence of a system is dedicated to the fulfilment of an objective

The sum of this sufficiency attributes completely defines the concept of Sustainable Development

Independence analysis

C does not involve I and vice versa: the existence of a multitude of components does not involve the existence of relationships between them or between them and external environment and the existence of a multitude of relationships does not involve the existence of certain elements.

C does not involve T and vice versa: the existence of a multitude of elements does not involve that these elements serve to a certain objective and, vice versa, the existence of a certain objective does not involve the existence of a multitude of components.

I does not involve T and vice versa: the existence of a multitude of relationships between components and between components and external environment does not imply the existence of a goal and the existence of a goal does not imply the existence of a multitude of relationships between components and between components and external environment

Consistency analysis

C is not contradictory to I: the existence of a multitude of components does not contradict the existence of relationships between components or between them and external environment

C is not contradictory to T: the existence of a multitude of elements does not contradict that these elements serve to a certain objective

I is not contradictory to T: the existence of a multitude of relationships between components and between components and external environment does not contradict the existence of a goal

The concept of Institutional System

The process of defining the concept of Institutional System as a species of a more general concept of System implies the use of sufficiency predicates.

The specific attribute that differentiates the concept of Institutional System from the concept of System is the Normative Character.

The Normative Character-N of a system implies the existence of formal and informal norms/rules/laws. According to Mr. Dinga[2] (Dinga E., 2018) there are three elementary

[2] Dinga, Emil, Studii de Teorie și Modelare Economică-Elemente metodologice generale, Studies on Economic Theory and Modelling-General Methodologic Issues, Editura Academiei Române, 2018, Bucharest, page 14

categories of norms:

Impositions-I-the action must be executed or in logical terms I(A), where A is coming from to action

Interdictions-IN-the action must not be executed or in logical terms IN(A)=I(NA), where NA is non-action

Permission-P-the action may be executed or not, in logical terms P=NON-I(A) /\ NON-I(NA)

From the logical point of view the concept of Institutional System may be describe as it follows:

S=(C)/\(I)/\(T)/\(N) where:

/\- is the symbol for logical conjunction

C-the Complexity attribute

I- the Interconnectability attribute

T-the Teleology attribute

N-the Normative character attribute

Thus, the Institutional System is a structure aiming to fulfil a political/social/economic objective, comprised of organizations, formal and informal rules and enforcement mechanisms with a normative character that together form a composition having different characteristcs and functionality than its components and the multitude of relationships between these components and between components and external environment.

The design of European Union Institutional System

In designing the European Union Institutional System, we will use the Ludwig von Bertalanffy's General System Theory. This theory was proposed in the 1940's by the biologist Ludwig von Bertalanffy (General Systems Theory, 1968)[3].

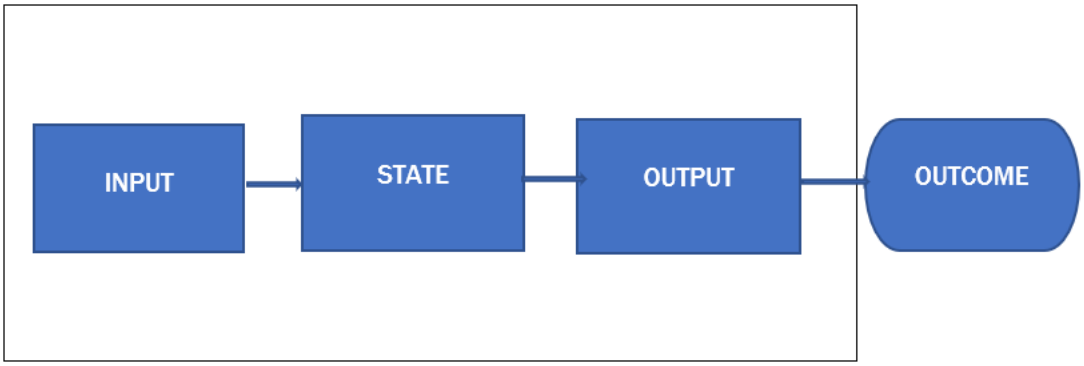
We use this epistemological and interdisciplinary instrument to analyse and explain the European Union phenomena.

There are numerous types of systems. In the following, I will use the model of the Input-State-Output System.

According to this model, the European Union Institutional System may be described as it follows:

[3] The History and Status of General Systems Theory, Author(s): Ludwig Von Bertalanffy Source: The Academy of Management Journal, Vol. 15, No. 4, General Systems Theory (Dec.,1972), pp. 407-426 Published by: Academy of Management Stable URL: http://www.jstor.org/stable/255139, Accessed: 29/12/2013 02:50. Secondary Source: http://perflensburg.se/Bertalanffy.pdf, Accessed:10/7/2018

Figure 1. The Logical Model of European Union Institutional System



Source: Author

The European Union is a political structure comprised of 28 sovereign and independent member states (until 2019 when Great Britain will leave European Union) that decided to coordinate their efforts toward a common objective.

The Union's decision-making system is based on the principle of separation of powers: legislative, juridical and executive.

The whole activity of European Union is based on treaties that were adopted by all member states. These documents underlie the Union's objectives, bodies and its functioning rules.

European Union's main action areas

The European Union acts in 35 different areas[4], as it follows:

- developing a common migration and asylum policy
- establishing a security union
- economy and finances and Euro
- making industry and business more competitive and to promote jobs and growth through a business-friendly environment
- single market
- digital economy-aiming to open up opportunities for people and businesses and enhance Europe's position as a world leader in the digital economy
- employment and social affairs-contributing to the creation of more and better jobs across Europe
- education and training
- research and innovation
- regional policy
- transport
- agriculture and rural development
- maritime affairs and fisheries
- climate
- environment
- energy
- foreign affairs and security policy
- enlargement
- neighbourhood policy
- trade
- international cooperation and development
- humanitarian aid and civil protection
- justice and fundamental rights
- public health and food safety
- consumers
- banking and financial services
- competition
- taxation and customs
- culture and media
- youth
- sport
- budget
- fraud prevention

Considering these aspects, we may proceed to identify the main elements of the European Union Institutional System's Logical Model

The elements of European Union Institutional System

I. The Input's elements

1) Lisbon Treaty
2) The Member States

The Lisbon Treaty amends both the Treaty on European Union and the Treaty establishing the European Community. We may say that the document changed the way the Union exercises its powers by enhancing

[4] European Commission, The European Union-What it is and what it does, https://publications.europa.eu/en/publication-detail/-/publication/715cfcc8-fa70-11e7-b8f5-01aa75ed71a1/language-en

citizens' participation and protection, created a new institutional framework and modified the decision-making processes. According to this treaty, the European Union (EU) gained legal personality.

The main institutional changes introduced by the Lisbon Treaty are[5]:

• creates the role of permanent President of the European Council

• the High Representative of the Union for Foreign Affairs and Security Policy gains importance and he will preside over the Foreign Affairs Council and will also be Vice-President of the Commission. A new European External Action Service will support the High Representative

• The President of the Commission will be elected by the European Parliament. The candidate will be proposed by the European Council, nominated by qualified majority. The European Parliament will also invest the whole Commission

• The European Court of Justice (ECJ) becomes the Court of Justice of the EU, and the CFI becomes the General Court. The jurisdiction of the Court of Justice is expanded to all the activities of the EU, with the exception of the common foreign and security policy.

• The co-decision procedure, under which the Council and the Parliament must agree on the proposed legislation and legislation cannot be adopted if opposed by the Parliament, is extended to a large number of new areas. It becomes the norm and is therefore renamed the 'ordinary legislative procedure'.

• introduces a new system of qualified majority voting which will take effect from November 2004 and is aimed at achieving a balance between large and small Member States. Under the new system a measure will be approved if it is supported by 55% of the Member States (15 out of 27), provided they represent 65% of the EU population. Only the most sensitive areas, such as tax, social security, citizens' rights, languages, seats of the institutions and common foreign, security and defence policies, remain subject to unanimity voting.

• The involvement of national Parliaments in the legislative process is increased and formalised.

• The Charter of Fundamental Rights, which was originally proclaimed by the EU institutions at the Nice Summit in December 2000, becomes binding and will have the same legal status as the Treaties.

II. The State's elements

The main element of the State from the system theory point of view, is the European Union legislative process. The legislative process follows the principles of subsidiarity and proportionality. The legislation is adopted through different legislative procedures depending on the policy area.

The ordinary legislative procedure is the most common legislative procedure by which directives and regulations are adopted.

The special legislative procedures are used in most sensitive areas.

Other types of legislative procedures are the consultation and consent procedures.

The treaties may be revised through ordinary revision procedure, simplified procedure revision and the Paserelle clause.

[5] Herbert Smith Freehills LLP, The Lisbon Treaty – brief overview of the key changes https://www.lexology.com/library/detail.aspx?g=48a4327a-c5e8-41a7-8000-c93e90abe763, Accessed 10/7/2018 20.55

III. The Output's elements

The Output's elements are the results of the legislative process and of the implementation of the Lisbon Treaty.

The main elements are:

- Regulations- European legislation with direct effect on Member States
- Directives – European legislation with indirect effect on Member States that needs to be transposed in national legislation
- Decisions- European legislation with direct but limited effect on Member States
- Non-binding rules-recommendations and opinions
- European Union main bodies with role in decision-making process at European level, such as:
  - o European Commission
  - o European Parliament
  - o Council of European Union
  - o The Council
- Enforcement bodies and mechanisms such as:
  - o Court of Justice of European Union
  - o European Court of Auditors, etc.

IV. The Outcome of European Union Institutional System

The European Union Institutional System has as main outcome the European Union goal-To promote peace, follow the EU's values and improve the wellbeing of nations.

The European Union's general objectives are:

- A common European area without borders
- Single Internal market
- Stable and sustainable development
- Scientific and technological development
- Prevention of social exclusion
- Solidarity
- Respect for languages and cultures
- Common foreign and security policy

The European Union's objectives are recorded in the Treaties of the European Union.

The Logical Model infers that based on the Input's elements (European Treaties and Member States) the European Union Institutional System performs a legislative process (The Model's State element) that determines the Output 's elements (legislation, formal and informal norms and organizations). The whole system is designed to serve to the fulfilment of European Union's Outcome.

Conclusions

The main conclusions of this paper are:

1. The paper succeeds to clearly define concepts of System and Institutional System using the method of sufficiency predicates. In doing so, the paper is useful for all the researchers that aim to study the field of System Theory applied in Economics.

2. The System is the general concept and Institutional System is the species.

3. The comparison between the concepts of System and Institutional System, based on their sufficiency predicates, is presented in the table below:

Table 1. Comparison of the concepts of System and Institutional System

	Sufficiency Attributes			
Concept	**Complexity**	**Interconnectability**	**Teleology**	**Normative Characteristic**
System				
Institutional System				

Source: Author

4. Using the methodological instruments of System Theory and Logical Analysis we may further the study on European Union Institutional System as it follows:

a. identifying the institutional elements that are according to Lisbon Treaty

b. identifying the institutional elements that are contradicting the Lisbon Treaty

c. identifying measures for improving the institutional framework of European Union system in order to achieve European Union's desired Outcome

REFERENCES:

1. **Dinga, Emil**, *Studii de Economie. Contribuții de analiză logică,epistemologică și metodologică*- Economics studies. Contributions of logical, epistemological and methodological analysis, Editura Economică, 2009, Bucharest
2. **Dinga, Emil,** *Studii de Teorie și Modelare Economică-Elemente metodologice generale*, Studies on Economic Theory and Modelling-General Methodologic Issues, Editura Academiei Române, 2018, Bucharest
3. **Enescu, Gh.,** *Tratat de Logică*- Treaty of Logic, Editura Lider, Bucharest
4. The History and Status of General Systems Theory, Author(s): Ludwig Von Bertalanffy Source: The Academy of Management Journal, Vol. 15, No. 4, General Systems Theory (Dec.,1972), pp. 407-426Published by: Academy of Management Stable URL: http://www.jstor.org/stable/255139 .Accessed: 29/12/2013 02:50. Secondary Source: http://perflensburg.se/Bertalanffy.pdf, Accessed:10/7/2018
5. European Commission, The European Union-What it is and what it does, https://publications.europa.eu/en/publication-detail/-/publication/715cfcc8-fa70-11e7-b8f5-01aa75ed71a1/language-en,
6. Herbert Smith Freehills LLP, The Lisbon Treaty – brief overview of the key changes https://www.lexology.com/library/detail.aspx?g=48a4327a-c5e8-41a7-8000-c93e90abe763, Accessed 10/7/2018 20.55

Sustainable Management and Entrepreneurship in the Field of Green Buildings in the context of the 4th Industrial Revolution

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Abstract: *The sustainable management it is very important, especially nowadays, when progress made as a result of the recent industrial revolutions allow to change the vision and the economic behavior in order to increase the economic efficiency. The sustainable management in the field of the buildings is particularly important because buildings have a major contribution to the greenhouse gas emissions, to the solid municipal caves and to the water consumption and also because the individuals spend a great part of their time indoors. In recent years, we can observe a worldwide preference for the green buildings, both for new buildings and for converted traditional old buildings, demonstrated by the numerous regulations in financial and legislation fields and thanks to the advantages that they bring to the inhabitants, to the owners, to the developers and entrepreneurs and to the State. Thanks to the last Industrial Revolutions, we are allow to use new equipment and products inside buildings, to transform their appearance or shape, their utility and their functionality, so they are more environmentally friendly and healthier.*

Keywords*:* sustainable management, green building, energy consumption, modern materials, certification.

JEL Classification: A13, D19, D24, E29, E61, E62, F35, H 21, H 22, I15, I38, O12, O15, O16

1. Introduction

Worldwide, it is considered that the world is now passing through the Fourth Industrial Revolution, which was defined by the prestigious Science and Technology Magazine, in March 2017 as: "It is the digital revolution, characterized by a fusion of technologies that shrinks the boundaries of the world - physical, digital and biological ones. "[4]

Regarding the past progresses of the industrial activities and technologies due to the first three industrial revolutions, besides the many indisputable progress that has led to the economic development and the development of mankind in general, there were also some negative effects that they caused determining several serious environmental crisis as negative externalities resulted from the industrial activities, like the air pollution, the emission of toxic substances, the climate change.

The great technical progress that has been made in recent years due to the 4th Industrial Revolution is the one that allows mankind to use new, more powerful and distinctive new materials and technologies that are more cleaner and more friendly with the environment and the society, are highly economic efficient, allowing for long-term benefits, increasing the revenues and contributing to raising the overall standard of living. New digital technologies will allow unprecedented progresses in medicine, genetics, electronics, robotics, communications, but its most important element remains the energy, especially the renewable one. With the new materials and technologies that the fourth industrial revolution created, it is possible to modernize and, in fact, to change economic activities in all fields so as to have a lower environmental, social and economic negative impact.

Buildings are important for people because they have a great influence on the daily life and health of the population during their living inside their homes, but also at the work place, by having a great influence on the labor productivity. The buildings are essential for the society because the individuals spend a great part of their time inside the buildings. This part can reach even 90% of the time per day in the developed countries, which demonstrates that the quality of the buildings is an important element for the comfort of the population. So, mankind must change the way to design and construct the new green buildings of the future.

In recent years, we can observe the worldwide preference for the green buildings in terms of both construction of new buildings and adaptation of old buildings in order to convert them in green ones.

The Governments can provide an important example for good practices by locate the State institutions in green or greener buildings. State can also play an important role in raising public awareness, including builders and entrepreneurs awareness, in promoting green buildings and in underlining the benefits that they bring on long term.

In Romania, as in the other European Union States, in recent years, were formulated and passed a series of regulations in financial and legislation fields that encourage the construction of green buildings. It can be observed also the trade market sensitivity in this field, considering that the green buildings bring a multiple advantages, not only to the residents, but also to the owners even if they do not live in those buildings, to the developers and to the State itself.

The main aspects to which the advantages of green buildings are related are: the energy efficiency, which is considered to be the most important; the sustainable water management, which involves the reduction of the water consumption, the increase of the its quality and finding new sources of water; using more natural materials for building them and for the interior decoration, which are more environmentally friendly materials and easier to recycle. This allows a significant reduction of the total resource consumption and a more efficient waste management.

2. Literature Review

Because individuals spend a lot of time indoors, it is important for them to have the benefit of the best conditions. The buildings sector has a major importance today also because it is responsible for a significant part of greenhouse gas emissions and consumes a large quantity of material and non-material resources. The green buildings are more energy efficient, consume less water and other materials and are more environmentally friendly and healthier.

„The process of greening buildings and their subsequent use provides a wide range of direct social benefits, including the improved health, productivity and wellbeing of those who live and work in them and the creation of jobs in construction, maintenance and the supply of energy, water and sanitation." [5]

This sector is very important for all countries and, in particular, for the developing countries where, as population growth and economic growth accelerate, the demand of buildings is growing too, both for residential buildings and commercial or offices. The construction of the new green buildings is a field which is expected to grow in the future and its importance is demonstrated also by the fact that it is an significant source of the labour demand, leading to an increase in the number of jobs, of which many are green jobs. "If the demand for new buildings that exists in developing countries is considered, the potential to increase the number of green jobs in the sector is still higher. Various studies point to job creation through different types of activities, such as new construction and retrofitting, production of resource-efficient materials and appliances, the expansion of renewable energy sources and services such as recycling and waste management. Greening the building industry also provides an opportunity to engage the informal sector and improve working conditions across the industry, by implementing training programmes targeting new skill requirements and improving inspection approaches." [5]

The role of the public sector and the leadership regarding the green buildings must be underlined: "Considering, in particular, the hidden costs and market failures that characterise the building industry, regulatory and control measures are likely to be the most effective and cost-efficient in bringing about a green transformation of the sector. These need to be combined with other pricing instruments for greater impact, given realities such as the level of development of the local market and household income-levels. Additionally, government-owned buildings such as public schools, hospitals and social housing units are ideal locations to begin implementing greener building policies, including green public procurement. At the same time, the role of progressive private sector actors organised, for example, through

Green Building Councils can drive the transition to lower carbon and more resource-efficient buildings." [5]

The decision to build a new green building, the way to actually put it into practice as well as the decision to adapt an old building in order to transform it into a green one depends on the local specificity of each country or area, so the local authorities must adopt their own specific measures appropriate to that area, with all its characteristics. The World Green Building Council underlines: "Any building can be a green building, whether it's a home, an office, a school, a hospital, a community center, or any other type of structure, provided it includes features listed

above. However, it is worth noting that not all green buildings are – and need to be - the same. Different countries and regions have a variety of characteristics such as distinctive climatic conditions, unique cultures and traditions, diverse building types and ages, or wide-ranging environmental, economic and social priorities – all of which shape their approach to green building."[6]

„Green building benefits go beyond economics and the environment, and have been shown to bring positive social impacts too. Many of these benefits are around the health and wellbeing of people who work in green offices or live in green homes." [6]

Developing the preference for the green buildings, mankind have also to answer at some interesting questions, as the authors Francis D.K. Ching and Ian M. Shapiro underlined in their book "Green Building Illustrated": "Is a green building one that is greener that it could have been? Is a green building one that meets a green building standard? Is a green building one that has low or zero negative impact on the environment and on human health? Should all buildings be green? Are green buildings a passing fad? Do green buildings stay green over time?" [1]

As the Romanian Green Building Council underlines: „The building sector is one of the major energy consumers (40% of the final energy consumption) and is responsible for a significant amount of CO2 emissions (36% of the CO2 emissions). The potential of reduction is very high, especially through measures for increase energy efficiency and energy production from renewable sources. The costs associated with these measures - especially those related to energy efficiency are minimal or even negative. These are not inefficient expenditures, but rather investments returned in the future through the savings of the conventional energy. The price of the energy will continue to grow and the existing subsidy measures, that have the goal to reduce the costs for the citizens, are not sustainable ..... The immediate benefits for citizens would be reducing energy bills, creating new economic opportunities and jobs, increasing comfort at home and office, as well as the living standards." [7]

"Managers are increasingly required to achieve their carbon footprint targets and the management of scores required by environmental sustainability certifications for individual green buildings or for their entire portfolio."[8]

Romania applies 4 important systems of certification for the green buildings, LEED, BREAM, DGNB and HQE.

"LEED, or Leadership in Energy and Environmental Design, is an internationally recognized certification system for green buildings, developed by the US Green Building Council (USGBC) in 2000. LEED

certification provides independent, third-party verification that a building, home or community was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED certification is the internationally recognized distinction that a building or neighborhood development is environmentally responsible, profitable and a healthy place to live and work. With nearly 9 billion square feet of building space participating in the suite of rang systems and 1.6 million feet certifying per day around the world, LEED is transforming the way built environments are designed, constructed, and operated - from individual buildings and homes, to entire neighborhoods and communities. Comprehensive and flexible, LEED works throughout a building's life cycle."[9]

"BREEAM (Building Research Establishment's Environmental Assessment Method) is an assessment method and rang system for buildings, first launched in 1990 by BRE, the trading name of Building Research Establishment, which sustains expert, impartial research, knowledge and advice for the built environment sector and beyond. BREEAM sets standards for best practice in sustainable building design, construction and operation and has become one of the most comprehensive and widely recognized measures of a building's environmental performance. BREEAM assessment uses recognized measures of performance, which are set against established benchmarks, to evaluate a building's specification, design, construction and use. The measures used represent a broad range of categories and criteria from energy to ecology. They include aspects related to energy and water use, the internal environment (health and well-being), pollution, transport, materials, waste, ecology and management processes. There are over 200,000 buildings with certified BREEAM assessment ratings and over a million registered for assessment since this rang system was launched. BREEAM sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance. Credits are awarded in ten categories according to performance. These credits are then added together to produce a single overall score on a scale of Pass, Good, Very Good, Excellent and Outstanding." [10]

"The DGNB assesses buildings and urban districts which demonstrate an outstanding commitment to meeting sustainability objectives. The sustainability concept of the DGNB System is broadly based and goes beyond the well-known three-pillar model. The DGNB System covers all of the key aspects of sustainable building: environmental, economic, sociocultural and functional aspects, technology, processes and site. The first four quality sections have equal weight in the assessment. This means that the DGNB System is the only one that gives as much importance to the economic aspect of sustainable building as it does to the ecological criteria. The assessments are always based on the entire life cycle of a building. Of course the focus is always also on the wellbeing of the user." [11]

The HQE certification system (Haute Qualite Environnementale or High Quality Environmental standard) is a French system which can be applied also at the international level. It is based on the principles of the sustainable development. "Underpinned by its

widely acknowledged expertise, HQE™ certification is the best solution to gain objective and credible recognition for:

- Best practice in terms of the sustainable construction and operation of buildings.
- High-quality and sustainable local developments.

HQE™ certification covers the entire lifecycle of a building (construction, renovation and operation): non-residential buildings, residential buildings and detached houses as well as urban planning and development.

It adds value to certified projects thanks to:

- Technical schemes that cover all categories of non-residential buildings (logistics, retail outlets, hotels, etc.).
- The ability to issue certificates worldwide by combining generic criteria, specific criteria, and common indicators, thereby allowing all assets to be compared.
- Full third-party certification, which is the most reliable way to ensure that the high quality nature of a project is recognized." [12]

3. Characteristics of the existing building sector

The technological progress created during the Industrial Revolutions has not only influenced the production activities themselves, but also the way in which individuals have built and arranged their homes. The Industrial Revolutions allowed the use of new equipment and products inside buildings, have greatly transformed their appearance or shape, their utility and their functionality.

Nowadays, the buildings sector accounts for around 10% of the global GDP of the world. In the developed countries it is foreseen that a great part of the currently used traditional buildings will no longer be used after 2050. This trend is mainly a result of the decreasing trend of the population and the increasing trend of the demand for the new and green buildings. It has been noticed that as a nation and its members become richer, individuals have higher expectations regarding the living conditions, the general living standards, which determines the increase of the demand for buildings with higher standards.

The newest world trends in the social and demographic fields influence the behavior of individuals regarding the buildings. Although they desire to have a higher living standard inside the buildings as the revenues increase, this trend does not always lead to an increase of the energy consumption. At present, it is noted that more and more households are currently formed by a single person, which leads to an increase of the energy consumption for lighting and heating, but causes a decrease of the energy consumption for heating the water. There are significant numerous differences in the energy consumption depending on the local traditions: while in the North of Europe there is a high energy consumption for heating the space, in some Asian countries the highest energy consumption is for heating water.

At the same time, in many countries, especially in the developing ones, there is a significant deficit of buildings, both residential, commercial and for offices, so the trend will be to increase the buildings supply. One of the major factors which conducts to the increase in the demand for buildings in this countries is the rapid increase of the degree of urbanization, as the process of economic development accelerates, by about two to three times more than in developed countries. An

important problem faced by most of the developing countries is that a significant part of the buildings that already exist are informal, low-cost buildings in which people with the lowest income are living. The low-cost buildings in general do not benefit from adequate sanitary conditions, do not have electricity and are place far away from public transport facilities, which impedes their tenants to access jobs and education. It should be taken into account also the fact that the poor population, even if they want to transform their buildings in greener ones, they do not have the necessary financial possibilities, so the State has an important role by granting them a financial aid.

One of the biggest problems that buildings currently have in all countries is related to the energy consumption. Both residential and commercial buildings together consume over 50% of total global energy consumption. In general, for all types of buildings, the main causes of the energy consumption are lighting, space heating and water heating, using the DVD, TV and PC. An important part of the total energy consumption comes from their construction and also from the demolition. In order to improve the energy consumption, it is essential for the owners of the buildings to be convinced that implementing more energy-efficient systems result much benefits for the whole society, given the fact that if they do not live in those buildings, they do not directly benefit from the inversion of buildings , but the residents who pay lower bills for the energy consumption.

Buildings also contribute with more than 10% to the total water consumption and to the municipal solid waste.

4. Perspectives, modalities and consequences of greening the building sector

Greening the building sector brings a series of long-term benefits both for those individuals that are living inside, for the owners, for the developers and for the States.

For those that are living or working in the green buildings the benefits are the pollution reduction, the lower usage costs and a more pleasant indoor environment, which has positive effects on health and productivity. The green buildings have several advantages also for their owners even if they do not live there because they are easier to rent and with larger amounts, they are more sought after, they have a lower maintenance cost, the relationship between quality and cost is very good and they can be sold much more easily and fast.

The decision to transform a traditional building into a green one must start from the costs that this process implies. In developed countries there is a higher preference for converting old buildings into new buildings since the demand for buildings decreases. In the developing countries, the possibility to build new green buildings is higher due to the significant increase in the buildings demand. In general, the initial cost of a green building is higher than the cost for a traditional building, but the benefits of a green building are much higher. So, at long-term, considering all the costs and benefits, it results that costs are greatly reduced, even until zero.

In the European Union, all the countries aim to reduce the energy consumption of the buildings by about 5% per year, which is set out in the document Energy Performance of Buildings Directive. Although the initial cost

of the green buildings is slightly higher than for the traditional buildings, according to a study conducted in the United States, the perception of the population is very different from this reality, the population believing that the initial costs are even 10 times higher than the real ones, which can turn into a psychological barrier for building green buildings.

In assessing the total cost, it must be take into consideration not only the cost of building, but also the cost savings, seen as benefits, of that individuals that are living indoors. Although there are very different patterns of energy consumption inside buildings depending on the geographic location, climate, degree of development, and degree of urbanization, can be identified, as solutions, some common elements that lead to reduce the energy consumption inside the buildings: using solar panels and wind turbines; substituting the current lighting system with LEDs; purchasing of systems that are recovering the inside heat; reducing the energy demand for lighting by building larger windows which can allow penetrate the sunlight; using heat pumps and heat storage; making floor holes for the air circulation; evacuating the air through the upper ceiling area; using the natural ventilation in order to reduce the energy consumption for cooling during the warm seasons. There are also some solutions that contributes indirectly at the reduction of the energy consumption inside buildings, such as: the installation of thermal insulation windows; the use of special insulation for exterior walls, made from natural materials such as wool, cotton, cellulose, soybean foam; the construction of roofs with vegetation on top, which ensure a cooler climate inside the building, protecting and favoring also the biodiversity.

Because the greening of the buildings involves to change the behavior patterns of the residents is important to change also the behavior patterns of the investors and the State. Aiming to adjust the energy consumption it is increasingly important to keep informed the households about the energy consumption issues. In order to modify the consumption patterns regarding the energy inside the buildings, the State has an important role in raising awareness among the population, along with other economic subjects such as owners, managers and entrepreneurs, through their voluntary actions of informing and implementing the new techniques and new models of consumption. Concerning the reduction of the energy consumption there are several situations when the political instruments used by the State may have an opposite effect to the desired one. The State can act by providing subsidies to the tenants in terms of energy consumption or by providing subsidies to those that are using the renewable energy. But, when the State decides to provide subsidies to the energy consumers, the effect may be the opposite, if they decide to spend in the future the same amount to pay the bills for the energy consumption, which allows them to increase their energy consumption.

The greener buildings will reduce the greenhouse gas emissions due to the decreasing trend of the energy consumption in all parts of the world less in Asia where the trend is to significantly increase the number of the buildings. Even if these buildings are greener, the foresights show an increase of the greenhouse gas emissions.

Related to the water consumption, which is another important problem of all buildings, in the green ones in order to

reduce the water consumption, they can be implemented various methods of water management such us collecting and storing the rainwater, heating the water by the intermediate of the solar heat, introducing the low-flow water taps, recycling and treating and reusing the gray water. Of course, it must be take into account the fact that water purification activities are energy-consuming. To solve the general problem of the imbalance between water demand and water supply, the State must encourage the private investors to build smaller local water supply systems and also to find new ways of purchasing water from new sources.

Due to the new discoveries in technology, it can be used better and modern materials in buildings construction, in furniture and in interior decorations, such as reusable and removable components for the constructions, organic paints for the interior, like washable paints with much less or no emissions of toxic substances, wherever possible it can be used those types of wood which have a higher rate of growth and with a fast recovery process, such as bamboo or rattan.

These solutions help also to reduce the problems of the municipal solid waste, given the fact that only the construction and demolition of buildings contribute to about 30% at the municipal solid waste. All the improvements in the materials used in buildings can reduce the consumption of the natural and material resources and can minimize the impact of their extraction on the environment. It can also increase the availability of water and land. By using better and newer modern materials, buildings can be easier to maintain and there is a greater potential for reuse of these materials by recycling them when buildings will be out of use. Nor should we forget the possibility of finding more efficient transport models related to the building activity.

The consumption of materials is not important only by itself. Within buildings, a wide range of materials such as wood, plastic, metals, with different recycling rates are consumed. In the recycling process, the most difficult to recycle is plastic, but some metals can be recycled with a much lower energy consumption compared to the initial extraction process from the ore. Even if some of the recycled metals no longer retain the original qualities, they can be reused for other activities, the energy savings being extremely important.

Greening the buildings sector has not be considered only from an economic point of view. It is, at the same time, strongly correlated with the social field, the environment and blends with elements of architecture and design. From this point of view, the role of designers becomes very important because they are meant to combine the revolutionary new technologies with aesthetics and functionality elements. These changes do not only relate to the materials used in the construction process, but also to the changes of the traditional form of the buildings. There are two main types of design.

The passive design aims to minimize the effects of the external environment on the building's interior. This design should use the natural elements available in the area, such as sunlight and air currents. According to the passive design, in the warm areas, the greener buildings must have thick walls and small windows and in those areas whit high humidity, the greener buildings must use the air currents for ventilation. Many of the principles of the passive design are already being

applied in the traditional buildings in those areas.

The active design is opposed to the passive one because it uses the latest technologies such as renewable energy and new methods to optimize the water consumption and also the most modern artistic elements.

The design should lead to a reduction in the cost with the materials, both for those used to build the buildings, to assure the maintenance of the buildings during their existence and also to favor a better material recycling process when buildings will be disposed of.

Besides the indisputable positive effects that the greening of the building sector has on the household members as residents, there are a number of positive effects on the labor force as well. When the production activities take place in green buildings, it is demonstrated that implies a significant increase in the labor productivity. The increase in labor productivity is primarily due to the fact that people have a more comfortable and pleasant workspace. The quality of the air is better, the natural light can penetrate better, even the natural ventilation can be used, allowing to control the air temperature and also ensures a less pollution, not only for the air, but also related to the noises. Increasing the labor productivity is an important premise for increasing the total profits of the companies. The green elements of a green building for offices may also be related to some elements that influence the climate and health of the population through the social components. For example, there are green buildings where lifts do not stop on each floor, in order to force the workers to make much more movement, by climbing or descending the stairs. The places which are specially set for a short coffee break are placed outside the building, in green spaces arranged around it, in order to foster the socialization between the working staff and the members of the local community.

Regarding the human resource as production factor, it is obvious that the greening of buildings, by transforming the traditional buildings or by building new ones, contributes to increase the number of many direct and indirect jobs, directly or indirectly linked to the building sector. These jobs refer to the number of people involved in all the activities related to the production and supply of renewable energy, to the procurement and production of the better materials used in buildings, to the transport, to the water treatment and to the waste collection and treatment.

The greening of buildings sector may face many barriers that are not only strictly economical barriers, but also barriers based on people's behavior, financial possibilities or economic policy measures. As the financial projects for the construction of green buildings have, in general, a high degree of uncertainty and high risks, there is a restraint of the financial institutions to provide credits for this purpose.

Among the economic policy measures, the market-based instruments have an important role, such as signing contracts for the energy efficiency or granting energy and materials certificates or cooperating in the field of the public procurements. Regulatory and control mechanisms that State can use have also an significant role, such as monitoring the buildings and doing the audit in this area. The fiscal instruments and incentives are also important, such as tax exemptions or reductions for green buildings, as well as subsidies

or loan guarantees by the State. Together with the general measures which must be taken into consideration in all countries, in the developing countries the issue is more complex because it involves both a stronger information for citizens on the advantages of green buildings including demonstrative projects and, at the same time, ensure the technical and financial assistance and trainings by the developed countries, which have a much greater experience in this area.

The State must encourage the construction of the green buildings or the transformation of the traditional ones into green buildings because that's how it reduces the greenhouse gas emissions, it reduces the dependence on the fossil fuels, it increases the energy security of the country, it makes a better use of the national resources, it can make progress regarding the local utilities by reducing the volume of the municipal solid waste and by a sustainable water use and, last but not least, boosting the local economy by saving resources and gaining extra benefits.

In a report of the Romanian Green Building Council there are illustrated the most important trends on the Romanian market: "Within the recent past, the following trends have converged to create significant opportunity for "green" development - including construction and eco-efficiency - in Romania and the surrounding region:

- increasing competition for existing fossil fuel reserves and falling (or eliminated) energy subsidies and the resulting rising energy prices
- unprecedented international political and business enthusiasm and demand for securing reliable sources of energy, reducing dependence on unstable suppliers of oil and combating climate change.
- scarce natural resources leading to significantly higher prices for a variety of construction inputs
- demonstrated investor interest in green building certification schemes
- mandated green procurement targets currently implemented
- falling prices for eco-efficient building solutions
- significant EU Funding for sustainable development (4.5 Billion Euros allocated between 2007 and 2013 for Environmental initiatives in Romania alone) and a general allocation of 30 Billion Euros to Romania for "Structural Funds" to improve infrastructure, competitiveness, governance, etc.
- relaunch of the suspended "Green Home" initiative providing subsidies for integrating renewable energy solutions into apartments and businesses.
- greater willingness of financial institutions to consider total life-cycle costs in approving project financing
- relatively recent introduction of mortgage lending and other forms of construction financing that makes available more purchasing power when planning and designing homes and buildings for better energy efficiency.
- implementation in Romania and other member states of the mandatory European Energy Performance Building Directive (EEPBD) requiring energy certification for new (2007) and existing (2010) buildings" [13]

As stated by the Romanian Green Building Council, several financial and legislative measures have been taken in our country in order to encourage the greening of the buildings. These financial measures include the co-financing from the Environmental

Fund for those who replace or complement their energy systems with mainly solar, geothermal and wind power energy. It is guaranteed that 80% of the expenditures needed for any eligible projects are non-refundable. There is also the maximum amount that can be granted for this co-financing to the territorial administrative units depending on the number of population. Another financial measure used to increase the energy performance of the buildings is the Multi-annual Thermal Rehabilitation Program, which has the purpose of the thermal insulation of the blocks of flats. The local administrative budgets have an important role in financing those projects. Regarding the legislation, since 2007, the owners of new buildings have been required to obtain energy performance certificates, authorities carry out energy audits and apply the same measures to increase the energy performance in all public procurements. [14]

Among the "Examples of incentives For the promotion of green buildings at central level in the States of the European Union and the United States", Romania Green Building Council illustrates the main measures in Romania to encourage the development of energy-efficient construction and the main factors that influence the developers in their decision to build sustainable. The results were obtained on the basis of a questionnaire regarding the measures to encourage development of the efficient construction from the point of view of the energy.

From the developers' point of view, there are illustrated the main factors to encourage the construction of the green and sustainable buildings, the main measures that can be taken as well as the main barriers.

As shown in the graph below, the determining factors for the developers' decision to build sustainable are, in order of their importance: the company's philosophy of building green; concerns about current / future prices; customer requirements; marketing / advertising benefits; lower costs for construction and operation; general demand for green buildings; imposition - by law - of standards; better understanding and information of the public; other factors.

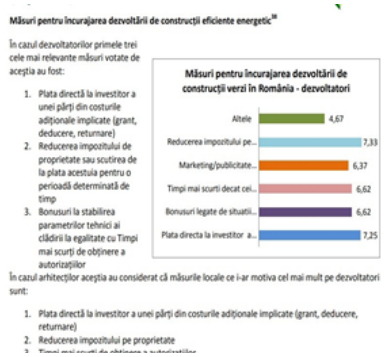
Chart 1: Determining factors for the decision to build sustainable - developers

Source:

http://www.rogbc.org/Downloads/Legislatie/Masuri-pentru-atragerea-de-investitii-in-cladiri-verzi-la-nivel-local.pdf

As shown in the graph below, the main measures to encourage the development of energy-efficient buildings are, in order of their importance: direct payments to the investors of a portion of the additional costs involved (grant, deduction, return); reduction of property tax or exemption from payment for a fixed period of time; bonuses to establish the technical parameters of the building at the same importance as shorter times to obtain authorizations; marketing / advertising; other.

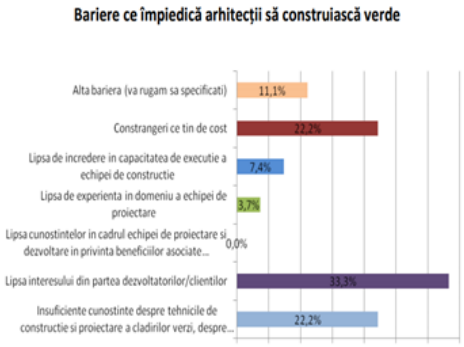
Chart 2: Measures to encourage the development of energy-efficient buildings



Source:
http://www.rogbc.org/Downloads/Legislatie/Masuri-pentru-atragerea-de-investitii-in-cladiri-verzi-la-nivel-local.pdf

As shown in the graph below, the main barriers that prevent architects from building green, in order of their importance are: lack of interest from developers / clients; cost constraints, with the same importance as insufficient knowledge of green building and design techniques; other barriers; lack of confidence in the construction team's execution capacity; the lack of experience in the field of the design team.

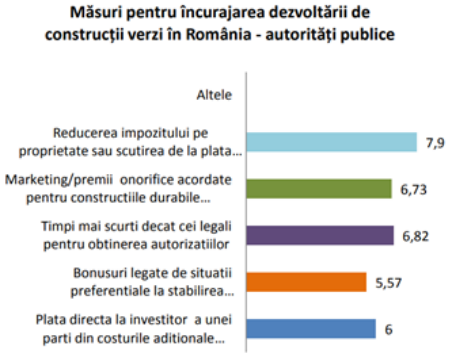
Chart 3: Barriers that prevent architects from building green



Source:
http://www.rogbc.org/Downloads/Legislatie/Masuri-pentru-atragerea-de-investitii-in-cladiri-verzi-la-nivel-local.pdf

From the point of view of the public authorities, the main measures that encourage the development of green building construction in Romania are: reduction of property tax or exemption from payment; shorter times than legal ones for obtaining authorizations; marketing / honors awards for sustainable construction; direct payment to the investor of part of the additional costs; bonuses.

Chart 4: Measures to encourage the development of the green buildings in Romania



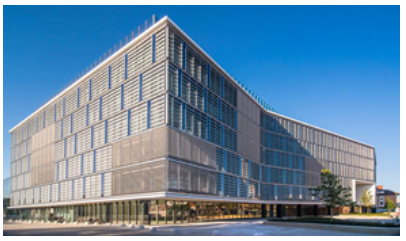
Source:
http://www.rogbc.org/Downloads/Legislatie/Masuri-pentru-atragerea-de-investitii-in-cladiri-verzi-la-nivel-local.pdf

Among the greenest office buildings in Romania are several buildings in Bucharest, the capital of the country and in the city of Cluj-Napoca

Photo 1: Floreasca Park, Bucharest, Romania

Source:
https://www.wall-street.ro/articol/Real-Estate/201072/topul-celor-mai-eco-cladiri-de-birouri-din-romania.html

Photo 2: The Office Cluj, Cluj – Napoca, Romania



Source:
https://www.wall-street.ro/articol/Real-Estate/201072/topul-celor-mai-eco-cladiri-de-birouri-din-romania.html

Photo 3: Crystal Tower, Bucharest, Romania

Source:
https://www.wall-street.ro/articol/Real-Estate/201072/topul-celor-mai-eco-cladiri-de-birouri-din-romania.html

Photo 4: Liberty Technology Park Cluj, Cluj – Napoca, Romania

Source:
https://www.wall-street.ro/articol/Real-Estate/201072/topul-celor-mai-eco-cladiri-de-birouri-din-romania.html

Photo 5: Green Court, Bucharest, Romania

Source:
https://www.google.ro/search?rlz=1C1AVFC_enRO804RO804&biw=1853&bih=932&tbm=isch&sa=1&ei=iGQBXOuSGNCwadr3t6AD&q=Green+Court+Bucuresti+&oq=Green+Court+Bucuresti+&gs_l=img.3...33922.33922..35432...0.0..0.113.113.0j1.....0....1j2..gws-wiz-img.wCLMUTnEV4Y#imgrc=mScGpHMdwR8sgM:

Although there are not many achievements in the field of private houses as residences in Romania, they can be observed some achievements also in this field. Among

the houses used as residence, the smartest house in our country is located near Bucharest and is called Buhnici House, after the owner's name which is a well-known Romanian journalist. From the available sources, it is the first intelligent house not only in Romania but also in the Southeastern Europe that has the residence destination.

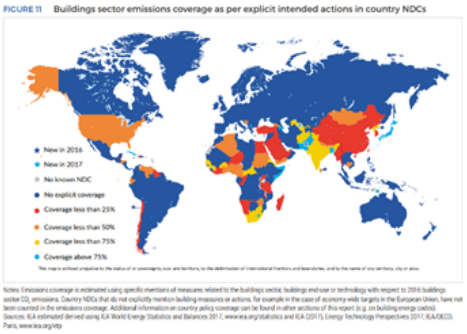
Photo 6: Buhnici House, Ilfov County, Romania

Source:
https://www.google.ro/search?q=casa+buhnici&rlz=1C1AVFC_enRO804RO804&source=lnms&tbm=isch&sa=X&ved=0ahUKEwjzoJLBnIHfAhUqxoUKHWzABFYQ_AUIDigB&biw=1853&bih=932#imgrc=I8AiyO88YcSO8M:

This family home is equipped with the latest technology elements is a smart house with minimum energy and water consumption because it is equipped with solar panels, underfloor heating and floor cooling, heat pumps, water tank and smart water taps. There is no need for air conditioning and in the attic there are smart windows, which are automatically opened or closed depending on the climatic conditions. The structure is made of wood and all the materials used inside are sustainable materials. [17]

At the European level, the best known examples are the Bosco Verticale in Milan, Italy, the roof of Berlin's Parliament in Germany as well as numerous other buildings in different countries of the European Union. In July 2015, the U.S. Green Building Council (USGBC) announces the top 10 Countries outside of the U.S.A. for LEED Green Building: "Canada, India, Brazil, Republic of Korea, Germany, Taiwan, United Arab Emirates, Turkey, Sweden". [15] According to the site green.it, the most famous buildings covered by green in the world in the summer of 2017 were "Rosewood Tower in Brazil, Eco-Luxury Hotel, France and Biodiversity Tower M6B2 in France". [16]

According to "Towards a zero-emission, efficient, and resilient buildings and construction sector, GLOBAL STATUS REPORT 2017", in most countries, are necessary more measures, taken by the authorities, to cover greenhouse gas emissions from buildings.



Source:
https://www.worldgbc.org/sites/default/files/UNEP%20188_GABC_en%20%28web%29.pdf

The same publication mentions the main factors that will determine the long-term reduction of carbon dioxide emissions:

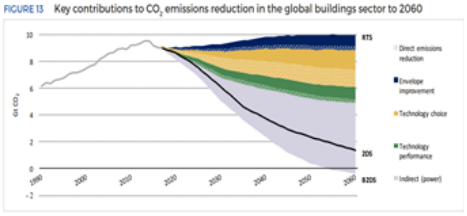


FIGURE 13 Key contributions to CO_2 emissions reduction in the global buildings sector to 2060

Notes: "Direct emissions reduction" represents a decrease in emissions from reductions in direct fossil fuel consumption in the buildings sector. "Envelope improvements" include measures (including deep energy renovations) that improve the energy intensity of the building envelope. "Technology choice" represents shifts from one type of technology and/or fuel to another (e.g. incandescent lamps to LEDs or gas boilers to electric heat pumps). "Technology performance" represents energy technology efficiency improvements (e.g. higher operational performance for heat pumps). "Indirect (power)" emissions reduction is from improved carbon intensities of power generation, where negative emissions are from carbon capture and storage (CCS) technologies.
Source: IEA (2017), Energy Technology Perspectives 2017, IEA/OECD, Paris, www.iea.org/etp

Source:
https://www.worldgbc.org/sites/default/files/UNEP%20188_GABC_en%20%28web%29.pdf

8. Conclusions

The transition to a more efficient and environmentally friendly economy, must be a priority of the managers of all levels in all the countries of the world, in order to protect the future generations. The sustainable management is very important, especially nowadays, when progress made as a result of the recent 4th Industrial Revolution allow a change of the vision and of the economic behavior which can lead to increase the economic efficiency.

The sustainable management in the field of buildings is particularly important because they have a major contribution to the greenhouse gas emissions, to the solid municipal caves and to the water consumption. Another important reason is the fact that individuals spend a great part of their time inside the buildings.

In recent years, we can observe the worldwide preference for the green buildings in terms of both construction of the new buildings and adaptation of the old buildings in order to convert them in green ones.

In the last decades, a series of measures have been taken to green buildings at both national, European and global levels. There were formulated a series of financial and legislative measures that encourage the construction of green buildings, considering that the green buildings bring multiple advantages, not only to the residents, but also to the owners even if they do not live in those buildings, to the developers and to the State itself.

In developed countries there is a higher preference for converting old buildings into new buildings since the demand for buildings has a decreasing trend. In the developing countries, the possibility to build new green buildings is higher due to the significant increase in the buildings demand. In general, the initial cost of a green building is higher than the cost for the traditional buildings, but the benefits of a green building are much higher. One of the main problems, at the global level, faced by the building sector, is the fact that in most of the developing countries, a large proportion of the population lives in informal houses and their financial possibilities do not afford them even the traditional housing and much less the green ones. But, even if the initial cost is quite high, at long-term, considering all the costs and benefits, it results that costs are greatly reduced, even until zero.

The States must create their own political instruments and measures for greening the building sector, according to the local differences regarding the conditions preferred by the users of the buildings, depending on the area and the region, so on the local traditions and consumption habits.

As there are many green buildings worldwide recognized for their overall performance, it may be necessary to promote

them more intensively so that developers, entrepreneurs, States and the consumers see them as worthy examples.

Given that an important issue worldwide is represented by the scarce financial possibilities, the States should grant more subsidies or tax exemptions to those who want to build new green buildings or to improve the traditional existing buildings and should find effective ways to encourage the financial institutions to give easier and higher amounts as credits for this purpose.

In order to improve the achievement in the building sector, States would also have to better assess and measure the effects of this sector as well as its achievements, by establishing more complex and complete indicators which are intended to be included in the calculation of the national GDP and other macroeconomic indicators.

The States should decide different measures at the macroeconomic level, in collaboration with specialists from different fields such as economists, engineers, biologists, architects, sociologists.

REFERENCES:

1. **Francis D.K. Ching, Ian M. Shapiro** (2014) *"Green Building Illustrated"*, Published by John Wiley & Sons, Inc., Hoboken, New Jersey, S.U.A., ISBN 987-1-118-56237-6 (pbk); ISBN 987-1-118-86649-8 (ebk); ISBN 987-1-118-87861-3 (ebk)
2. **Gh. Crețoiu, V. Cornescu, I. Bucur** (2011), *"Economie"*, 3rd Edition, CH Beck publishing House, Bucharest, ISBN 978-973-115-935-5
3. **D. de Vincenzo, P. Morelli, G. Spinelli, L. Scarpelli** (2010) *"Geografia economica"*, McGraw Hill Companies Inc., Milano, Italy
4. https://stiintasitehnica.com/patra-revolutie-industriala-8-previziuni-despre-schimbarea-lumii/
5. „Towards a Green Economy. Pathways to Sustainable Development and Poverty Eradication", www.unep.org/greeneconomy, ISBN: 978-92-807-3143-9, Layout by UNEP/GRID-Arendal, www.grida.no, Version - 02.11.2011, Copyright © United Nations Environment Programme, 2011
6. https://www.worldgbc.org/what-green-building
7. http://www.rogbc.org/Downloads/Legislatie/Masuri-pentru-atragerea-de-investitii-in-cladiri-verzi-la-nivel-local.pdf
8. https://archibus.ro/ro/solutii/aplicatia-cladiri-verzi/
9. http://www.rogbc.org/Downloads/Educatie/LEED_INFORMATION_PACKAGE.pdf, material from http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988
10. http://www.rogbc.org/Downloads/Educatie/BREEAM_INFORMATION_PACKAGE.pdf, material from: http://www.breeam.org/about.jsp?id=66
11. https://www.dgnb-system.de/en/system/dgnb-sustainability_concept/
12. https://www.behqe.com/cerway/essentials
13. "Opportunities for Green Construction and Energy Efficient products, materials, technology and services in Romania and the Central Eastern European region", prepared by John Biggs AIA LEED AP,

Manager – SOPOLEC Anca Bieru, Director – Romania Green Building Council Sara Bocaneanu, Senior Consultant - SOPOLEC Sinziana Frangeti, Consultant - SOPOLEC Costin Dragnea, Consultant – Romania Green Building Council, Updated March 2009, http://www.rogbc.org/Downloads/Educatie/Green_Building_Product&Services_Market_for_Romania&CEE.pdf,

14. http://www.rogbc.org/Downloads/Legislatie/Masuri-pentru-atragerea-de-investitii-in-cladiri-verzi-la-nivel-local.pdf
15. https://www.usgbc.org/articles/usgbc-announces-international-rankings-top-10-countries-leed-green-building
16. http://www.green.it/edifici-ricoperti-di-verde/
17. https://adevarul.ro/locale/cluj-napoca/casa-buhnici-cea-mai-desteapta-casa-romania-7_5ae22ca6df52022f75452494/index.html
18. http://www.rogbc.org/Downloads/Educatie/Class_Bambus-Brochure.pdf
19. http://www.rogbc.org/Downloads/Educatie/Stardome_Brochure.pdf
20. http://www.rogbc.org/Downloads/Educatie/WSP-Brochure.pdf
21. „Towards a zero-emission, efficient, and resilient buildings and construction sector, Global Status Report 2017", https://www.worldgbc.org/sites/default/files/UNEP%20188_GABC_en%20%28web%29.pdf
22. https://www.google.ro/search?q=casa+buhnici&rlz=1C1AVFC_enRO804RO804&source=lnms&tbm=isch&sa=X&ved=0ahUKEwjzoJLBnIHfAhUqxoUKHWzABFYQ_AUIDigB&biw=1853&bih=932#imgrc=I8AiyO88YcSO8M

The Advantages And Disadvantages Of Using The Lean Start Up Method For Setting Up A Company In Romania

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Abstract: *In the multitude of methods and procedures for initiating and implementing new businesses over the past decade, the Lean Start Up methodology also follows the research conducted by IT entrepreneur Eric Ries from 2008. The Romanian economic context after the effects of the international financial crisis revealed an increasing trend, albeit variable, in terms of economic growth and the development of new business and entrepreneurial initiatives. This article aims to highlight the possible impact of the Lean Start Up methodology on entrepreneurial thinking and practice in Romania, both at the beginning of the road and in its continuous evolution. The paper first performs a research on specialized scientific literature, then focus on the presentation of the Laen Start Up methodology, on the advantages and limitations of the method in question, and on the implications of its use in Romania. The results of the research result in highlighting a number of possible guidelines and guidelines to follow regarding the application of the method to the newly established enterprises in Romania.*

Keywords: Lean Start Up methodology, entrepreneurship, business model, startup, innovation-accounting

JEL Classification: M13, M16, M53, O31

Introduction

In the multitude of methods and procedures for initiating and implementing new businesses over the past decade, the Lean Start Up methodology also follows the research conducted by IT entrepreneur Eric Ries from 2008. The Romanian economic context after the effects of the international financial crisis revealed an increasing trend, albeit variable, in terms of economic growth and the development of new business and entrepreneurial initiatives. This article aims to highlight the possible impact of the Lean Start Up methodology on entrepreneurial thinking and practice in Romania, both at the beginning of the road and in its continuous evolution.

In the context of the research of the specialized literature, the article tries to highlight the importance of the methodology on the theoretical and practical aspects regarding the establishment of new business, the use of this method in Romania, as well as the advantages and drawbacks outlined by the methodology in question.

The research methodology considered a qualitative research that aimed at collecting, analyzing, evaluating and interpreting the theoretical and practical information and views on the Lean Start Up methodology.

The results of the research result in highlighting a number of possible guidelines and guidelines to follow regarding the application of the method to the newly established enterprises in Romania.

Literature review

Born in the aftermath of international financial crisis as a new method to set up a new business, but with the roots of the concept since 1999, this approach was based on the state of economy at that time characterized by tighted debt markets, closed windows for Initial Public Offerings (IPOs) and mergers and acquisition (M&A) and Venture Capital distrust after a period when cash was easily available as much as follow on financing methods. In this context, Steve Blank revealed in an article in Harvard Business Revue „Why the Lean Start-Up Changes Everything" that „Lean start-up techniques were initially designed to create fast-growing tech ventures. But I believe the concepts are equally valid for creating the Main Street small businesses that make up the bulk of the economy. If the entire universe of small business embraced them, I strongly suspect it would increase growth and efficiency, and have a direct and immediate impact on GDP and employment" [1]. Eric Ries, the American entrepreneur that was the author of the book „The Lean Startup", explain the choise of this name for his entrepreneurial movement: „I like the term because of two connotations: 1. Lean in the sense of low-burn. Of course, many startups are capital efficient and generally frugal. But by taking advantage of open source, agile software, and iterative development, lean startups can operate with much less waste. 2. The lean startup is an application of Lean Thinking. I am heavily indebted to earlier theorists, and highly recommend the books Lean Thinking and Lean Software Development" [2].

Summarizing the book of Ries, Allen Cheng shows that „the ideas in The Lean Startup came about when Eric got frustrated working on products that failed to get traction. As an engineer, he initially thought they failed due to technical problems, but this was never the right answer. In reality, they

just spent a lot of time building things nobody wanted. [...] One inspiration was Steve Blank's idea of Customer Development: a rigorous methodology for the business and marketing side of a startup. Another inspiration was Japan's lean manufacturing systems, made famous by Toyota" [3]. Yoo, Huang and Arifoglu underline in their research: „from a broader perspective, the Lean Startup is a paradigm regarding the need to test hypotheses about various components of the business model, which includes learning not only about consumers, but also suppliers, costs, and more" [4].

Reffering to the limits of the method, Ted Ladd assumed that „the popularity of the lean startup method is well deserved. But, as is true of any business process, the method must be tailored and employed with reflection and constraints, not blind allegiance" [5].

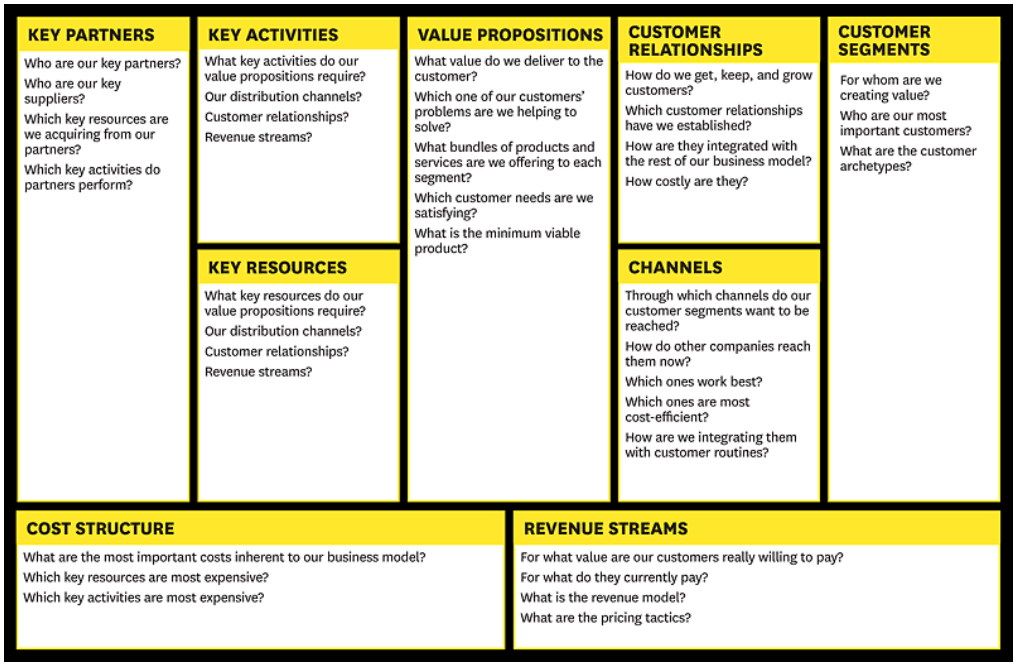
In terms of the approach of Romanian researchers, the paper named „Identifying entrepreneurship readiness for the application of the Lean Startup practices in the service industry – Case study Romania" shows that „Based on the interviews taken for this research, the conclusion is that private company owners and managers face great challenges but also important opportunities to develop their business and change the economic life of a nation towards sustainable growth. Even though not entirely understood and still looked upon with distrust, Lean Startup is seen as an interesting methodology by Romanian entrepreneurs in the service sector who responded to this study"[6]. In another research, the authors compaired two ways of starting business – Lean start up and classical method, but didn't offer real examples and practical solution to apply the method in Romania [7]. The research of Kullmar and Lallerstedt highlighted „the findings show that the lean startup method advocates a sound entrepreneurial mindset and it provides a great set of tools and hands-on recommendations that can help startups understand how to build and measure success" but „also show that the method might not be suited for all types of companies, which is something Eric Ries clearly claims in his book. Instead it seems as if it can have a negative effect on the long-term planning of the startup, be hard to apply for high-tech companies and even be discouraging toward visionary cases of radical innovation" [8].

Gaffeney et al highlighted that „the underlying principle that drives the lean methodology is to improve efficiency. In a startup, efficiency means knowing exactly what your customers will want, how much they will pay and exactly what the product will look like. Without knowing these things, time and money will be wasted following the wrong track" (Gaffeney et al, 2014) [9].

Presentation of the Lean Start Up methodology

Investopedia website defines in everybody's language the Lean Start Up methodology like "a method used to found a new company or when an existing company introduces a new product. The lean startup method advocates developing products that consumers have already demonstrated they desire so that a market will already exist as soon as the product is launched rather than developing a product and then hoping that demand will emerge" [10]. This method is described by using „a business model based on hypotheses that are tested rapidly. Data does not need to be complete before proceeding; it just needs to be sufficient. When customers do not react as desired, the startup quickly adjusts to limit its losses and return to developing products consumers want. Failure is the rule, not the exception"[10].

Fig. 1 Business model Canvas concept developed by A. Osterwalder and Y. Pigneur



Source: www.businessmodelgeneration.com/canvas.

The Lean Start Up methodology is based on five principles [3] to be applied by entrepreneurs such as:

1) Entrepreneurs are everywhere: start-ups are defined as "a human institution designed to create new products and services under conditions of extreme uncertainty".

2) Entrepreneurship is management: this principle involves the elimination of instinctual entrepreneurial actions and their replacement with rational, principled management actions.

3) Validated Learning: observing and analyzing the clients and products they want are essential and represents a learning process on scientific basis.

4) Build-Measure-Learn: the learning loop thus defined allows continuous improvement of client and product-related tactics and strategies.

5) Innovation accounting: a critical principle in this methodology in order to measure progress by a range of chained lending indicators.

The Lean Start Up methodology is based on three key components [1]. The first component, called "Vision," delimits entrepreneurial and startup concepts to attach them to a progress measurement procedure called "validated learning." The second component, called "Steer," is about going through an iterative feedback loop that is highlighted by the built-metered-learned circle. The third component, 'Accelerate', is characterized by increasing the speed of action within the learning loop.

Fig. 2 Differences between Lean and Traditional Start Up methodologies *Fig. 2 Differences between Lean and Traditional Start Up methodologies*

Source: Visual Library of Harvard Business Review

Lean Startup is defined as a scientific methodology applied to initiate startups and promote new products and is adaptable to any type of business or industry expected by entrepreneurs, developers, or business leaders.

Advantages and limitations of Lean Start Up methodology

There are a range of critics as well as praises and good opinions about the methodology and its application in practice from which the author wanted to extract only a few points below.

A female entrepreneur, Helen Walton, a co-founder and Marketing Director of Gamevy, a tech start-up which won the PitchICE award, says about the caveats of Lean Start Up method: „a) smaller is not necessarily better and viable is not always the right measure; b) validated learning sounds great – but barriers to entry may force you to develop a product blind and without experiments. Blind progress may be better than open-eyed stasis; c) pivot points do not only

come from customer feedback – there are many other types of serendipity that may intervene and offer a choice. That choice is never easy because almost every trade-off hurts; d) all the metrics and hypotheses in the world will probably not help you when reality bites. Since luck plays such a major role in what occurs, try to keep this as light-weight as all your other planning; e) no process or discipline can guarantee success. There are always new, exciting and unforeseeable ways to fail" (Walton, 2015) [11].

The same author underline that „in 2004, when Eric Ries co-founded IMVU, it was still relatively cheap to acquire customers online. Those costs have since increased significantly as the online environment matches other media in marketing budget requirements" and „for start-ups, high barriers to entry can make the size of the MVP so large that there is little point in calling it a 'little bet'. Instead, we should apply the common sense principles of avoiding waste and attempting to set up experiments to validate underlying business assumptions as soon as possible [...]" (Walton, 2015) [11]

On the same website of Walton, Ramdane Mir, Expert in Lean Startup Methods, says: „The weak points of the Lean Startup method is that it relies upon humans to execute it, and far too many don't and say they are. This gives Lean Startup a bad reputation as a methodology and perpetuates bad practices in its execution, which in turn leads to more failures while practicing "lean startup." (Walton, 2015) [11]

As a professor of internet economics and a research fellow at the Center for Disruptive Innovation at the Hult International Business School, USA, Ted Ladd considers the positive and the negative aspects of the method: „[...] the good news: In general, the lean startup method works. We measured success by looking at how teams performed in a pitch competition in front of a panel of industry experts at the end of the accelerator program (a proxy, albeit an imperfect one, for long-term financial performance). Teams that elucidated and then tested hypotheses about their venture performed almost three times better in the pitch competition than teams that did not test any hypotheses. [...] the bad news: There was no linear relationship between the number of validated hypotheses and a team's subsequent success. In short, more validation is not better. I also found that teams that conducted both open-ended conversations and more formalized experiments with customers actually performed worse in the competition than teams that conducted either one or the other during the early stages of venture design" [5].

A good opinion is expressed by Dan Kaplan a contributor to the website techcrunch.com: „The Lean methodology is the closest thing to a scientific approach to startup creation that we have. [...] Of course, in order for you to make a claim on the truth, the tests you use and the results they generate must be repeatable by others — and not just those you've paid off. In the world of startup creation, the Lean methodology doesn't quite achieve the rigor of repeatable tests, but it is certainly one of the most effective, cost-efficient ways to develop and test hypotheses about your product and your market" [12].

As a professor at UC Berkeley, Jon Burgstone says that „it sounds like straightforward enough advice to build a better business, but the approach has serious flaws" and one major critic is linked to the innovation accounting principle: „another key lean

start-up principle is the idea that standard accounting practices are not helpful measures of progress in the dynamic days of an early-stage company. Instead, the thinking goes, start-ups should rely upon "innovation accounting," or more creative metrics. So instead of, say, measuring the number of customers a start-up has, you measure instead the "engagement" of those customers. [...] Innovation accounting sounds good–but accounting is accounting. Standard accounting simply needs to be interpreted differently for early-stage ventures, not ignored or deemed irrelevant"[13].

Entrepreneur and blogger Patrick Vlaskovits shows that „The following are meant to be constructive critical observations of various facets of lean startup and customer development. [...] Pivot, Persevere or Portfolio: Lean Startup may be optimized for investors, not entrepreneurs. Natural Limitation on Hypothesis Testing: Some environments are too complex and too chaotic for meaningful hypotheses to be formed and tested. Lean Startup itself is the Resistance: Coming up with perfect experiments is the perfect excuse not to take action. People versus Process: Lean startup is just another battle in the never-ending People vs Process war. Startup Cult-Building is next to Impossible with Lean Startup: Hard to get people fired up to fight in the startup trenches when upon a pivot, you decide that this isn't a war to fight for" [14].

Implications of using the Lean Start Up methodology in Romania

As a new vision and methodology of creating new businesses, Lean Start Up could be an important method for Romanian entrepreneurs. Like any procedure or methodology to set up a new business, it needs to take into account the economic developments, although the main asset of the Lean Start Up method is precisely that, under difficult conditions of financing and variations in economic growth, is a viable way of thinking and action for future entrepreneurs.

Romania has seen in the years after the negative effects of the international financial crisis a continuous economic outlook, with slight variations, being among the first countries with a high indicator of economic growth. Over the past two years, as a result of the effects of government economic policy decisions, the economic situation, although rising, is experiencing significant deterioration in some areas of activity and areas of action.

The Romanian economist Iancu Guda, president of the Association of Banking and Financial Analysts in Romania, states in an article (Cicovschi, 2018) [15] that Romanian micro-enterprises are currently facing ten major problems, which can be translated into future projects for setting up startups. As major problems one can reveal: modest efficiency of the workforce, modest profitability growth, liquidity assurance, modest capitalization, high indebtedness, long-term investment declines, low asset efficiency, slower debt collection, increased availability and diversification of inventories above the equilibrium level. As the interviewee explain: „the deterioration of the financial situation of microenterprises in Romania has significant adverse long-term effects on the business environment: [...]improving the competitive environment, [...] strong individualization of the products and services offered by SMEs, [...] generating new jobs, [...] increased

receptivity to the needs of the market due to the direct contact with it (Cicovschi, 2018) [15].

A research conduct at the University of California, Berkeley in 2014 reveals how an enterprise can benefit from Lean Startup Methodology highlighting the followings:

„1. Empower every employee to propose and work on new ideas outside their existing work; 2. Evaluate and filter ideas methodically and use the appropriate business process: traditional or lean startup processes; 3. Ensure corporate-level support and protection/isolation for the selected ideas; 4. Provide a mechanism to measure success using innovation accounting outside the normal company objectives; 5. Define investment readiness stages using clear guidelines and provide appropriate resources with the progress through each stage; 6. Devise an incentive structure to enable innovators to have a career path and share in the success" (Gaffney et al., 2014) [9].

In this context, the author fo this paper has some arguments regarding the implications of using this by the Romanian potential entrepreneurs such as:

- The psychological structure of the Romanians, as well as the tradition and the culture of labor can be impediments to the application of this methodology in Romania; care must be taken not to be used as a screen for good intentions, but poor results in the practice or even non-application of the method as such;
- The application of the methodology in Romania may be favorable to certain areas (IT, e-commerce, Internet-related business) and disadvantageous to others;
- The launch of a new business is similar to the take-off of an airplane - it depends on what type of airplane and runway is used (startup financing assets and mode), which is the length of the take-off runway (business start time) where the airport is located - at the mountain or at sea or at the plain and atmospheric conditions (macroeconomic situation and product demand on the market); thus, the conditions of this type are very crystallized in Romania;
- The idea of Lean Start Up is, in fact, only a takeover of Japanese quality management techniques (which it recognizes by specifying the application of Toyota's methodologies and production procedures) in a new iterative cycle that wants to consider Precise customer wishes and expectations for the product you create; as such, Romanian entrepreneurs have to show a permanent concern for the market research, the clients and the products made for them, which is somewhat difficult in the conditions of an entrepreneurial culture still in the beginning.

Conclusions

The final conclusions are based under the previous assumptions in this paper. Like any procedure or methodology to set up a new business, it needs to take into account the economic developments, although the main asset of the Lean Start Up method is precisely that, under difficult conditions of financing and variations in economic growth, is a viable way of thinking and action for future entrepreneurs. So, as a new vision and methodology of creating new businesses, Lean Start Up could be an important method for Romanian entrepreneurs. In order to implement the methodology on Romanian start-ups, the author underline there are also positive and negative aspects with strong impact in that regard.

REFERENCES:

1. **Blank, S.** (2013). *Why the Lean Start-Up Changes Everything*. Harvard Business Revue. May 2013 Issue. Available at < https://hbr.org/2013/05/why-the-lean-start-up-changes-everything > (Accessed 23 September 2018)
2. **Ries, E.** (2008) *The Lean Startup*. Available at < http://www.startuplessonslearned.com/ 2008/09/lean-startup.html > (Accessed 10 September 2018)
3. **Cheng, A.** (2018). Best Book Summary + PDF: *The Lean Startup,* by Eric Ries. Available at < https://www.allencheng.com/the-lean-startup-summary-pdf/ > (Accessed 11 September 2018)
4. **Yoo, O.S., Huang, T., Arifoglu, K.**, (2016). *A Theoretical Analysis of the Lean Startup's Product Development Process.* Available at < https://rady.ucsd.edu/docs/seminars/ lean_startup_yoo.pdf > (Accessed 15 September 2018)
5. **Ladd, T.** (2016). *The Limits of the Lean Startup Method.* Harvard Business Revue. March 2016. Available at < https://hbr.org/2016/03/the-limits-of-the-lean-startup-method > (Accessed 15 September 2018)
6. **Racolța-Paina, N.D., Andrieș, A.M.** (2017). *Identifying entrepreneurship readiness for the application of the Lean Startup practices in the service industry – Case study Romania.* Ecoforum Review. Vol. 6, Issue 3(13). Available at < http://www.ecoforumjournal.ro/ index.php/eco/article/view/688 > (Accessed 14 September 2018)
7. **Ciobanu, O.G., Năstase, C.E.** (2015). *The Coordinates of a Sustainable Economic Development Strategy by Reconfiguring the Romanian Entrepreneurship - Generation Y and Lean Startup Method.* Economic Insights – Trends and Challenges. Vol.IV(LXVII) No. 2. Available at < http://www.upg-bulletin-se.ro/archive/2015-2/8.Ciobanu_Nastase.pdf > (Accessed 20 September 2018)
8. **Kullmar, L., Lallerstedt, I.** (2017). *The Lean Startup Method - A golden ticket to success or a vision killer?*. INTM01 20171. Innovation Engineering, Lund University Libraries, LUP Student Papers. Available at < https://lup.lub.lu.se/student-papers/search/publication/8912682 > (Accessed 21 September 2018)
9. **Scott Gaffney, S., Lin, S., Miller, K., Nilsson, H., Ravala, S., Unnikrishnan, M.** (2014). *Lean Startup Methodology for Enterprises. How Established Companies Can Leverage Lean Startup Methodology for Sustaining and Disruptive Innovation*. Engineering Leadership Professional Program. UC Berkeley, USA. Available at < https://ikhlaqsidhu.files.wordpress.com/2014/08/elpp-project-1-lean-startup-for-enterprises-final-3.pdf > (Accessed 21 September 2018)
10. Investopedia. (2018). *What is 'Lean Startup'?*. Available at < https://www.investopedia.com/terms/l/lean-startup.asp > (Accessed 18 September 2018)
11. **Walton, H**. (2015). *Lean Start-Up, and How It Almost Killed Our Company.* Available at < https://www.infoq.com/articles/lean-startup-killed > (Accessed 21 September 2018)
12. **Kaplan, D**. (2014). *Peter Thiel Is Wrong About Lean Startups*. Available at < https://techcrunch.com/2015/05/09/peter-thiel-is-wrong-about-lean-startups/ > (Accessed 16 September 2018)
13. **Burgstone, J**. (2012). *What's Wrong With the Lean Start-up.* UC Berkeley. Available at < https://www.inc.com/jon-burgstone/flaws-in-the-lean-start-up.html > (Accessed 18 September 2018)
14. **Vlaskovits, P**. (2018). *Lean Startup: Pivot, Persevere or Portfolio?*. Available at < http://vlaskovits.com/lean-startup-pivot-persevere-or-portfolio/ > (Accessed 20 September 2018)
15. **Cicovschi, A**. (2018). *La omu' sărac nici boii nu trag: firmele mici şi mijlocii din România abia se descurcă. Top 10 probleme cu care se confruntă microîntreprinderile.* Adevarul 31 iulie 2018. Available at < https://adevarul.ro/economie/stiri-economice/la-omu-sarac-boii-nu-trag-firmele-mici-mijlocii-romania-abia-descurca-top-10-probleme-confrunta-microintreprinderile-1_5b5ea69ddf52022f75c7e21f/index.html > (Accessed 20 September 2018)