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MODEL OF FUNCTIONING OF INTERNAL ENTREPRENEURSHIP IN PUBLIC ENTERPRISES OF THE REPUBLIC OF SERBIA

Marina Jeremić, Jasmina Omerbegović-Bijelović

AN APPROACH FOR MANAGING SMEs BASED ON KPIs IN STARTING PHASE OF COMPANY'S LIFE CYCLE

Nikola Atanasov, Predrag Mirković, Vladimir Marinković

PLANNING OF THE ACTIVITIES OF THE FAMILY FIRM SUCCESSOR PREPARING IN SERBIA

Mirjana Jeremić, Zoran Rakićević

RESOURCE MANAGEMENT QUALITY OF SME IN THE FIELD OF FASHION AND DECORATIVE FABRICS RETAIL

Bojan Živadinović, Nikola Atanasov

PROBLEMS WITH RESOURCES MANAGEMENT IN CATERER-SME IN THE DIGITAL AGE

Ivana Zdravković, Vesna Čakeljić, Jelena Krstić

EDUCATION PERFORMANCE INDICATORS FOR ENTREPRENEURSHIP IN THE SECONDARY SCHOOLS OF SERBIA AND IN THE WORLD

Nemanja Backović, Bojan Ilić, Vesna Milićević

BUSINESS ASPECTS OF PUBLIC-PRIVATE PARTNERSHIP IN DIGITAL ECONOMY ENVIRONMENT

Marko Miletić

INTRODUCTION OF THE NEW SERVICE ON SERBIAN TELECOMMUNICATION MARKET: VIRTUAL PHONE NUMBER

MODEL OF FUNCTIONING OF INTERNAL ENTREPRENEURSHIP IN PUBLIC ENTERPRISES OF THE REPUBLIC OF SERBIA

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Abstract: *This work presents the study of internal entrepreneurship (IE) in public enterprises (PE,) in Serbia. The idea of an author is to check the existence and, if necessary, generating and presentation of the model (objectives and limitations) for the functioning/operation/IE manifestation in PE Republic of Serbia. It is expected to show whether Serbia has been operational in IE PE, and that, as in the developed world, and PE in the Republic of Serbia, which applied IE, be more competitive, successful and socially-useful than PE, which do not apply this concept. This topic provides a motive to provide guidance, as well as the necessary support, to launch IE in the PE of Republic of Serbia. The research in this paper, based on a survey is conducted in PE that operates in our country, founded by the Republic of Serbia or local government. As the basic research tool was the questionnaire about defining models of the functioning of IE in PE. This work shows the IE stakeholders in PE, models of this concept, the way the research was conducted and what are its results. Practical aspects of the research refer to the usefulness of the data, information and ideas on IE models in PE, with the hope that PE Serbia will show interest to learn more about them and use it to improve their own management, and business.*

Keywords: *Internal Entrepreneurship (IE), Public enterprises (PE), Stakeholders in PE, Operation of IE in PE, Model of IE in PE Serbia*

1. INTRODUCTION

The concept of internal entrepreneurship (hereinafter: IE) is seen as a process of discovery and development of opportunities to create value - through innovation and to take advantage of an opportunity, regardless of the resources (human or material), or the location of Entrepreneurs (Churchill, 1992). Internal or corporate entrepreneurship is essential for survival, profitability and growth of any company. This is due to the fact that IE stimulates creativity and innovation, and to encourage risk-taking organization - through business operations that can strengthen the company position in existing markets and entry into new profitable fields of operations (Zahra et al., 2009). IE is of great importance for the social, the economic development of enterprises in the Republic of Serbia (hereinafter: RS), because it allows the inflow of new goods and technologies to the market, opening new markets, introduction of new processes and technologies. It enhances economic and financial indicators of enterprises – by more efficient use of resources and the application of appropriate motivation system for its employees (Istocescu, 2006). Facilitates the allocation of resources from less productive to more productive activities, filling capacities that are missing and supporting structural changes in the economy and the economy. The importance is also reflected in terms of innovation, because the internal entrepreneurs bring new ideas, create new products and create new markets. It is clear that without the entrepreneurial innovation and new ideas, the world would not be as it is today, not culturally not in terms of technology.

The term "public sector" is widely used, both in the world and in our country, primarily for labeling of all activities which are opposite to business, including: the civil service/administration (eg. justice), institutions/establishments (education, health) (Zekić, 2011) and public enterprises. Under the public sector include the various forms of organization of individual businesses, through which the state or its local authorities, ensure the realization of certain interests in certain areas of the economy. The public sector includes the part of the national economy for which the state has a certain responsibility (ibidem). The public sector, as well as the institutions and organizations that make it operates on the basis of the constitution, laws, regulations, internal decisions, and partly based on economic principles. The public sector consists of two subsystems: the executive power sector- which has a decisive role bureaucracy under direct political control, as well as Public Enterprises (PE) and commercial associations owned by the state or local governments. According to the Law on Public Enterprises RS, PE is a company that carries out activities of general interest, founded by the Republic, autonomous province or local self-government (Law on Public Enterprises and Activities of general interest, Article 1, no. 116/2013). The RS has a total of 727 public and public utility companies. Public enterprises founded by the Republic of Serbia has a total of 36. Public enterprises founded by local governments or autonomous province has 691. These enterprises are divided

by districts represented in Serbia, and in the cities that are located in a given district. Public enterprises are established in the field of infrastructure, public utilities, management of goods of common interest, as well as in areas that are of strategic or special importance for the Republic. Business of PE is crucial for the Serbian economy, because these companies at the national, provincial and local levels make up a significant part of the economy- by its number, the number of employees and money at their disposal. Public companies in the RS increasingly gaining in importance, and citizens, with right, expect that those who have received from the state a monopoly position in the field of the use of funds, resources and markets, and their results, justify the same.

Internal Entrepreneurship (IE) is necessary for the transformation of existing enterprises into viable market units, which are able to compete with its competitors. The development of IE could lead to the development of a systematic exploration of new opportunities for production/service delivery, innovation in technology, marketing and similar. These studies and the organizational schemes that perform them should be led by professionals at a given activity and those employed in PE (Prokopenko, Pavlin, 1991). IE has become more important than before. The reason is that the world today is changing much faster - under the influence of new technologies, and the growing competition makes the work harder- because they must constantly innovate in the market.

Based on the research of IE in all three categories of organizational systems of the public sector (public enterprise, institution/organization and administration), it was determined that the greatest propensity to IE showed respondents from public institutions (education, health, etc.), followed by respondents from the public administration, and the lowest propensity to IE was found in respondents from PE (Balaž, 2015). Unlike private sector enterprises, entrepreneurship and innovation as means to improve organizational performance, do not occur naturally in PE. Public enterprises are under the direct influence of the political philosophy of those political forces that are in power, where it is very difficult to protect workers in PE from undue political influence. In addition to political influence (which are an obstacle to the development of entrepreneurship in PE and the whole public sector), significant obstacles arise in terms of organizational culture and management. Operation of PE is regulated by the system of civil service, which is usually complex, formalized and risk-averse. PE is characterized by certain specifics - which represent the limits of efficiency and barriers to the development of these enterprises and make development and IE practice harder. These obstacles relate to: Government control of public enterprises; Budgetary constraints - PE financed from the state budget; Legislative and regulatory constraints; Political influences; Inadequate resources; Bureaucratic organizational structure; Focus on how the realization of profit, and non-profit objectives (Sadler, 2000). PE should work on education and training of staff - from areas: entrepreneurship, and the bureaucratic decision making (which is typical for PE), should be kept to a minimum. Stimulating ideas and active participation should be encouraged at all hierarchical levels; teamwork and cooperation must become part of the way of doing business, and the old strategy of continuity and predictability must be replaced by a strategy of continuous change / improve the management of the business.

2. STAKEHOLDERS INTERNAL ENTREPRENEURSHIP IN PUBLIC ENTERPRISES

Internal/corporate enterprise (IE) can be regarded as a phenomenon which takes place at the level of the organization or organization parts, but also on the micro level, comprising entrepreneurial projects, and each entrepreneurship individually. To make the organization fully effective, every part must make a contribution in fostering entrepreneurial initiatives. Each organizational function has a role in encouraging corporate entrepreneurship (Goffin & Mitchell, 2010).

Stakeholders in the modern enterprise consist of all the stakeholders that are, in any way, affiliated with and that have a certain interest - in relation to its existence and operation. Company's stakeholders can be classified into two main groups: internal and external stakeholders. External stakeholders are external partners with whom the company does business in various ways (customers, suppliers, banks and others), then state authorities, business associations, media and other entities, more or less direct way, expressing the interests of the community.

Since big obstacles IE in PE represents bureaucratic organization, inadequate funding, political opposition, legislative and regulatory constraints, this is where the state has an important role (to ensure macroeconomic and legal framework for the functioning of IE in these companies). Hard budget constraints, the introduction of positive real interest rates and a balanced exchange rate should ensure the efficient functioning of the market, which is a necessary condition for entrepreneurial development.

Cooperation with companies of the private sector is one of the important factors in the functioning of the IE in PE. Networking is a concept with which PE uses ability of certain entrepreneurial experts and establishes cooperation - as with other sectors within their enterprises, as well as with the private sector and their

companies (in order to be able to take the ideas that they can use in their practice). When it comes to PE, as an example of business networking and encouraging IE, the most common is the concept of public-private partnerships. This concept works attractive to all decision makers in PE, as it enables the implementation of infrastructure projects and troubleshooting of individual services. Business networking is useful not only for PE indirectly, due to increased entrepreneurial activity, but also because it helps to reduce costs and increase the flexibility of the workforce within the company (Bailey, 1994). Also, it allows a PE to be up to date with current issues and solutions that are offered, as well as developments in the field of science (therefore the industry) in the future period. Significant external knowledge source as the key input of entrepreneurial activities and the development of core competence are universities and research centers. Banks and media are also important stakeholders of PE.

Employees of PE are internal stakeholders without which the IE could not work in these companies. Employees should be motivated to be entrepreneurial. Training employees for IE must create the conditions and environment that will enable the application of new knowledge to work and change. Special attention must be paid to the implementation of new management approaches, both conceptually and in terms of organization. They should provide and officially regulate the time required for the IE. It should also regulate and enforce certain events, fairs IE, in which the employees of PE are able to present their ideas, results, share experiences and compete. Investments in human resources are a potential source of competitive advantage for increasing the overall effectiveness of the PE, which leads to improving the performance of these institutions.

As internal stakeholders, owners and management of PE are one of the most important factors. Managers need to encourage the entrepreneurial culture that supports the changes/improvements/innovations that accepts mistakes, which enables a controlled experiment with potentially-efficient new processes/resources and to create structures that help organizational units to learn from failure, when and if they occur. Support of the top-management is essential - so that employees get the confidence that the IE is taken seriously, or that PE will really stand behind the development and commercialization of good ideas (Hisrich & Kearney, 2012).

The appearance of new competitors and new strategies, changes in processes, products and designs and similar, represent an opportunity for managers. Internally-entrepreneurial managers must: be focused on results/efficiency, rather than on activities, to observe the employees as responsible people who want to achieve results, to be ambitious and competitive, to develop the ability of conflict resolution; to realize that the organization is a system of interlinked subsystems and that together form a whole and to be motivated to innovate and change - not only for ourselves, but for all employees (Prokopenko & Pavlin, 1991).

The task of management is to stimulate inter-functional cooperation and teamwork, because a response of the organization slows down (especially when dealing with large systems) because of the limited perspective of individual functional areas, which makes difficult for the execution of tasks, coordinate with each other and contributes to conflicts between functional managers (Babic et al., 2008). In order for an organization was fully effective in IE, every part must make a contribution in fostering entrepreneurial initiatives. New ideas should not come only from the organizational unit responsible for research and development, but also the rest of the organization should (could) show initiative and agility. Each organizational function has a role in encouraging corporate entrepreneurship (Goffin & Mitchell, 2010):

a) *Research and development* - is, for many managers, the source of all new ideas. The truth is that most initiative comes from there, but companies that rely too heavily on the organizational part fall into the trap of manufacture sophisticated products that the market doesn't need. Management of entrepreneurial initiatives is much more than establishing a research and development tool that produces new technological solutions. It is advisable to service companies, instead of this function, establish teams to develop innovative ideas.

b) *Marketing* - plays a key role in encouraging corporate entrepreneurship. Its task is to identify the needs of customers, using creative approaches to market research. It has to be involved in the innovation processes, especially in stage of initiating and defining new product/service, when deciding on price, market position and strategy of launching the market. Good marketing is a factor that recognizes/supports the idea of a new enterprise and contributes to its transformation into a successful product.

c) *Production/service provision* - even though, as part of the operating functions, has one of the most important roles when it comes to entrepreneurial initiatives, its managers often do not understand. They are too focused on maximizing the efficiency of current operations, thereby limiting the capacity to make long-term competitive advantages. It is much easier to copy the new products offered by competitors, than the entrepreneurial processes. This fact is often overlooked especially in service organizations.

d) *Supply and distribution* - as part of the operating functions, constantly in touch with customers and suppliers, which are an inexhaustible source of ideas and an integral part of the (sub) systems for improving processes and products, both in terms of inputs and in terms of the final performance.

e) *Finance and Accounting* - often seen as a function that has no role in fostering IE, however, provides important support in evaluating and calculating the potential yield of entrepreneurial projects. Sometimes just financial managers have the final say on which projects offer the optimal combination of lower risk and higher yield (and are compatible with the available resources and capacities).

f) *Human Resource Management* - provides the activities of recruitment, employment, development and motivation of staff, who are key players in building entrepreneurial organizations. A creative atmosphere characterized by smaller teams is easily lost when the organization begins to grow, so that the personnel function must act proactively and systematically in building an entrepreneurial organizational culture.

3. THE CURRENT MODELS OF INTERNAL ENTREPRENEURSHIP

Models are abstractions that reflect key elements of a complex problem or structure by eliminating less important details and, thus, make the problem much easier to understand. They represent a subjective, abstract (simplified) image of the system, describing the elements of that system and its connection. Models are used to describe business processes, understand the current state of business and model the new processes.

3.1 Models of internal entrepreneurship in the world

Lippitz and Wolcott (2010), in their research model IE indicate that there is no single model that can be successfully applied in every company. There are two dimensions that are under the direct control of management, which consistently make a difference in how companies approach the IE. The first dimension makes the ownership of the new enterprise or the facts of who, within an organization, claims ownership rights to the newly created product/service as a result of internal/corporate entrepreneurship. The second dimension makes the distribution of resources, and whether there is special separate funding for activities of IE or resources are obtained by need. By combining these dimensions, the matrix forms four dominant models: Opportunistic, Enabling, Advocacy and Manufacturer. Each model represents a special way to strengthen IE activity within a company (Wolcott & Lippitz, 2010, p. 74-82):

a) *Opportunistic model*, according to which the IE is based on the exploits and happy circumstances of individuals often referred to as "project champions". These are people who fight against all obstacles (including those coming from the company itself), creating new jobs. In this model, the ownership of the new venture is not pre-determined, within the company there are no resources specially designed for such ventures.

b) *Allowing model*, according to which the IE is no predetermined ownership of the new venture, but there are resources that are specifically designed to create new products or services. The main assumption of the model is that employees in companies will be willing to develop new concepts if they are given adequate support. Well placed, this model is suitable because top management has an opportunity to introduce innovative young employees, thereby developing young leaders. In this model it is important to note that not only the resource allocation is essential, but also the development of employees and the commitment of top management.

c) *Advocacy model*, under which the company provides modest budgets for the main group activities. Organizations that implement this model sponsor and support innovation, coordinating IE associated with the business units. However, ownership of the new venture is not strictly defined.

d) *Manufacturer's model*, according to which the aim is to encourage entrepreneurship hidden within the organization. In this model there is a clearly established ownership of the new venture, which is almost always in the hands of the parent company. This is the most structured and formalized model IE. The company applying this model aims to protect development projects from wasting resource spending and to encourage co-operation between business units, build a business, and create an open way for managers to follow career development opportunities outside their parent business units.

3.2 Models of internal entrepreneurship in Serbia

Despite the need and necessity of introduction and development of IE in all organizational systems of the public sector, the current state of the practice of public sector in RS indicates unsatisfactory low level of development of IE. Based on research (Balaž, 2015) "Limited entrepreneurship in the organizational system of the public sector of the Republic of Serbia," it was determined that the IE in the public sector of the RS is somewhat below the national average. Public companies are, in fact, the least entrepreneurial. IE is under-represented, or not at all, in this kind of enterprises in PE. There are no standardized procedures and guidelines that would allow: a) introduction, b) the operation and/or c) the development of this concept. For this reason, the definition of a model implementation (for all three phases mentioned) IE in PE in RS should serve as support to public enterprises, i.e. to guide them on how to ensure the realization of this concept (which are all steps and elements that should, on this occasion, to meet and to raise awareness about the importance of IE). All mentioned phases available in master thesis of Jeremić from 2016). In this work, as noted, only a model of operation IE will be shown (step b).

In setting implementation model (introduction, operation and/or development) IE in PE, it is necessary to define the most important goals and IE restrictions in PE Republic of Serbia. After the introduction of IE, it is necessary to ensure that a given model works in PE, to achieve the objectives and eliminate the key limitations, but that allows further development of the concept of IE in PE. As such, the model helps PEs to be more competitive, successful and socially useful. Based on the state of practice in the model include the requirements identified and directed to improvement of activities and elimination of defects. Research has led to identifying the critical points, or restrictions that hinder the development of model IE (Jeremić, 2016).

The key limitations are: a) lack of recognition of potential application of IE in PEs; b) The lack of incentive for/to the innovation; c) The legislative and regulatory constraints; d) inadequate dedication of top management of PE-s; e) The fear of failure and a general resistance to change; f) Negligence of state/local administration, as owner of PEs; g) Too hierarchical levels; h) Lack of ideas and/or anything else.

A necessary precondition for the functioning of the IE is management support/management PE (or state, if she is the owner). It is hard to imagine that the company can successfully develop new ideas, and at the same time there is no support from the top of the hierarchy. However, no less important is support of lower-level managers, who are in direct contact with the internal entrepreneurs and, in this sense, can act stimulating and restrictive on them.

The study (Jeremić, 2016, pp. 65-66) defines the steps of introducing IE in PE, thus creating the conditions for the functioning of the IE in the USA:

- Defining internal documents that are approved, encouraged and supported by IE in PE,
- Identifying and allocating resources necessary for starting entrepreneurial ventures (provided time, equipment, technology, space, knowledge...)
- Definition of the budget that is dedicated (and available) for generating (and checking) entrepreneurial ideas and to launch enterprise
- Defined system of rewarding and encouraging staff (dealing with IE),
- Informing and educating of employees about the concept of IE,
- Creating organizational structure, based on which the IE is incorporated into the plans of enterprises
- Designing organizational culture based on entrepreneurial initiative, which projects a unique message to employees - to share common values and behavioral style,
- Determination of one and/or more than one person (team of people) who will be the mentor (s)/facilitator (s) who supervises/monitors the progress of enterprise and provides (it) necessary advice, contacts, help,
- Organizing trade fairs of entrepreneurial ideas, events and/or competitions for the selection and presentation of entrepreneurial ideas

For IE to function in PE, they need to have an entrepreneurial orientation. Entrepreneurial orientation has five dimensions, which shape the style of decision-making and practice of managers. These five dimensions are: autonomy, innovation, proactive, competitive aggression and risk taking. **Autonomy** implies independent action when implementing new ventures. The teams working on the identification and implementation of new ventures have a certain degree of freedom of action, necessary time to improve ideas at its disposal but also the greater powers for the further implementation of selected ideas. IE occurs in those organizations which encourage **innovation and creativity** of its employees. **Proactivity** refers to activities aimed at finding new opportunities. Those organizations that operate proactively look to the future and try to always go one step ahead of its competitors, closely following market trends, changes in consumer needs, as well as changes in the environment. **Competitive aggressiveness** refers to the steps that a company takes to overcome competitors. **Taking risks** relates to the company's willingness to embark on a new venture, even if the outcome is not completely certain. To IE function in PE, they should maintain and apply the above five elements (Suarez, Lanzolla, 2005). Also, the IE should become an integral part of PE, not just sporadic activity (Dess et al., 2007).

Public enterprises should monitor changes in the environment, competitive behavior (if they have in their business activities), monitor technological changes, etc. in order to adequately adjust their business or IE processes. It is also necessary to monitor the behavior of citizens, monitor their needs and, on the basis of all analyzes, work on the development of the implemented IE model. Permanent employee training on new changes and innovations on the market is one of the ways that will contribute to the continuous development of the existing IE system. PEs should preserve the current status of management solutions for IEs, in order to ensure the competitiveness and satisfaction of citizens as a user of PE's products/services.

4. RESEARCH OF CHARACTERISTICS OF MODEL OF INTERNAL ENTREPRENEURSHIP IN PUBLIC ENTERPRISES OF THE REPUBLIC OF SERBIA

Research problem that has inspired this work (as part of the master-work of first author) refers to insufficient (insufficiently-evident) manifestation/expression of IE in PE of the Republic of Serbia. Empirical research IE in PE was conducted with the initial idea to identify the perceptions and attitudes of employees on the implementation in phases: f1) the introduction, f2) functioning and f3) development IE in PE.

4.1 Null hypothesis and its structure

To solve the problem of rarely perceived function/presence of IE in the PE, the null hypothesis has been defined:

H(0): It is possible to make a model of the operation of the IE in PE. It is decomposed into four individual hypotheses: H(1), H(2), H(3) and H(4).

H(1): The IE performance model in PE shows that there should be a legal regulation of the IE application in PE.

H(2): The IE performance model in the PE shows that there should be the provision of time and other resources needed to express IE in PE..

H(3): Model of IE and PE-matter shows that there should be opportunities for presentation of research results in the field of IE in PE.

H(4): The IE performance model in PE shows that there should be the choice and application of selected, promising IE results in PE.

4.2 Research Methodology

The research operation of IE in PE in RS is based on the use of different methods. The main method, used for the foundation of a research problem, is the review and analysis of the literature (Table Research). It was then performed the research in the field (Field Research). The method of testing employees in the PS (survey) for data collection was used; a questionnaire was created on the model of functioning of the IE in the PE of Serbia, in order to collect data on the attitudes and knowledge of the employees in the PE on the functioning of IE in their organizations. The questionnaire contains three groups of data: the respondent, the company/organization in which it works, and the attitudes/knowledge of the respondents. Research questions were followed by variants of the answers - to explain the respondents in order to get their opinions, attitudes, statements (measured, mostly, according to the Likert scale). Field research (using the questionnaire) was carried out in September and October 2016 in PEs on the territory of RS. Statistical data processing and analysis was used by the SPSS (Statistical Package for Social Sciences), or statistical methods implemented in this software, which enable fast and accurate results to be obtained.

The sample populations, animated for research, included 60 subjects employed in PEs of the RS of which is employed in PE established by the state 37, and the other (23 subjects) were employed in companies founded by the local self. Geographically, respondents (at the time of the research) located in cities/municipalities: Belgrade, Ub, Smederevo, Lazarevac, Kraljevo, Stara Pazova,...). When selecting a sample, it was taken into account that, in the sample, equal representation of different groups of employees in PEs was ensured.

Scientific and social justification for research is to use the results to be realized real entrepreneurial potential of PEs in RS, respectively, to (one) could provide assistance and support to these companies. Recommendations (based on the results of the research) can benefit to the country, management and employees of PEs, as well as the following researchers of this and related topics. Defining IE model contributes to the achievement of competitive advantage of PEs, the reduction of public expenditures and losses, more motivated employees, increasing revenues of PEs, greater satisfaction of the citizens who use the services of PEs and the overall economic recovery of the Republic of Serbia.

4.3 Field research results

This chapter presents the results of research models of functioning IE in PEs of Serbia or displayed responses (analyzed) to research questions from the Questionnaire. All research questions are associated with individual hypotheses and examine the possibility of making this model.

In the process of checking the authenticity of the individual hypotheses **H(1)**: "Model of functioning IE in PEs shows that there should be legal regulation of application of IE", set the research questions Rq 25-28. Results of respondents' answers (mostly reviews) are shown in Tables 1-4.

Respondents' response to the research question (hereinafter: Rq) No. 25 are assessments of the truthfulness of the statement "The job agreement or other legal documents of the PE in which you are working is provided that you can use Enterprise Resources (space, technology, tool,...) at the time when you want, even outside working hours. ", are given in Tab. 1. Responses of respondents to Rq 26 are estimates of the truth of the statement "In the public company in which you work, if you want to be involved in entrepreneurial ideas and ventures, you can work in different periods" and are given in Tab. 2

Table 1: Distribution of answers on the use of resources PE

Assessment of the availability (for IE) of the PE resource	Percent
Rq25 1.0	26.7
2.0	20.0
3.0	41.7
4.0	5.0
5.0	1.7
Total	95.0
Missing	5.0
Total	100.0

Table 2: Distribution of answers about provision of time for dealing with IE-TV

Provide time to handle IE	Percent
No answer	3.3
Only after regular working hours	33.3
Rq26 Only within working hours	21.7
Within and outside working hours	41.7
Total	100.0

Answers of respondents to Rq 27-28 given in Tab. 3-4. On Rq27 48, 3% people answered they do not have time provided for dealing with IE, instead of 41,7% who have 41,7%. On Rq28, 8,,3% answered that they do not have mentor for help with IE.

Table 3: Distribution of answers on the available share of time to deal with the IE

Allowed portion of time for dealing with IE	Percent
Rq27 0% of working time (WT)	48.3
To 30% WT	41.7
30 – 50% WT	6.7
Over 70% WT	1.7
Total	100.0

Table 4: Distribution of answers about the existence of a mentor/helper

Existence of mentor for help in dealing with IE	Percent
Rq28 Missing	1.7
Yes	15.0
No	83.3
Total	100.0

In the process of checking the authenticity of the individual hypotheses **H(2):** Model of IE in PEs functioning shows that there should be the provision of time and other resources required for the expression of IE in PEs", set the research questions Rq 29-33. Results on the answers of respondents (estimate levels of agreement with the given statements) are shown in Table 5. There are the answers to research questions:

- Rq 29 ("PE where you work provides trainings / seminars relating to business entrepreneurship and encouraging IE, to help employees acquire the necessary knowledge and skills for the implementation of this concept. "),
- Rq 30 (" employees who want to improve in the field of IE know to whom they can turn for the necessary consultation and assistance ".)
- Rq 31 ("In PE you work, employees who (need to) find new business opportunities is provided time to work.")
- Rq 32 (" In the PC in which you work, employees who (should) find new business opportunities, are provided the resources necessary for entrepreneurial activities (possibility to use offices, equipment, tools, technology whose owner is the company). "), and
- Rq 33 (" in the PE, in which you work, employees who (should) find new business opportunities and entrepreneurial ideas, is provided the access to databases (based of which they can get the information needed to undertake entrepreneurial ventures).

Table 5: Breakdown of responses to the research questions Rq 29 – Rq 33

Research questions	1	2	3	4	5	Missing	Total
Rq 29 - Training of staff of IE in PE	40.0	23.3	20.0	11.7	5.0		100.0
Rq 30 - Familiarity employees about the existence of support for the necessary assistance and consultation	23.3	33.3	33.3	8.3	1.7		100.0
Rq31 - provision with the time needed to deal with IE-TV	30.0	20.0	38.3	6.7	3.3	1.7	100.0
Rq 32 - Providing the necessary resources	25.0	28.3	33.3	11.7	1.7		100.0
Rq 33 - Providing access to databases	20.0	30.0	40.0	8.3	1.7		100.0

In the process of checking the authenticity of the individual hypotheses **H(3)**: "Model of IE in PEs functioning shows that there should be opportunities for the presentation of research results in the field of IE in PEs", set the research questions Rq 34-37. Results on the answers of respondents (estimate levels of agreement with the given statements) are presented in Table 6. There are the answers to research questions:

- a) Rq 34 ("in PE, in which you work are organized fairs of entrepreneurial ideas, events and / or competitions for presentation of entrepreneurial ideas, to which employees can present their ideas and research results in the field of IE. "),
- b) Rq 35 (" Management PE in which you work attends events / fairs / exhibitions and similar. IE and uses the opportunity to support their employees and encourage them to be more entrepreneurial.")
- c) Rq 36 (" If this form of support IE does not exist in your company, do you know whether other PE in our country support the presenting of research results in the field of IE in this way. "),
- d) Rq 37 ("How employees of PE in which you work in are motivated to deal with IE?"). On this question employees rounded up the offered answers. 33% respondents didn't answer, 16,67% said they are not motivated to IE, 6,67% answer was "I do not know", 1,67% give their own answer and 41,67% rounded up more offered answers where the answers are arranged in a normal distribution, with an equal frequency of representation of all responses.

Table 6: Composition of the research questions Rq 34 –Rq 37

Research questions	1	2	3	4	5	Missing	Total
Rq 34 - The existence of events to present the results of IP	31.7	35.0	20.0	8.3	3.3	1.7	100.0
Rq 35 - The presence of IE management events	28.3	21.7	33.3	11.7	1.7	3.3	100.0
Rq 36 - Presentation of results in practice in other PE manifestations	28.3	20.0	36.7	13.3	1.7		100.0
Rq 37 - Motivating employees to IE	Open-ended question						100.0

In the process of checking the authenticity of the individual hypotheses **H(4)**: "Model of IE in PEs functioning, shows that there should be a choice and application of selected promising results IE in PEs.", set the research questions Rq 38-39.

Table 7: Distribution of answers about the existence of a case of IE

Existence case IE	Percent
1.0	30.0
2.0	15.0
3.0	33.3
4.0	18.3
5.0	1.7
Total	98.3
Missing	System
Total	100.0

Table 8: Distribution of answers on the number of entrepreneurial ventures

Number of entrepreneurial	Percent
a) None	28.3
b) 1 to 10	20.0
d) 10 to 100	5.0
e) More than 100	3.3
f) Do not know	43.3
Total	100.0

4.4 Discussion of research results

Checking the truthfulness of general hypothesis H(0): "It is possible to make a model of the functioning of the internal entrepreneurship in PEs" is carried out based on checking the authenticity of four single hypothesis: H(1), H(2), H(3) and H(4). Thereby, for each of them, is defined at least one research question. Thus, the authenticity of individual hypothesis H(1) - H(4) checks through the (already presented) research questions.

To check the accuracy of the individual hypotheses **H(1)**: "Model of the IE in PEs functioning shows that there should be a legal regulation of IE application", were harvested and analyzed the research questions Rq 25-28. Based on the analysis of said response, it can be concluded that the employees of PEs of RS is allowed to work on entrepreneurial ideas and ventures in different periods, but they are not (sufficiently) provided the percentage of time for dealing with IE, and that they were not provided with a mentor/helper which monitors the progress of enterprise and which provides the necessary advice, contacts, help. From this it can be concluded that a single hypothesis **H(1)** is not true there is no evidence of its truthfulness.

To check the veracity of individual hypotheses **H(2)**: "Model of IE in PEs functioning shows that there should be the provision of time and other resources required for the expression of IE in PEs", set the research questions Rq 29-33 in the Questionnaire. On all five questions correspond to tick the number that represents

the evaluation / level of agreement with a given statement. Based on the analysis of the mentioned answers, it can be concluded that employees of PEs are not provided trainings / seminars related to the entrepreneurial business and encourage IE-ness that employees who want to improve in the field of IE do not know to whom they can turn for the necessary consultations and assistance to them is not provided time to work on entrepreneurial ventures, nor the resources necessary for entrepreneurial activities, nor access to the databases. Based on this, it follows that a single hypothesis **H(2)** is not true, i.e. there is no evidence of its truthfulness.

To check the veracity of individual hypotheses **H(3)**: "Model of IE in PEs functioning, shows that there should be opportunities for the presentation of research results in the field of IE", set the research questions Rq 34-37. Based on the answers to these questions it can be concluded that in PEs of Serbia do not organize events and/or competitions for the presentation of entrepreneurial ideas, and nor the management nor leadership do not attend these events. Employees in PEs cannot say for sure whether the other PEs in our country is such practice of support to IE. No employees are (sufficiently) motivated to deal with IE. From this it follows that a single hypothesis **H(3)** is not true, i.e. there is no evidence of its truthfulness.

To check the veracity of individual hypotheses **H(4)**: "Model of IE in PEs functioning shows that there should be a choice and application of selected promising results IE in Pes", set the research questions Rq 38-39. Based on the above-mentioned issues, it can be concluded that in PEs is not expressed (not enough) application of selected promising results IE, i.e. that in practice poorly or that are not realized entrepreneurial ventures based on the results achieved by using IE-ness. From this it follows that a single hypothesis **H(4)** is not true, i.e. there is no evidence of its truthfulness.

Analysis of answers to all the questions in the research, it follows that the four individual hypothesis H(1), H(2), H(3) and H(4) have not been proven, that is, in PEs is not regulated use of IE there is no support post of a IE in terms of providing time and other resources required for the expression of IE in PEs, as well as an opportunity for the presentation of research results in the field of IE-ness. By analyzing the results, it was also found that, in the practice of PE, entrepreneurial undertakings based on the results achieved by applying the IE are not sufficiently implemented. On the basis of this, it can be concluded that the general hypothesis **H(0)**: "It is possible to create a model for the functioning of IEs in PEs" has not been proven.

5. CONCLUSION

Internal Entrepreneurship (IE) is, today, necessary to transform the existing public enterprise (PE) in viable market units, which are able to compete with its competitors. Defining the model of functioning of IE would contribute to the PE in the Republic of Serbia become more competitive, socially useful and become market-oriented. This model should serve as a support and guidance to PEs how to enable the introduction, operation and development of this concept. Based on the research presented in this paper, one can recognize the presence of a lack of entrepreneurial spirit in the PEs in Serbia, despite the existence of the potential of IE in PEs in the Republic of Serbia. This was confirmed by the respondents - participants in the here-described study, with their responses they showed that, with the possibility of using work time to deal with IE, as well as with the use of offices, equipment, tools, and with the provision of a mentor / helper (to whom they could turn for necessary assistance) and with defined reward system and encourage employees, IE could become an integral part of the operations of public enterprises of the Republic of Serbia.

Results of here-presented research, first of all, can and are designed to the state, as owner of public enterprises that, through the support of IE in PEs ensure: increasing effectiveness and efficiency of these enterprises, increase public revenues, reduction of losses of these companies, increase employee satisfaction, as and citizens - users of services/products of public enterprises. They can be of use to the management/leadership of PEs in an effort to increase the performance (to operate positively and to improve the image you have of citizens of the Republic of Serbia). To students and scientists who are engaged in research in the field of entrepreneurship it would help to this form of his work extend to public companies and, finally, readers could use this work as a good source of information for further thinking on this topic.

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AN APPROACH FOR MANAGING SMEs BASED ON KPIs IN STARTING PHASE OF COMPANY'S LIFE CYCLE

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Abstract: *Object of research in this paper is to evaluate possibility of creating key performance indicators for managing small and medium-sized companies in initial phases of company life cycle. Research is based on the literature analysis and field research in small and medium enterprises. The poll is conducted on small and medium-sized companies in Republic of Serbia. The main research tool used in the poll is the questionnaire of choice of the right key indicators of performance for managing - by their initial phases of life cycle. The results of the research have shown that it is possible to create key indicators of performances for managing small and medium-sized companies, by the initial phases of their life cycle and those are the main things that are presented in this paper.*

Keywords: *Key Performance Indicator, Small and medium-sized enterprises, Enterprise life cycle, Initial phase of Enterprise life cycle.*

1. INTRODUCTION

SMEs are representing legal entities that operating within their business environment, within developed business mission and vision, with a goal to deliver results based on the purpose of their existence. According to the research (Ministry of Economy of Serbia, 2014, p. 77), SMEs are representing 29% of total number of companies (including legal entities and entrepreneurs) operating in the territory of the Republic of Serbia. Considering only business enterprises as legal entities, excluding entrepreneurs, this number of SMEs rises up to 99% (more precisely: 99.47%), which points to the great importance these legal entities - both for the state itself and for its inhabitants.

In addition to basic, legal, characteristics that differentiate SMEs from other enterprises, SMEs have certain characteristics. According to (Sajfert, Djordjevic, Bedjic, 2006, p. 163), the most important characteristics of SMEs are: (1) Small size, which varies based on the industry; (2) Centralization of management (the owner is also the manager); (3) Low level of specialization, due to concentration of functions at the level of management and decision making activities; (4) Intuitive and low level of job management strategy formalization, based on the fact that in SMEs, the owner (manager) is involved in operative daily routine together with employees (administration, shop floor workers) and able to adjust strategies and operations simultaneously; (5) Simple and flexible internal communication and information sharing, based on everyday face to face dialogue (in contrast to communication and information flows in large enterprises, based on written and formalized documents); and (6) A simple system of external information sharing and communication, based on more frequent contact with suppliers and customers, which ensure the mutual understanding of needs, desires and opportunities.

The topic of this paper is the research on the possibility to determining the quality of the management in small and medium enterprises (SMEs) that are in the initial phases of the company life cycle. This means that, firstly, it is necessary to identify the possibilities for creating Key Performance Indicators (KPIs) relevant for business environment and circumstances in certain phase of company life cycle. The idea is to present the basic characteristics of SMEs and the initial phase ("Courtship") of its life cycle and, based on these data, to create a set of KPIs relevant to managing SMEs at that stage.

Therefore, set of performance indicators should be evaluated in order to be able to satisfy the needs of "Courtship" as the initial phase of the SME's life cycle. Based on practical experience and studying theoretical knowledge (taking into account already conducted research) and considering characteristics of certain phase of company life cycle, together with identified problem (pathological and normal) occurring at a particular stage, it is necessary to examine the possibility of creating universal set of KPIs that will be adequate to manage SMEs in the initial phases of the life cycle (and even in the here-observed phase of "Courtship").

2. BUSINESS LIFE CYCLES IN SMEs

The company is born, it develops and grows, become old, and eventually dies, just like a life. The difference between the life cycle of any living being and company is that the company does not necessarily have to die. Between life and death there is sometimes a thin line, only the one who manages himself, the company, in the right way, ensure survival and / or rejuvenation. The life cycle represents the life flow of the entities that are taken into consideration, described with different life cycle phases and relevant characteristics. In theory, there are various life cycles classifications (by object, by purpose, etc) impacting the development of different theories and models of life cycles related to product, service, organization, technology, enterprise, etc.

According to the theory of Isak Adizes, the founder and professional director of the Adizes Institute, the creator of the Adizes methodology and the well known consultant, the life cycle of each enterprise consists of the ten phases shown in Figure 1. The first phase begins just before the formal establishment of the company, while the last phase can start long time before the formal quitting of company. The reason lies in the fact that the company is not born at the time of official enrollment in legal books, but it arises with the first idea created at the mindset of entrepreneur. The same comment can be done related to the death of an enterprise, it is never sudden or happen at the moment; the enterprise goes to the last stage of its cycle at the moment when the last willingness of improvement is lost, regardless of the different image that its managers, owners and / or directors have. Each phase, if the company steps in the right path, leads to the next one. Despite the fact that different business circumstances (positive or negative) lurking at every step, so the company is tempted to stray into a dead end or simply get lost on the life cycle direction. After a period of unsuccessful effort to overcome the "challenges" from the current phase, there is high probability of company death.

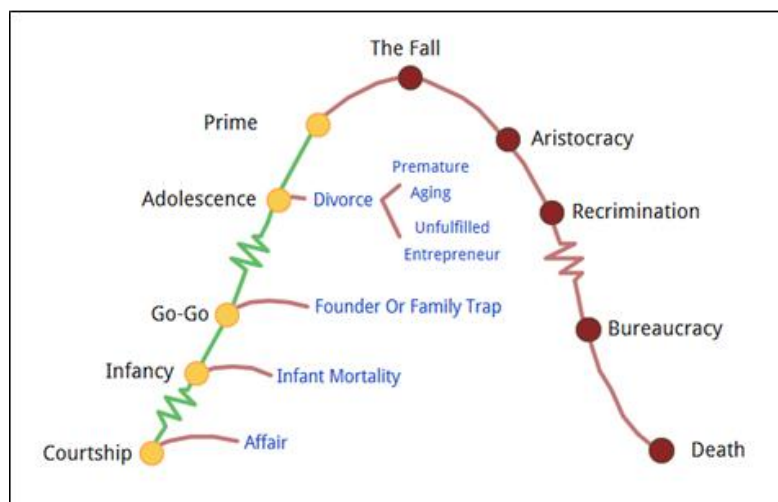


Figure 1: Business life cycle by Isak Adizes (Source: Adizes, 2007)

The first phase, known as the Courtship, according to Adizes (Adizes, 2007, p. 26), precedes the creation of a business entity, at the moment business exists only as an entrepreneurial idea. The founder of the SME does not leave the idea of his future company. The entrepreneur is continuously evaluating the circumstances and temptations in which he could be found in the future. It's a dream that haunts him everyday. He already creates imagination of product and / or service acceptance on the market. The founder should be reasonably-unreasonable person - to fanatically hold on to his convictions, but also to hear the voice of truth (Adizes, 2007, p. 34). The next part of the paper will show the possibilities of creating adequate Key Performance Indicators (KPIs) for managing SMEs in the first phase "Courtship" in the company life cycle.

3. PERFORMANCE MANAGEMENT IN SMEs

The management system is an organized set of integrated management elements aligned together with common purpose to managed part of the system (Omerbegović-Bijelović, 2006, p. 31). According to Omerbegović-Bijelović & Krsmanović (2013, p. 5) the quality of management is reflected in its effectiveness (to produce the desired output) and efficiency (to increase the relation of the output and inputs). Quality is measured based on the achieved results, considering management performance and relevant performance indicators.

Performances represent the measure of success in achieving business goals. For each performance can be identified one or more performance indicators that describe the performance status/appearance. Indicators are quantitative or qualitative measure by which, directly or indirectly, it is possible to estimate or understand the level of accomplishment for a particular goal, as well speed, time or deadline for achieving the relevant goal (Simeunovic, 2015, p.4).

Quality of management (Omerbegović-Bijelović, 1998) describes multiple attributes (performance indicator) of management. (The performance indicator referring to quality of management represents an attribute or description of the quality of management as an entity.) Each performance is measured by certain indicators. Not all the performances are equally important for the system of management, or any other system whose behaviors are observed. Based on this, it comes as necessary to understand the importance of selected/relevant indicator of each performance of the observed system. Then the quality of the management system (or the quality of any other system, but in this case, the management system will be considered) can be calculated based on following equation (1):

$$UQact = \sum_{i=1}^n gact(i) * \alpha(i), \quad (1)$$

where: $UQact$ – actual quality of management system; n – number of attributes (performance indicators); $gact(i)$ – Score of attribute i ; $\alpha(i)$ – Importance of attribute i .

Monitoring the development of the SME management system, as well as further measurement and improvement of the quality of management in SME, is based on implementation of adequate set of KPI. Usually, the capacities of human resources in SMEs are limited (and even the entrepreneur as unique resource in SME), the problem is manifested by lack of the SMEs management competencies, particularly for solving issues characteristic for certain phases of the SMEs life cycle. In this paper, attention is focused on the initial phase of SME management - "Courtship".

4. PERFORMANCE MANAGEMENT IN INITIAL PHASE OF SMEs LIFE CYCLE

The first stage of the company's life cycle is the "Courtship" phase. It represents a period in which the SME does not exist legally, there is only an idea about the future company. The founder of the company at this stage is an entrepreneur. Entrepreneurship is a very dynamic process that requires enormous energy and passion for creating, implementing new ideas and creative solutions (Isaković, 2015, p. 3). The basic characteristics of managing the entrepreneurial process, according to Horvat, 2013, page 3, are:

- Readiness to take up business risk;
- Ability to bring together a great team;
- Creativity necessary to utilize the needed resources;
- Ability and skills to prepare a good business plan;
- Visionary skills to recognize a situation where others do not see / are reluctant to recognize it.

Current phase is about managing the process of establishing a new company, with entrepreneur as founder role and only one responsible to manage the process. Key moment for future of newly established company is understanding of business opportunities and market/environment circumstances, prior starting the new company's operations. As an important tool, it is recommended to use the Business Plan to establish foundations for future business and ensure justification of the business idea from beginning.

Quality of management in this phase depends exclusively on the founder's capabilities. During Courtship phase, if founder is aware and well prepared, he can establish the future business and management processes of SMEs. As well, the founder can (should) define the purpose, mission and vision of his future company. The main characteristic of the phase is following: everything depends on the founder and his desire for success. One of the main stepping stone in this phase is founder readiness to understand and acquire basic theoretical approaches of managing SMEs and understanding the complexity and circumstances of the business itself.

From the aspect of management (Atanasov, 2016, p. 24), the value of the performance indicator represents information indicating whether the selected control action, in the expected manner, impact on the observed performance. Performance represents a variable / characteristic of a particular object in a managed subsystem (Atanasov, 2016, p. 26). Performance represent the achievements or effects that a company

achieves in different areas and aspects of doing business, over a specific time period. Another definition (Pesalj, 2006, p. 5) identify additional role of performances, in process of transforming available inputs into requested outputs, where performances demonstrates efficiency of engaged inputs. In order to set the foundations for evaluating the performance results, followed by an evaluation of the results of the operation of a managed object that is described by performances, the company needs to establish adequate measurement system. Measuring system and the instruments of that system (Tadic, 2015, p. 78), can be classified into categories: measure, measure, performance indicator and key performance indicator.

Each business life cycle refer to business issues relevant for specific phase. For the growth and development, it is needed SME to focused on solving or overcoming the problem of the certain life cycle phase. These problems (challenges) needs to be managed systematically - by implementing SMEs performance management system and set of selected performance indicators (KPI package). By achieving positive and expected values of the indicator related to the problem associated with certain phase of life cycle (identified in the previous management control cycle), it is confirmed the fulfillment of preconditions for improving the system of management to next level, positively impacting business performance overall. In the initial stages of the life cycle, the main goal is continuously to move to the next life cycle phase - all the way to the "Top Form" phase, where company needs to stay as long as possible.

5. SMEs MANAGEMENT BASED ON KPIs IN THE FIRST PHASE OF LIFE CYCLE

Implementation of adequate performance indicators in performance management system represents precondition for improving the effectiveness of management, according to Atanasov (2016, p. 17). Foundations of performance management system are built through selection of adequate performances and set of adequate performance indicators identified by the phases of the company's life cycle (identified based on the needs of certain company's life cycle phase).

The goal of the research is to present an overview of the existing knowledge in the area of SMEs management based on performance indicators (KPI, SMEs, life cycle of the company) in order to contribute to theoretical knowledge base. At the same time, the goal is to identify an adequate set of performances and relevant performance indicators that represent the needs of entrepreneurs in the RS - owners of SMEs (for illustration purposes) in the initial phase of the company life cycle.

The operational objectives of the research are: 1) Identification of the problems of SMEs in the initial phase of the life cycle ("Courtship"); 2) Identification of the managing object – by solving the problems identified in certain phase of life cycle; 3) Identification of performances related to managed object and adequate performance indicators, and 4) Selection of key performance indicators (from the set of possible performance indicators). The overall goal is to identify operative management tool (which, in this case, is theroretically general purpose, but it can be applied in each SME, with a certain level of adjustment to the activities and specifics of the company); this requires identification of a KPI set relevant for the initial phase of the life cycle - "Courtship".

5.1. The research methodology

Based on the analysis of the available theoretical literature and defined topic and objectives of the research, a general assumption / basic hypothesis is H(0): It is possible to choose the set of KPIs relevant for managing SMEs in the initial stage of the enterprise's life cycle ("Courtship").

Apart from the general hypothesis, two individual hypotheses are defined (Figure 2):

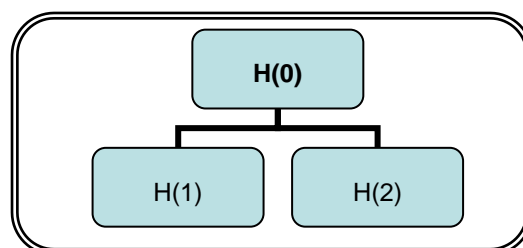


Figure 2: Hypotheses structure

H(1): It is possible to define indicators for each SMEs managerial performance in starting phase Courtship in company life cycle.

H(2): It is possible to select set of relevant KPIs for starting phase Courtship in company life cycle.

To test the individual hypotheses for solving the defined problem adequately, for the individual hypothesis H(1), were defined following research questions (RQ):

- RQ(1.1): Based on which performance is SMEs managed in the "Courtship" phase?
- RQ(1.2): Can be identified at least one indicator for each performance of the observed problem in "Courtship" phase?
- RQ(1.3): Which KPIs are used to manage SMEs in the "Courtship" phase?

For the individual hypothesis H(2), the following research questions have been defined:

- RQ(2.1): What criteria are used to select the set of performance indicators of the corresponding problem in the "Courtship" life cycle phase?
- RQ(2.2): Based on which theoretical knowledge, identified performance indicators can be considered adequate to manage the problem in the "Courtship" life cycle phase?

By the method of field survey, the authors carried out research through data collection. A Questionnaire on Key Performance Indicators (Jeremic, 2017) for the management of SMEs in the initial phase of the life-cycle "Courtship" was created. Based on the Questionnaire data were collected from entrepreneurs, the founders / owners / managers of SMEs. As individual hypotheses H(1) and H(2) have been tested by survey, it is necessary to indicate that they can not be proved with full certainty due to the limited reliability of the frequency method used to evaluate the results obtained by the Questionnaire. The results are suggested, based on the frequency of responses, which should also be considered a field research limitation.

The survey was conducted on a sample of 35 respondents employed in SMEs in the Republic of Serbia (Jeremić, 2017). The survey was based on the following sample structure - by sex: 35 of the respondents, 20 respondents (57.14%) were male, while 15 were female (42.86%) female. Structure of the sample according to the level of education of the respondents: out of 35 respondents, 5 (14.29%) with completed secondary school, 6 respondents (17.14%) with completed postgraduate studies, employees with completed higher education were 9 respondents (25.71%), while the highest number of respondents with completed university (bachelor) is 15 (42.86%). The structure of the sample according to years of working experience indicates that the highest number of respondents with a working experience from 5 to 15 years - 14 (40%), 10 respondents from 15 to 25 years of working experience (28.57%), 9 respondents have a working experience up to 5 years (25.71%), while 2 respondents (5.71%) have a working experience of 25 to 35 years.

5.2. Research results

This chapter presents the results of a survey of key performance indicators for managing SMEs in the initial phases of the life cycle. The confirmation of the general hypothesis H(0) ("It is possible to choose the set of KPIs relevant for managing SMEs in the initial stage of the enterprise's life cycle ("Courtship")") is checked through the verification of the truths of its components - the individual hypotheses relevant to the initial phase of "Courtship". For the Courtship phase, Adizes and Horvat identified six problems of the phase (Table 1), on the basis of which the authors highlighted two of the most significant problems (challenges) of the phase: (1) Testing the reality of the possible realization of entrepreneurial idea, and (2) founder is ready for business actions and is fully committed to the idea. For each of the above characteristics, the authors presented the recommendations with the control objects in Table 2 in order to create the conditions for managing business by characteristics relevant of Courtship phase.

RQ(1.1), RQ(1.2) and RQ(1.3) have been set up to test the individual hypothesis H(1) ("It is possible to define indicators for each SMEs managerial performance in starting phase Courtship in company life cycle.").

Table 1. Characteristic of phase Courtship in company life cycle, according to Adizes and Horvat
Source: (Adizes, 2007, p. 28-37) and (Horvat, 2013, p. 23)

<i>ISAK ADIZES</i>				<i>ZVEZDAN HORVAT</i>		
N°	Regular problems	Patologic problems	Problem description according to Adizes	N°	Regular challenges of phase	Treats to business survival
1.	Excitement, testing the reality	Reality is not tested	<p>Entrepreneur should be ready to answers: 1. WHY starting the business or certain activity? 2. WHO should perform activity? 3. WHAT needs to be done? 4. HOW to do it? 5. WHEN to do it?</p> <p>Founders are very vulnerable to those who promise to help with sales or financing. Founders - who are more committed to their products than control and ROI (return on investment) - end up, losing control of their companies (in favor of the owner of the capital or / and the "owner of knowledge").</p> <p>The motivation of the founders should be directed towards meeting the needs of the market, creating values, ie. product-oriented - until they develop products of the appropriate quality, capabilities and functionality.</p> <p>Realistic expectations - depends on several factors: the complexity of starting the job, the time needed to get the first positive results, the degree of necessary innovation, understanding business environment and different circumstances.</p> <p>The company is founded when the founder takes the calculated risk. The risk can be manifested in several ways: by leaving the previous job, by renting a new business space, or by undertaking an obligation to deliver a product on a specific date.</p>	1.	Testing the idea/concept	No testing of idea/concept – market and business reality is ignored
2.	Checking details	Missing details check		2.	Excitement	Fear and doubt
3.	Founder's has a control	Low control level by founder		3.	Founder's full control	Control is uncertain and vulnerable
4.	Focus on product and added value creation	Profit orientation		4.	Focused to deliver results	Exclusive orientation to profit or a lack of commitment to future profits
5.	Realistic expectations	Unrealistic, fanatic expectations		5.	Focused on vision	Unrealistic, fanatic expectations
6.	Expectations directly linked with risk level	Expectations not linked with risk level		6.	Commitment is in proportion to the risk	Commitment is in opposite proportion to the risk

The research question RQ (1.1) "Based on which performance is SMEs managed in the "Courtship" phase?" was considered through the literature (Adizes, 2007), the authors identified the performances relevant for Courtship phase, considering the challenges characteristic SMEs management in the observed phase (Table 2) and grouped according to a characteristic of controlled object in the phase, shown in Table 3.

The research question RQ(1.2): "Can be identified at least one indicator for each performance of the observed problem in "Courtship" phase?" evaluated based on theory and practice that gives a definitive answer to this question, the performance should be described by at least one indicator, otherwise its identification would be insufficient (Atanasov, 2016). Based on this, the authors identified one or more performance indicators for each identified performance of managed objects - at the initial phase of the life cycle. Identified performance indicators for managed object in the initial phase Courtship are shown in Table 3.

Table 2. Managed object – defined based on the potential issues in „Courtship“ phase

N°	Challenged of phase	Reccomendations	Managed object
1.	Testing the reality of entrepreneurial idea	In order to test the reality of entrepreneurship idea realization, it is recommended to create a business plan - which will be the basis for starting the business, as well the tool for testing the "reality" of the entrepreneurial idea, through the activities: <ul style="list-style-type: none"> • Defining mission, vision and decomposition of goals; • Defining the program of production / services, including the initial assortment; • Defining ownership structure and team structure; • Market research: supply (resources, input barriers, competitors, potential suppliers, substitutes, competitors) and demand (customers, consumers); • Business environment research (PESTLE analysis); • SWOT-analysis of entrepreneurial venture; • Financial projections of operations and sources of financing; etc... 	Business plan
2.	The founder is ready for acting and fully committed to business idea	It is necessary to examine the personal motives, readiness and responsibility of the entrepreneur for creating the company. Peter Draker highlights six basic characteristics of entrepreneurs: need for achievement and success, creativity, risk taking, trust in self and boldness (self-confidence), need for independence and autonomy and motivation, energy and engagement. It is necessary to determine how much the founder is ready to invest in his / her enterprise (time, money, knowledge, other resources, ...) and how much he is willing to take risks (to cancel the previous job, leased business space, enter into the realization of the idea. .).	Competences of founder

Table 3. Performance indicators in Courtship phase of life cycle

Object	Performances	Performance indicators (for planned unit of time)
Business plan	Quality of Business plan creation process (BP)	<ul style="list-style-type: none"> • Efficiency of BP preparation (1) = Actual time of BP preparations/Planned time of BP preparation BP*100 [%] • Efficiency human resources in BP preparation = Number of BP revisions [1]
	Business plan creation costs (BP)	<ul style="list-style-type: none"> • Actual costs of BP preparation / Planned costs of BP preparation BP*100 [%] • Total costs of BP preparation [financial unit]
	Identified stakeholders	<ul style="list-style-type: none"> • Number of identified stakeholders [1] • Number of identified potential investors [1] • Number of potential investors contacted before engagement of selected investor [i=1,2,...,n]
	Business plan level of delivered expectations	<ul style="list-style-type: none"> • Level of delivered expectations for potential investor "i" for BP = Perceptible quality (PK) BP for potential investor "i" – Expected quality (OK) BP for potential investor "i" [Unacceptable quality of BP (OKi BP > PKi BP); Satisfactory quality of BP (OKi BP ~ PKi BP); Ideal quality BP (OKi BP < PKi BP)] • Stakeholder satisfaction with business plan [Measure the satisfaction of each category of business plan stakeholder, where the grades are: 1 - Totally dissatisfied; 2 - Partially dissatisfied; 3 - Not satisfied, not dissatisfied (as uninterested); 4 - Satisfied with this business plan; 5 - Very satisfied with this business plan.] • Achievement of the founders' expectations from BP = Perceived quality (PK) BP by the founders - Expected quality (OK) BP by the founder; [Unacceptable quality of BP (OKo BP > PKo BP); Satisfactory quality of BP (OKo BP ~ PKo BP); Ideal quality BP (OKo BP < PKo BP)]
Founder's competencies	Investments in Business plan realization	<ul style="list-style-type: none"> • Number of agreed investments [1] • Value of agreed investments [€]
	Invested time of founder	<ul style="list-style-type: none"> • Founder's invested time = Founder's invested time in planning of new company establishment / Founder's available time*100 [%]
	Founder's readiness to take the risk	<ul style="list-style-type: none"> • Entrepreneur's readiness to take the risk [1 – Ready to invest "free" time (minimal risk); 2 – Ready to invest time dedicated to family (low risk level); 3 – Ready to invest own financial found (moderate risk); 4 – Ready to invest time impacting work-life balance (time dedicated for healthy life style) (high risk level); 5 – Ready to take the bank loan or to engage other financial sources (Very high risk, full risk)]
	Founder's readiness for future investments	<ul style="list-style-type: none"> • Measure of founder's readiness to focus on newly created company in the future [1 – Founder is ready in the future to dedicate minimal resources (time, financials, networking, etc) to ensure implementation of entrepreneurial idea (minimal dedication); 2 – Founder is ready to dedicate necessary resources for starting idea implementation (small dedication); 3 – Founder is ready to dedicate necessary resources for starting business (moderate dedication); 4 – Founder is dedicated to work full working time (8 working hours) (normal dedication); 5 – Founder is ready to work on the newly created company 24 hours, 7 days per week, or "as much as needed" (total dedication)]

The research question RQ(1.3) reads: "Which KPIs are used to manage SMEs in the "Courtship" phase?". For mentioned phase, on the basis of the most important characteristics of the phase, the authors identified two objects (Business plan and Founder competencies). The goal of the research was participants to select

three performances and one indicator for each of them, based on priority for their business. (Note: for objects that are linked with more than three performances, the ranking of the offered performances according to significance 1 - The most significant performance, 2 - Very significant performance, 3 - Significant performance, for objects that are described with exactly three performances, this ranking will not look at the work - so as not to be overburdened with the excessive number of data, because all three are considered to be the chosen performances). As the Business plan was described with five performances, it was first necessary to select the three most important ones - according to respondents. Table 4 presents the response frequencies of the respondents, while in Table 5 shows the values of responses obtained by multiplying the frequencies with a corresponding weight.

The research question RQ(2.1) reads: "What criteria are used to select the set of performance indicators of the corresponding problem in the "Courtship" life cycle phase?". According to Vujovic (2012, p. 38), the criteria that should be taken into consideration while identifying performance indicators are following: relevance, reliability, credibility, up-to-date, comparability, empathy and simplicity.

Table 4. Responses frequency for „Business plan“

"Business plan" performances	Frequency [1]			[%]		
	1 – Most important	2 – Very important	3 - Important	1 – Most important	2 – Very important	3 - Important
1	2	3	4	5	6	7
Business plan creation quality	11	9	11	31,43	25,71	31,43
Business plan creation costs	15	8	4	42,86	22,86	11,43
Identified stakeholders	2	3	4	5,71	8,57	11,43
Business plan delivered expectations	2	5	11	5,71	14,29	31,43
Investing in Business plan realization	5	10	5	14,29	28,57	14,29
Total:	35	35	35	100,00	100,00	100,00

Table 5. Selection of most important performances for „Business plan“

"Business plan" performances	Value (Frequency x Ponder) [1]			Total value
	Frequency (Most important) x Ponder (9) ¹	Frequency (Very important) x Ponder (6) ²	Frequency (Important) x Ponder (3) ³	
1	2	3	4	5
Business plan creation quality	99	54	33	186
Business plan creation costs	135	48	12	195
Identified stakeholders	18	18	12	48
Business plan delivered expectations	18	30	33	81
Investing in Business plan realization	45	60	15	120

The research question RQ(2.2) reads: "Based on which theoretical knowledge, identified performance indicators can be considered adequate to manage the problem in the "Courtship" life cycle phase?". The authors, based on literature and acquired knowledge (determining the adequacy of the individual performance indicator depending on the circumstances of the business is shown in the dissertation of Atanasov (2016)), identified performance indicators for managing individual characteristics (problems / challenges) at the initial stages of life cycles. These performance indicators are subject to update or change, in line with specificity of each company, different activities and business circumstances. The adequacy of the identified performance indicators can not be fully determined as in this paper they were done to meet the needs of the paper topic and completing the picture of the analysed paper topic.

¹Most important performance received ponder 9.

²Very important performance received ponder 6.

³Important performance received ponder 3.

Table 6. Selection of performance indicators in phase „Courtship“

PERFORMANCE INDICATORS		Frequency [1]	[%]
Business plan	Quality of Business plan creation process (BP)	35	100,00%
	<i>Efficiency of BP preparation</i>	24	68,57%
	<i>Efficiency human resources in BP preparation</i>	11	31,43%
	Total costs of Business plan creation	35	100,00%
	<i>Actual costs of BP preparation / Planned costs of BP preparation</i>	9	25,71%
	<i>Business plan creation costs (BP)</i>	26	74,29%
	Invetsments in Business plan ralization	35	100,00%
	<i>Number of agreed investments</i>	10	28,57%
	<i>Value of agreed investments</i>	25	71,43%
Founders competencies	Ivensted time of founder <i>Participation of Founder's invested time in planning of new company establishment</i>	12	34,29%
	Founder's readiness to take the risk <i>Founder's readiness to take the risk measure</i>	30	85,71%
	Founder's readiness for future investments <i>Founder's readiness for future dedication to business</i>	26	74,29%

During the survey, while selecting the performances, the respondents were asked to select one indicator for each performance. As only one performance indicator was identified for individual performance, respondents had the opportunity to decide whether this indicator could be considered the key to the observed phase of the life cycle. The authors decided that, in case of "solitary" indicator if more than 60% of respondents answered positively, this indicator is seen as crucial. The response frequencies of the respondents are shown in Table 6. Based on the research, the authors formed the KPI for the life-cycle phase "Courtship", shown in Table 7.

Table 7. Key performance indicators in phase „Courtship“

Business plan	Quality of Business plan creation process (BP)
	<i>Efficiency of BP preparation (BP) = Actual time of BP preparation / Planned time of BP preparation*100 [%];</i>
	Actual costs of BP preparation
	<i>Total costs of BP preparation [financial units]</i>
	Investments in BP realization
	<i>Value of agreed investments [financial units]</i>
Founders competencies	Founder's readiness to take the risk <i>Founder's readiness to take the risk [1 – Ready to invest "free" time (minimal risk); 2 – Ready to invest time dedicated to family (low risk level); 3 – Ready to invest own financial found (moderate risk); 4 – Ready to invest time impacting work-life balance (time dedicated for healthy life style) (high risk level); 5 – Ready to take the bank loan or to engage other financial sources (Very high risk, full risk)]</i>
	Founder's readiness for future investments
	<i>Measure of founder's readiness to focus on newly created company in the future [1 – Founder is ready in the future to dedicate minimal resources (time, financials, networking, etc) to ensure implementation of entrepreneurial idea (minimal dedication); 2 – Founder is ready to dedicate necessary resources for starting idea implementation (small dedication); 3 – Founder is ready to dedicate necessary resources for starting business (moderate dedication); 4 – Founder is dedicated to work full working time (8 working hours) (normal dedication); 5 – Founder is ready to work on the newly created company 24 hours, 7 days per week, or "as much as needed" (total dedication)]</i>

The presented research examines the possibility of creating set of KPIs for SMEs in the initial phase Courtship in the company life cycle. Based on collected data (theoretical knowledge and practical - the survey), analysis and conclusion about the previously set hypotheses was made. The confirmation of the general hypothesis H(0) was verified by verifying the truth of individual hypotheses H(1) and H(2).

The individual hypothesis H(1) ("It is possible to define indicators for each SMEs managerial performamnce in starting phase Courtship in company life cycle.") was checked through the research questions RQ(1.1)-RQ(1.2), formulated to test the truth of the hypothesis. In order to obtain answers to these questions, the authors analyzed the characteristics of the "Courtship" phase in the company's life cycle (Table 1), by identifying the managed object in the observed phase (Table 2), as well as performance and performance

indicators characteristic for the considered phase Table 3). Also, the procedure for selecting the performance for one of the identified objects in the "Business Plan" phase is presented, based on the survey response frequencies (Table 4 and Table 5). Based on mentioned, it can be concluded that the individual hypothesis H(1) is confirmed.

Individual hypothesis H(2) ("It is possible to select set of relevant KPIs for starting phase Courtship in company life cycle.") was checked through the research questions RQ(2.1)- RQ(2.2), where participants were asked to select key set of indicators for the observed life cycle phase. The hypothesis testing was conducted on the basis of the Questionnaire, where respondents, employed in SMEs, selected performance and indicators that they consider to be crucial for a particular phase. The selection of the KPI for the phase Courtship is shown in Table 6, and the selected KIPs have been additionally described with the measurement systems - in Table 7. Based on the above, it can be concluded that the individual hypothesis H(2) is true / confirmed.

On the basis of the confirmed truth of the individual hypotheses H(1) and H(2), it can be concluded that the general hypothesis H(0) "It is possible to choose the set of KPIs relevant for managing SMEs in the initial stage of the enterprise's life cycle ("Courtship")" is confirmed as well.

5. CONCLUSION

Each company can identify position in the company life cycle according to the specific characteristics appearing in the business. SMEs are companies that have the most modest resources, and therefore they need more driving energy that will influence the growth and development of the company's business and market position. At the beginning of the life cycle (in the phase called "Courtship"), SMEs are faced with different problems, mostly related to financials – and in this phase they are mainly focused on financial performance indicators. In the initial stages of life cycle, following the upward path along the life cycle and, slowly, achieving success, SMEs should start introducing into their management and non-financial performance and indicators (which can give them more general insight into the business).

The problem, explored in this paper, is the possibility of identifying set of KPIs for managing SMEs in the initial phase of the life cycle ("Courtship"). The results of the survey confirmed the general hypothesis (H(0): "It is possible to choose the set of KPIs relevant for managing SMEs in the initial stage of the enterprise's life cycle ("Courtship")). KPI package for the observed initial phase of the life-cycle "Courtship" are also created. The adequacy of the presented set of KPIs has not been fully explored, but the idea was to present the possibility of managing the phases of the life cycle of SMEs - using KPIs, and to point out the potential and importance of this business practice.

The result of the research is a tool that can be developed, and as well tested in specific business circumstances in practice (in different SMEs). Testing the tool would lead to the possible directions of its development, and it would be desirable to create several KPI packages of the observed initial phase of the life cycle ("Courtship ") that would be relevant to certain types of business (according to the size of the company, the activity it deals with, etc.). It is also possible to extend the research and selecting the set of KPIs to all (initial and other) phases of the company's life cycle.

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PLANNING OF THE ACTIVITIES OF THE FAMILY FIRM SUCCESSOR PREPARING IN SERBIA

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Abstract: *This paper presents an important aspect of always current issue of “family business succession”. It is about the preparation of the family business/firm (FF) successor or, to be more precise, about planning/designation of contemporary activities of the FF successor preparation in Serbia. The intention is to indicate to the owners and potential FF successors as the most important groups of interested parties (stakeholders) for successful FF succession and thus for a good/planned preparedness of future successors. The research of the solution from the reference books (in theory and practice) helped identify potential activities in the FF successor preparing (development of their ownership competences, i.e. for FB management); then, field research of Serbia resulted in the (plan of) acceptable contemporary activities of the FF successor preparing which suit the circumstances (economy situation but also to the cultural model) in Serbia. The generated plan of activities (per phases) represents the tool of the FF owners in Serbia, for their potential successors and also for the remaining stakeholders: it may be used in planning (as well as in comprehensive management), preparation of potential FF successors.*

Keywords: *Family firm/business (FF), FF Succession, FF Successors competencies, FF Successor preparing, The activities in the FF successor preparing, Plan of the activities of FF Successor preparing*

1. INTRODUCTION OR ABOUT FAMILY BUSINESS

The evidence to the importance of family firms is provided by the data that they represent 80 percent of all registered business entities in the world, that they generate 70 percent of the world GDP (EY Economic Barometer, October 2017). However, the statistics does not support the success of family firm succession since approximately 70 percent of family firms disappears after the “departure” of the owner while only 30 percent of these goes through the transfer from the first to the second generation, and barely 12 percent from the second to the third (Kets de Vries, 1993). According to the data of the Economic Barometer from 2017 conducted by Ernst & Young, 22 percent of the Serbian entrepreneurs currently at the top of their company took it over from a family member or another person, while only 15 percent of the Serbian companies were succeeded from a family member (EY Economic Barometer, 2017). The research about the status of family firms (2014) in Serbia, conducted by companies Chapter4PR and ProEduca indicate that about 60 percent of companies in Serbia have operated for less than 20 years. Totally 84.5 percent of them are founded by their current owners, 11.9 percent are succeeded and 3.6 percent bought. The data also show that 67.9 percent of the companies are managed by their first owner, while the managing role is assumed by the second generation in 29.2 percent of cases and only 2.4 percent of the companies was succeeded and managed by the third generation of owners. According to this research 9.3 percent of founders are planning to retire by 2018. Relatively high “mortality” of the succeeded companies (family firms) is strongly related to (insufficient or/and inadequate) competency of the successors and also with their readiness to assume the role of the owner, manager, (internal) entrepreneurs. There is no company, not even family firm, which can afford the risk of losing “the most responsible one”, so the tendency is to have a ready (potential) successor. This is where the inspiration for the research presented in this paper –about the planned preparation of the family business successor preparing stems from.

2. SUCCESSION OF THE FAMILY BUSINESS

In Serbian companies 40 percent of current owners plan to leave the company to family inheritance (EY, 2017), which fits into the European average of 46 percent (Freund, et al., 1995). The information of particular concern –only 3.5 percent of interviewees plan to, immediately after completed studies, take over the family business –is provided by the study conducted by Ernst & Young (2014). It indicates that there is the problem of (planned) preparedness of the family business successors who –due to the preparation of insufficient quality –are not capable of coping with the problems which the family firm faces during the succession and later. If, during a longer time period, the need for planning, preparing and implementing of the process of family business succession is ignored, the family firm may be in serious trouble.

The succession process may be divided into three phases: F1) planning of the personal development of potential successors; F2) involvement of successors in the family business and F3) assuming of the leadership position in the company. Planning of the personal development (F1) involves: formal (Sharma, et al., 2003; Morris et al., 1996) and informal education (Neubauer, 2003; Morris et al., 1996), gaining work experience outside the company (Morris et al., 1996), as well as the inclusion of consultants from the environment of the subject company (Sharma, et al., 2003). The implementation of (F2) second generation into the process of succession involves relations and connections established by the successor on individual, interpersonal and organizational level (Filser, 2013), taking into consideration legal, financial, tax and psychological aspect (Ip i Jacobs, 2006). In order to preserve the tradition of family entrepreneurship, the firm owners should accept the planning of succession as a process which involves the acceptance of the succession as a long-term process, clear defining and appointment of persons responsible for this process and persistent and quality preparation of the following generation for assuming of the leader function in the firm (F3).

The problem of family firm successor preparing stems from the fact that the successor, by entering the firm starts assuming the authority of the founder. Based on that, Davis (1968) defined three models in family firms:

- Model 1: "Strong father and weak son", where the father is the personification of power and strength. His relation toward employees may be described as idyllic, unlike his relation toward his son, who usually lives in luxury and abundance. The most important reason of the failure in these family firms is that the father fails to transfer his strength and devotion to his son, i.e. "the father is everything that the son is not". The son respects the father too much and, as the time passes, he loses the interest and ambitions.
- Model 2: "Conservative father and progressive son", when the role of the father is less dominant and the relation between the founder and the successor is reflected in the age difference. In this mode, it is usually talked about the father who started "from the scratch" and who possesses very little formal education (or does not possess it at all), while the son acquired higher education (very frequently abroad) and is in charge of the innovations and their implementation in the firm. After retirement, the father wants to enjoy the fruits of his work and frequently is dedicated to his grandchildren. The succession in this model is a slow and long-term process and ends with the death or retirement of the founder. This model, according to the mentioned research, proved to be the wisest and the most successful in the process of family firm succession.
- Model 3: „Ramified family“, which refers to the involvement of several family members in the company management. It is a very frequent situation that one brother is in charge of production and the other one for sales. The more harmonious the relations in the family are, the greater is the chance for the survival of these family firms, since, very frequently due to family conflicts, the company is split and/or sold.

The success of the family firm succession should be observed in the context of the relation of the founder/predecessor (current owner/ legal owner/ director) and (potential) successor(s). The success of the transition depends to a great extent on their relation (Venter et al., 2005), but also on the communication between them and within the family itself (Wing, 2011; Filser et al., 2013; Morris et al., 1996; Bigliardi i Dormio, 2009; Maciel, et al., 2015). Family and business goals, in most of the cases, are not identical within the family. What connects them is the role of the family in the very defining of these goals; reaching the goals may be accompanied by conflicts, but, eventually, the sense of belonging to the family and family firm is strengthened. The lack of plan and communication (within the family) about the succession and takeover is very present at family firms. (It certainly refers to Serbian family firms taking into consideration the traditional cultural heritage –that the succession is not the topic for discussion before the death of the founder (and opening of the will, if it exists).) The death of the founder represents one of the crucial reasons for the successor takeover of the company (Freund, et al., 1995). Apart from the fear of death, Howorth and Ali (2001) emphasize also the fear of loss of respect and strong connection of the owner with the firm as main reasons for the resistance which appears with the founder. Everything that the founder sees as a threat, the interruption of the daily routine is related to the loss of the status of the "hero" which he enjoyed in his environment. One of the potential family firm succession scenarios shows how successful family firms have defined fixed age limit for the retirement, which refers to all members. Even if the owner neither takes the retirement into consideration nor prepares the successor once the retirement limit is established, he is aware of the certain time period he has to prepare the successor.

For the founder's success his dedication and the dedication of the entire family are of crucial importance (Sharma et al., 2003). It also includes the wish of the owner to leave the firm to descendants (Tatoglu et al., 2008), as well as the wish of the successors to take over the family business (Venter et al., 2005). The necessary conditions for successful implementation of succession with the second generation are: planned dedication of the successor for the long term (Fox et al., 1996), his competences and suitable education (Tatoglu et al., 2008; Bigliardi i Dormio, 2009), experience outside the company (Morris et al., 1996) and

psychological preparation of the successor, top management, family, employees (Neubauer, 2003). In order to realize the process of the selection of potential successor, it is necessary to have a successor ready to assume one day (when it is required) the managing role. If the successor himself conducted improperly in the process of successor preparing it may undermine his authority and create resistance with the employees (and even the family). The competency of the second generation is based on the planned education of the successor and represents the basis for their inclusion in the family firm operation –according to the “plan of potential successor preparing”. An important factor in the very competency of potential successors is the experience which may be acquired in two manners: a) By work –in different forms of engagement in the family company (student internship or/and labor relation); b) By internship in other companies or/and establishment of the labor relation in another company for a definite period of time (prior to the planned succession). Barach et al. (1988) state that most of the successors immediately after schooling enter the family firm and the same authors conclude that the more successful successors are the ones who, prior to the company takeover, have work experience in some other companies (acquired immediately after schooling). The successor acceptability (for all interested parties) represents an important factor for the selection of the potential successor to the managing function in the family business.

The change of generations in family firms bears great life changes with both generations changing the balance of power in the family and the firm itself, in a certain manner, starts over. The successful transition from the founder/owner to the successor is more probable/ successful in families with the relations of harmony and love (Morris et al., 1996, Venter et al., 2005, Maciel, et al., 2015). For the change of generations with family firms the harmonious relations within the family are extremely important.

The family tradition, values and the sense of belonging represent an important feature of the family firm. Members of the family sense belonging to the company to a greater extent than employees who do not belong to the family and also they have stronger motivation to overcome problems in the firm (compared to other employees). The values cherished within the family, family culture and communication play the key role for successful termination of the process of family firm succession (Tatoglu et al., 2008; Wing, 2011; Morris et al., 1996; Bigliardi i Dormio, 2009; Santiago, 2000; Campbell et al., 2007). If the family does not share family values, the very succession is significantly aggravated. Therefore it is very important that the family members openly express their opinions, views and attitudes about these values –in order to identify their attitude toward family firm/business. Here the manner of mutual communication of family members is of essential importance.

As a successful model of succession Royer et al. (2008) emphasize the Japanese model of succession of the family business: it is more successful than others because it focuses, apart from the nuclear family (sons, daughters, brothers and sisters) to the extended family, too (sons-in-law, daughters-in-law, brothers and sisters of the second and third generation). Klaus Kobjoll, the owner of the famous and multiple-award winning hotel Schindlerhof, believes that the greatest entrepreneurs, by the rule, are not founders, but the second generation, with the “eagerness” of the founder (Kobjoll, 2007).

3. ACTIVITIES OF THE PLANNED PREPARING OF THE FAMILY BUSINESS SUCCESSOR

With regards to different models as well as the differences in the environment and cultural standards, it is not recommended to “transplant” other’s models even in the case of the family business/ firm/ company successor preparing –unless it is planned for a long term and realized consistently. It is sensible to get familiar with other’s models, but to accept those features (of that model) which may be “received” in a specific environment (in this case, in Serbia). Therefore, in this chapter, other’s models/plans of activities of successor preparing are presented.

The last German emperor –Wilhelm II –said: “The first generation builds, the second one manages and the third one studies art history”. Thomas Mann, famous writer and Nobel Prize winner, who spoke about the decline of German civic ideology of Wilhelm age in his piece “Buddenbrooks”. Mann’s novel is current today, since it depicts four generations of an old, respected merchant family and the authors of this paper see it as a case. In practice, current owners and potential successors, even before planning/activity defining of the successor preparing, have the problem of successor selection and then, just in case of the succession of the family business (i.e. for each successor) and the problem of determination of corresponding activities of their preparing. The additional problem could be caused by inadequate transfer of knowledge and experience (especially if also they –knowledge and experience are inadequate) to (potential) successors. A special aspect (or danger) in the preparation planning for potential FB successor may be inadequate motivation or his directing to the activities according to which he does not show the competency or wish at all.

As basic activities of the preparation for succession, according to foreign theory and practice, the following may be isolated: a) sending for schooling or additional schooling; b) frequent presence in the family firm; c)

sending to training, seminars, courses, etc. There are many activities which may significantly facilitate the succession in the family business: d) work in family firm; e) participation of the successor in defining of the family policy of succession; f) participation in decision-making at meetings; g) beginning of the career in another company; h) mutual agreement of successors and current owners; i) participation at the workshops for the successor preparing; j) occasional work of potential successors in the other's practice; k) gradual inclusion of the successors in the family firm operation, etc.

From the group of previously stated activities the "constant presence in family firm" is isolated. In majority of family firms there is a great generation gap between parents (current owners or/and managers) and potential successors. The presence of successors, from an early age, in the family firm may reduce the disagreement in the assuming of the managing role in the family firm since through the continual presence the successor is closely introduced to the functioning, meaning and the potential of the family firm, develops the understanding for the family business and their role in it and the surrounding is prepared/accustomed to their presence. In these cases it is possible to plan all the activities and provide reality and accomplishment of such plans.

Just like individuals, all families are unique and different –each in their own way. In Serbia, in 58 percent of the companies, families significantly contribute to the work within the company (EY, 2017). (The examples are MONA, AMC, GARDEN CENTAR, etc.) The succession is to a certain extent emotional –since there are different interests and plans of individuals within the family. In Serbia, many entrepreneurs start alone, without great help of the institutions. As the time passes, as family business grows, the tendency for the formalization of the organizational structure and the employment of professional managers grows, too. The founder find it difficult to accept that their children have grown up and that they should be let go; this, for founders, represents a great, double challenge: professional –since they see the firm as their child and emotional –biological child has grown up and moves on independently.

4. RESEARCH OF THE ACTIVITIES OF THE FAMILY BUSINESS SUCCESSOR PREPARING IN SERBIA

The research of activities, as a phase of the planning of the successor preparing, requires the special attention to be focused toward the solution to the problem: "Which of the contemporary activities of the successor preparing (implemented in developed countries) are necessary and applicable in Serbia in order to have a successful succession?" The issues of importance also refer to the length of the preparation process, the sphere of the competency development, combining of the successor preparation with other aspects of life, organization/participation of planning and realization of the successor preparing, etc. Via a questionnaire (for owners/successors of the family company) and the representation of cases, the data about contemporary activities, participants, errors, problems, and attitudes referring to the family business successor preparing are collected based on which the set of contemporary activities of the family business successor preparing is defined and applicable in Serbia.

4.1. The researched problem

"Succession is one of the most critical steps in the evolution of the family business. What is kept secret by the family, what is not said, i.e. what remains unspoken, weaknesses inside the family, communication, lack of experience and other, will most probably cause the conflict, non-functional and irrational conduct during the succession" (Deschamps B., Cisneros L. (2014), p. 1). There is a great number of problems which the successors and potential successors face. The basic problem whose solution is being looked for is how to introduce in Serbia the practice of planning (and later realization) of contemporary activities of potential successor preparing (and also, with the defining of activities, to introduce the specification of participants, resources, time, manner, etc.). To be more precise, the solutions (plan elements) for the activities of family business successor preparing and they should be contemporary (applicable in the developed world) and acceptable in Serbia.

In Serbia, at the early XXI century, the first (after war) generation of the company owners is still dominant and it is characterized by the complete control by founders (while the other generation still bears with itself the burden of "the great father" and must prove itself to partners and family). The constant proving may sometimes be too big of a burden for the successor, for which he is still not ready (because he is expected to be at the same level as well as the predecessor, to maintain the similar vision of the family firm and long-term goals set at the time of the establishment). For economic as well as psychological/medical reasons, it is important that the second generation enter the job according to its own motives, just as it is important that the founders (or/and current owners/managers) do not pressure their children with the entrance into the family business. It has been expected that the research (presented in this paper) in Serbia also shows that, in most of the cases, the plan of preparatory activities does not exist and in cases when it exists, it is not

quality enough, its realization does not have sufficient attention and support. For the inspection of the stated expectations the corresponding methodics/"methodology" was developed.

4.2 The research methodology

The main technique of the here described research is in written communication, i.e. via a questionnaire (so-called non-experimental research) and via the case analysis. In this manner, the conduct and need of the interviewees may be observed, as well as the solutions presented in cases. For the purposes of the observed research the questionnaire is made with three groups of questions: a) on interviewees (owners and potential successors); b) on family firms where the interviewees work and c) on research topics –related to individual hypotheses.

4.2.1. Hypotheses about activities of FB successor preparing

The research started with the basic hypothesis H(0): It is possible to define/plan contemporary activities of the family business successor preparing applicable in the Republic of Serbia. General hypothesis H(0) means that, currently, the activities of the family business successor preparing in the Republic of Serbia are not accessed adequately, so there is room for improvement –the introduction of contemporary activities, from the practice of developed countries. The assumption is based on the fact that a great number of family firms have the problem in the determination which activities are necessary so that the successor could be adequately prepared for the succession.

Apart from the general hypothesis, two individual hypotheses are defined (Figure 1):

- H(1): It is possible to define/plan contemporary activities of the family business owner in the family business succession preparing, applicable in the Republic of Serbia.
- H(2): It is possible to define/plan contemporary activities of the potential successors in the preparation for the assuming of a specific role in the family business in the Republic of Serbia.

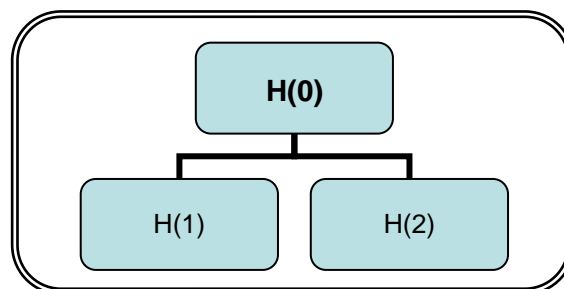


Figure 1: Hypotheses structure

In the inspection of the veracity of hypotheses, the intention is to go from the inspection of the veracity of individual hypotheses H(1) and H(2). The veracity of individual hypotheses is inspected (for each hypothesis individually) per research questions (RQ); for H(1) –based on responses to RQ no. 8-14 and for H(2) –to RQ no. 15-23. Then, based on the answers to the stated RQ, the conclusion about the veracity of the basic hypothesis H(0) is reached.

4.2.2. Sample of the population participating in the research

The sample consisted of 100 interviewees (out of that 37 female), current owners of family firms and potential successors. The number of participants –according to questions –fluctuates significantly, according to the willingness of the interviewees to respond to certain types of questions, which is why some of the questions referred to owners and the other to potential family firm successors.

In the paper Mirkovic (2016) the sample structure is presented in great details. Here is indicated that: 44 percent of interviewees are age 18-30 and 26 percent of age 45; 46 percent are with faculty education, 24% with higher level of education, 32 percent are founders, 20 successors in the role of owners/managers and 48 percent potential successors; 79 percent possess one firm each, and 4 percent possess three or more firms; 56 percent of their firms deals with the service rendering, 26 percent production and others combine production and services.

4.2.3. Research place and time

The research was conducted electronically, via Google Forms in October 2016.

4.2.4. Research manner

In the subject research the questionnaire consists of 6 questions about the Interviewee, one question about the scope of activities where the Interviewee works (described in chapter 4.2.2) and of 37 questions about the family business successor preparing, among them 7 research questions referring to H(1) and 9 questions to H(2). (The remaining questions are not closely related to the observed hypotheses). Here the responses to the selected research questions are presented (in tables) (since the organizer SymOr2018 limited the length of papers). Additional research deals with activities in three cases of family business successor preparing –in different scopes of activity and different phases of life cycle of the family firm.

4.3. Research results

Double “field research” was conducted (via electronic questionnaire and the analysis of three cases), accompanied by generation of the (potential) part of the plan of family business successor preparing which refers to the list of contemporary preparation activities –acceptable in Serbia. Therefore the presentation of the field research results will be divided into two parts. The first part deals with the inspections of veracity of individual hypotheses (based on the analysis of the responses to the research questions from the Questionnaire) and the other –by presentation of three cases. They are also accompanied by the third part – the proposal of the set of contemporary activities of the family business successor preparing applicable (in the plans of family firms) in Serbia.

4.3.1. Field research results

The results of the research of the family business/ firm successor preparation activities concern:

- a) Attitudes of current owners – among them there are entrepreneurs/ founders and managers/ successors of the family business (H(1)) i
- b) Attitudes of potential successors (H(1;2)).

For the inspection of the individual hypothesis H(1), 7 research questions are generated (RQ); here are presented 5 RQ and answers to them (in tables 1-5). For the inspection of the individual hypothesis H(2), 9 RQ are generated but here are presented 6 RQ and answers to them (in tables 6-11).

Table 1: Answers to the question “Do You have in your family a detailed plan of development and introduction of the following generation of successors in the family business?” (Mirkovic, 2016)

Answer variants	Number of interviewees (u [1])	Share in total number (in [%])
No	37	42.0
Yes, but not detailed enough	36	40.9
Yes	15	17.0
Total	88	99.9

Table 2: Answers to the question “Have You and in what manner been prepared for the succession?”

Answer variants	Number of interviewees (u [1])	Share in total number (in [%])
No, I was just accepted	10	19.3
Yes, by schooling	1	1.9
Yes, by frequent presence in FF	3	5.8
Yes, by sending to training, etc.	1	1.9
Yes, but inadequately	5	9.7
I am the founder	32	61.4
Total	52	100.0

Table 3: Answers to the question “What (which activities) do you recommend for the FB/FF successor preparing?” (Mirkovic, 2016)

Answer variants	Number of interviewees (u [1])	Share in total number (in [%])
Work at the firm	29	46.0
Education and work/internship	22	35.0
Workshops for the successor preparation	3	4.8
Start of the career in another company	7	11.0
Participation at the meetings	1	1.6
Participation in the designation of the succession family policy	1	1.6
Total	63	100.0

Table 4: Answers to the question “By the application of which of the following activities does the participation of the owner reflected in the preparation of the successor?” (Mirkovic, 2016)

Answer variants	Number of interviewees (out of 52)	Share in total number (u [%])
By schooling of the successor	45	86.0
By sending the successor to additional training, courses, etc.	26	50.0
By sending the successor to work and to be an intern in other companies	7	13.5
By occasional work and gradual inclusion in the FF operation	44	84.6
Through constant advising and providing support to successors	37	71.0

Table 5: Answers to the question “Have you, and based on what, chosen your family business successor?” (Mirkovic, 2016)

Answer variants	Number of interviewees (u [1])	Share in total number (in [%])
I have not chosen yet.	22	42.3
I have not, they need to be tested	3	5.9
I have not, they are still young	11	21.1
I have, based on the competences	7	13.5
I have, based on ambitions	2	3.8
I have, based on education	5	9.6
Yes, to each successor equally	2	3.8
Total	52	100.0

Table 6: Answers to the question “According to Your opinion, which activities are necessary in the very process of family business successor preparation?” (Mirkovic, 2016)

Answer variants	Number of interviewees (u [1])	Share in total number (in [%])
Gradual introduction in the FF operation	12	25.0
Education, work and internship	6	12.5
Introduction to future obligations	7	14.6
Gradual progress through FF	3	6.2
Owner support and dedication	8	16.6
Directing of the owner (and family)	3	6.2
Everyday participation in FF operation	9	18.9
Total	48	100.0
Other	5	10.4

Table 7: Answers to the question “What type of pressure did you encounter in your selection as the potential successor?” (Mirkovic, 2016)

Answer variants	Number of interviewees (out of 48)	Share in total number (in [%])
By family members	29	60.4
By the environment	21	43.7
Fear of failure	42	87.5
Fear of complexity	25	52.1
Disappointment of the one doing the preparation	25	52.1
Other	5	10.4

Table 8: Answers to the question “Have You ever performed the job which was in a way similar to the job You want to succeed?” (Mirkovic, 2016)

Answer variants	Number of interviewees (u [1])	Share in total number (in [%])
Yes	22	45.8
No	18	37.5
Without previous work experience	8	16.7
Total	48	100.0

Table 9: Answers to the question “*What was your first function in the family firm?*” (Mirkovic, 2016)

Answer variants	Number of interviewees (u [1])	Share in total number (in [%])
Executive	35	72.9
Manager	9	18.8
Other	4	8.3
Total	48	100.0

Table 10: Answers to the question “*How much have the proper education and directing by the owner and family helped You in the process of preparation and assuming of the role in the family firm?*” (Mirkovic, 2016)

Answer variants	Number of interviewees (u [1])	Share in total number (in [%])
They were helpful a lot	28	58.3
They were of key importance	6	12.5
I am preparing; I still have to work in another firm before I succeed the business	3	6.3
They were not helpful	11	22.9
Total	48	100.0

Table 11: Answers to the question “*Which of the following activities of the owner and family members, according to your opinion, influence the success of the family business preparation and succession?*” (Mirkovic, 2016)

Answer variants	Number of interviewees (out of 48)	Share in total number (in [%])
Timely planning of potential successors preparing	39	81.2
Proper knowledge and experience transfer to potential successors	32	66.7
Successful motivation of the successor	26	54.2
Proper directing in the successor education	14	29.2
Other	0	0.0

4.3.2. Case studies

In the inspection of the veracity of individual hypotheses, apart from the research of references and “in field” the analysis of three cases of family business/firm succession is applied and they vary in the phase of life cycle in which the companies are. The first case refers to active preparation of the successor of family firm which is in the phase of transformation from hobby to business. The second case refers to the preparation of the successor – “adolescence” while the third company is before the top shape.

Case study 1: Micro family firm (in the “courting” phase toward “development age” phase)

Beekeeping in the family Atanasov represents a part of the tradition for more than one century. However, due to contemporary way of life in the urban environment, last two generations of the family members (from the second half of the 20th century) considered beekeeping as a hobby –doing it near Belgrade, at rented fields. The statement of Bennedsen et al. (2007) that “the sex of the first child impacts the succession in the family firms so much that the percentage of successful transition from the founder to the successor is by 32.7 percent higher in families where the first-born babies were male” finds the confirmation in this family: first-born child –son Nikola, goes to schools and, during the weekends, studies with the help of his Father about bees, honey, honey production technology, protection, etc. He obtained his faculty education for operative management (at the FOS, doctorate). He recognized the business potential of his father’s (and family) hobby –beekeeping and helped his father in deciding to turn his hobby into a more professional activity (purchase of beehives, then purchase of the property).

The hobby grows into a business which brings modest income to the family budget (by selling bee products to close friends). During 2014 the “successor” from the second generation of beekeepers in the family presents the idea to turn the *beekeeping* hobby into a small family firm for the production of bee products. The father and the son decide to mutually by the equipment for collecting (extracting), keeping and packing of honey, as well as for “moving” of beehives in the search of season-available pastures. “Beekeeping company Atanasov” is currently (2018) in the process of establishing a small family company, in the transition from the “courting” into “development age” phase and Nikola Atanasov, PhD more diligently studies the theory of Entrepreneurship, SMC management and Management Quality Improvement and Problem

solving in practice the newly acquired knowledge. The family expects soon to have the company officially registered at the Business Registers Agency. Nikola is gaining improvement in a prestigious multinational company.

Case study 2: Small family firm (in the “adolescence” life-cycle phase)

The production of furniture and metal structures represents a part of a family tradition of two generations of the Mirkovic family. The successful family business –STADIUM, at their land (in Belgrade) and within their premises attracted (apart from the father and mother) also the sons (older –designer and younger -lawyer). The second generation due to new approach to the market (both in Serbia and abroad), brought the increase of production and sale. The Mirkovic family, from 1992 to 2018 founded two companies. Simultaneous with the business development, the sons are schooled in the spheres they are interested in (and which may help with the family business). All four members of the family are schooled for different areas of business and make a team (it is true, for now, incomplete –as far as the functions in the company are concerned). The youngest, Pedja, after he completed the law (and simultaneously with the work in this area –in someone else’s company), completed master studies in the Entrepreneurial management of SMC at FOS. All this time he works also in the family company (which is now, according to Adizes, in the “adolescence” phase).

Through personal experiences of the co-authors of this paper the activities of the family business successor are preparing are identified: the schooling for the field which the successor Predrag selected (and which is important for business: law). Simultaneously, apart from the law, Pedja is working on the inclusion in production and business activities of the company. Work activities in someone else’s company with gradual introduction into the operation of the family firm brought him: the introduction to all rights and obligations, gradual progress through the firm hierarchy, solving of the conflicts with the current owner/father, directing by the owner and family members and everyday participation in the operation in the company.

Case study 3: Medium family firm (in “adolescence” phase toward “top shape” phase)

The family firm SUNCE of the Marinkovic from Kragujevac was founded by (the grandfather) Aleksandar (1929) –as a family workshop for the locksmith work. He was succeeded by his son Ljubisa who brought 50 employees in the production of PVC joinery. His sons, brought up in the business environment (where the mother also has her business) are specialized for the production director (older-Dusan) and for the director of the family firm (younger, Vladimir). After high school, Dusan remained in the company and Vladimir after completed education at the Faculty of Philology at FOS completed the specialist studies of SMC Management and then master studies and PhD studies in marketing.

The family, apparently, worked all the time on the development of the family business but also on the successor preparing. They managed to bring the firm to the pre-top phase (since they operate according to the contemporary production program, use robots, have business with domestic and foreign partners, grow and develop the business and its management, etc.). In the social aspects they are also successful: their reputation grows constantly, their sons have successful families and successors and Vladimir continues his professional development for the firm management. No, ten years since Vladimir’s beginnings at FOS, it may be said that Ljubisa and his wife directed their sons wisely and that, they provide all the time proper support and example (so that they can also direct wisely their children –according to their desires).

The three presented cases also (as well as the previous research questions and their responses) show that both individual hypotheses are based on facts and true. These conclusions are based on the confirmed assumption that it is possible to find contemporary activities for the preparation of potential family business successors, applicable in the Republic of Serbia.

4.3.3. Contemporary activities of the family business successor preparing in Serbia

The activities of the potential successor preparing are necessary to split in a few phases. Through the previously planned activities for the successor preparing, the very succession in the family business is facilitated. The *phases* (and corresponding groups of activities) *of the planned family business successor preparing* could be:

- 1) *The phase of the awakening of the awareness of the family business/firm*: The initial phase of the activity preparation; starts from an early age, where the successor is, in an informal manner, introduced to the family firm (through visits and games, etc.), by listening to family conversations about the business and family history, by using old “data carriers”: photography, letters, journals, gramophone records, and by the application of digital ‘accomplishments’ (out of which some are already put *ad acta*: cards, magnetic strips and discs, floppy discs, and CDs, cassette deck, video cassettes, etc.)

- 2) *The phase of informing about the family business/firm:* In this phase, the potential successor is introduced to the products/services which are produced/provided by the firm to business associates and to economic basics of the operation of the family company (as the source of income for their parents and himself).
- 3) *The phase of the introduction in the practice and family business/firm:* the preparatory activities in this phase refer to the beginning of performance of simple tasks in the family firm –during the summer break or free time of the family business successor. It is characterized by the performance of various activities, based on which the interest/affiliations of the potential successor will be discovered; it provides more quality planning of the potential successor preparatory activities. Through the first operation activities the successor acquires the work habits for the practice. With more quality planning of preparatory activities there is also the directing related to education. The planning of this activity is important because of the successor formal education based on which then the practical knowledge is acquired. The activities which are also desirable in this phase are: the practice in another company –dealing with similar activities as well as different forms of professional training (workshops and courses) as well as constant advising of the successor and support providing, etc.
- 4) *The phase of the planning of the family business/firm successor preparing:* of the potential successor for the assuming of the role of the “leader” of the family business starts with the initiation of “work with full working hours” in the family firm, where, through the activities the succession is prepared on a daily basis. Surely, at the beginning these are simple activities (such as the participation at the business meetings and the introduction to the existing obligations, following of the instructions of the current owner for further improvement of the potential successor), but, with the time, the successor moves upwards –at the hierarchy ladder of the family firm –through the activities themselves, which are more complex (e.g. the participation in the decision-making policy in the family firm, moving to a better work position and assuming of greater responsibilities and authorizations). That is the manner of development of the potential successor and advancement –since the moment of the very assuming of the managing role in the family firm. What should not be left out are the activities provided by the remaining family members and the total environment. The role of the predecessor/owner in the development of the family business/firm successor is changed with time; his help in the planning of the successor preparing refers more and more to the psychological part of the successor preparing activities (such as: motivation and support provision).
- 5) *The phase of the family business/firm successor competencies improvement:* post-successive activities refer to further “improvement of own skills” (of already “realized” successor), since for the successful business operations it is not sufficient just to be competent for the technology or operation and business, but it is necessary to develop competencies also for the identification and the use of business relations (and opportunities for work), for the relations with the environment, information about scientific discoveries, appearance and action in various occasions (where the culture, education, various types of literacy, including the digital one, moral, humanity and values are “tested”), etc. With that, the successor of the family business must take care of his health (healthy life styles: the balance of the work and free time, amount of sleep, nutrition, recreation –physical culture, etc.) as well as to be active (and loved) member of the family and respected in the society (Future seems to be looking for a renaissance man again).

Contemporary activities of the family business/firm successor preparing identified in the world may appear also in the plans of family business/firm successor preparing in Serbia; no doubt, their realization may successfully prepare the successors of the family business. It provides successful application on the top of the family business/firm, and thus successful management of the family business/firm.

4.4. Discussion about research results

The subject research was conducted with the purpose of defining contemporary activities which may be helpful in the family business successor preparing, with the tendency to be really applicable in Serbia today. Different aspects of potential successor preparing are taken into consideration.

Based on the data collected in the field (responses to 7 research questions in the Questionnaire) and three cases, the veracity of the individual hypothesis H(1) was shown (“It is possible to define/plan contemporary activities of the family business owner in the preparation of potential family business successors, applicable at the Republic of Serbia”), i.e. this individual hypothesis is also confirmed. Based on this (and the interviewees –potential successors of the family business/firm made their statements), it is defined what the contemporary (applicable in the developed world) activities of potential family business successors are –in their preparation for the role of the successor applicable in Serbia, too.

From two sets of contemporary activities of the potential family business/firm successor preparing (i.e. from the perspective of the owners and their potential successors) the mutual/adjusted (harmonized and

synchronized) contemporary activities of the owners and their potential successors in the potential successor preparing for the takeover of the family business/firm management applicable in Serbia are defined.

Therefore, based on all previously stated and elaborated results in great details (field research, three cases and presented (per phases) the set of contemporary activities of potential successor preparing for the family business/firm takeover) it may be concluded that the basic hypothesis H(0) ("It is possible to define contemporary activities of the preparation of potential successors of the family business/firm in the Republic of Serbia) is confirmed.

5. CONCLUSION

The topic of this paper is the research of plans, i.e. contemporary (existing in the practice of developed countries) activities of the preparation of potential family business (i.e. family firm) successors. The most important participants in this "work" are (current) owners of family firms and their (potential) successors in business. At the same time, also all other family members (especially if they have share in ownership of the subject business/firm), and even wider environment (business partners, local community, state, etc.) have interest in having the activities of the business/firm successor preparing being performed adequately –both from the perspective of the (potential) successor and from the perspective of the current owner (legal owner/director of the firm).

The problem of defining of (for Serbia) adequate, contemporary and acceptable activities of the business/firm successor preparing has been researched from the aspect of both most important participants: "the current owner" and "potential owner". Both parties responded to the research questions and helped choose contemporary (in application in developed countries) activities which enter the plans of family business/firm (potential) successors preparing. The research is supported also by presentation of three case studies of the family business successor preparing for companies in different phases of life cycle.

Based on the foreign and domestic theory and practice, the list of activities for the potential family business successors preparing was defined. From the scientific perspective, the contribution of this paper is in the application of the scientific methodology in defining of elements (activities) for planning of the family business successor preparing and, simultaneously, in the elaboration of the planning methodics for this field (which creates the potential for the quality improvement of the planning of family business successor preparing, for the increase of probability of the successful replacement "at the top" of the family firm and for the improvement of this firm management quality improvement).

Further research in this field would be related to the sample volume (for all questions) –which could initiate the performance of two independent researches. Also, the search would go in the direction of the quality of family business/firm succession (performance, indicators, key indicators and their importance, measuring systems and quality measure) as well as in the direction of finding the solutions for this quality improvement. The same research methodology could be applied in other areas of family business/ firm management, all small and medium-large and even large companies (Some other directions of potential research are stated in the introductory part of the IV Chapter).

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RESOURCE MANAGEMENT QUALITY OF SME IN THE FIELD OF FASHION AND DECORATIVE FABRICS RETAIL

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Abstract: *This paper provides an insight into the way in which the quality of resource management in SMEs for trading in fashion and decorative fabrics (FDF) can be determined. The results of the research of the problem of insufficient sale of textile goods in SMEs for the retail sale of FDFs are presented (insufficient for business to be positive). The idea is to ensure better management of such SMEs, which requires determining the quality of the observed management - and resource management (as well as all other relevant management objects) in such an SME. In addition to literature research, field research was also applied. The method of testing (survey) for the collection of performance data and indicators was used, which measures the quality of SME resource management for retail FDF. The results of the survey allowed to define the method of measuring the quality of SME resource management for retail FDF. It is estimated that this solution, with less adapting, is applicable in all SMEs who are engaged in trading and who notice the possibility of improving their quality of management (and even other management facilities in the company) by improving the quality of their business. The positive veracity of the defined individual hypotheses has been verified in the paper, and it can be concluded that the general hypothesis is confirmed: "H(0): It is possible to define the desired quality of resource management and determine the limits of tolerance".*

Keywords: SME, Retail FDF, SME resources, Resource management, Quality Management

1. INTRODUCTION

Insufficient sales of goods force small and medium-sized enterprises (SMEs), in that activity, to improve their business and improve the management of SMEs in the field of trade to achieve sales that enable the survival of these companies and greater satisfaction of interested groups. Improving the quality of business becomes an imperative of the modern market and global flows. Valtakoski & Witell (2018, p. 1144) stated that different SMEs' resources capabilities lead to different outcomes. Due to that, SMEs need to carefully consider which service capabilities (i.e. service resource) to invest in. Valtakoski and Witell (2018) showed that front office service capability has a positive impact on firm performance of SMEs.

The ultimate goal of the business is to achieve business excellence. Such defined goals, in the conditions of the global market, create preconditions for successful business and development based on meeting all segments of the society (consumers, partners, employees, owners, state administration, and general public). According to Todorovic, Kalicanin, Nejkovic (2015), the purpose of performance measurement is also reflected in the value of business management. In order to know what the direction should be, the quality of management (enterprise, resources, etc.) need to be measured. The presented example is in the area of assortment of fashion and decorative fabrics (FDF). It refers to the implementation of the service strategy, the impact of the defined strategy on the behaviour of consumers and the monitoring of consumer satisfaction with the service itself in trading.

The presented work consists of six sections. After the introductory, the second section of the paper shows the process of retailing of fashion and decorative fabrics (FDF) as well as SMEs that are in this activity. The third section defines the management of SME resources for retail FDF. The fourth section presents a survey on the characteristics of the quality management of SME resources in the retail of FDF. Following the survey methodology, results are presented with the discussion. Section 5 gives a conclusion. The literature is shown in section six.

2. SMEs IN THE RETAIL OF FASHION AND DECORATIVE FABRICS

According to Overdiek (2018) mostly starting small micro retailers have very limited financial resources and consequently they are experimenting with alternative business model (like e-business/e-retail) which additionally does not require huge material business resources. On the other side, small and medium-sized enterprise (SME) retailers, in particular, encounter significant challenges in defending market share and the implementation of marketing efforts to attract new customers (Hutchinson et al., 2015). According to

Radunović and Lovreta (1995, p. 11), retail enterprises are intermediaries in goods trading between wholesale and end-consumers. If they do not use wholesale services, retailers mediate between manufacturers and consumers. On the basis of this, the turnover of goods takes place according to the scheme: producer - retail - consumer. Procurement of retail companies is not limited, and they can also obtain goods from wholesale and retail enterprises, directly from the manufacturer, while wholesale is limited to manufacturers and importers. Accordingly, retail stores supply products from wholesale, directly from the manufacturer or combined. The enterprise will choose previous options according to following characteristics: the quantity of procurement, the width of the assortment, the cost of purchase.

Retailing is a process in the marketing channels, which include activities among the final consumers and wholesale, or the final consumers and manufacturing enterprises (*Stanković & Čavic*, 2013, p. 114).

According to *Milošević* (2015, p.33), retail trade is the main initiator of the economic development of one country and therefore is one of the basic economic activities of that country. The importance of retailing is also contributed by the presence of a large number of stakeholders.

One of the items that trade of fashion and decorative fabrics distinguishes as specific would be the remains of the material is so-called rests, which need to have a special low price to be sold. In addition to the rest, particular attention should be paid to process of purchasing goods. *Jokić* (2010, p.131) states that too much procurement of fashion items can lead to excessive stocks, which, along with numerous actions and price reductions, cannot be sold. However, in the opposite case, the lack of fashion items leads to dissatisfaction of customers who then turn to competitors, and this results in poor company reputation and decreased sales. The seasonality of the goods is usually solved by experienced sellers by applying a combination of wide and shallow assortment, given the uncertainty about the acceptance of certain products by customers. With the passing of the season and acquiring knowledge about the sales of particular items, the orientation is on the narrower, but also denser and deeper assortment. At the end of the season, traders tend to focus on selected assortment lines, and on certain types of products within these lines. In the offseason, the situation is most favourable if there are no longer seasonal products in the stock (*Jokić*, 2010, p. 132).

The model of organising sales that applies to the sale of fashion and decorative fabrics is an organisation according to customers. This model is very applicable to companies where sales depend on good, very close and long-lasting relationships with customers. Customer organisation is also interesting when customer needs are specific, so each customer's order is preceded by the process of solving the problems that the customer has. In the case of selecting fabrics for sewing some clothing materials, where the consumer explains the appearance of his model and the seller informs him and advises which material would be adequate for this model. The place and role of consumers in the retail market depends on (*Stanković*, 2010, p. 566): The speed of consumer service; „Possession of hearing" for changes on the demand side, as well as agile response to these changes; Creating a customised offer and individual consumer focus; Care for the needs and demands of consumers over an extended period of time.

The primary task of trade is to ensure the continuity of social reproduction, linking producers and consumers and aligning they're many, often contradictory, demands and interests (*Lovreta et al.*, 2011, p. 177),. "Trade in its place in reproduction represents a kind of "barometer" for registering all changes in the scope and structure of supply and demand in the market" (*Lovreta et al.*, 2000, p. 179). According to *Stanković* (2010, pp. 567-568), a learning-based dialogue is established between businesses and consumers. It means that retailers provide their consumers with an opportunity, to inform retailers about their own needs. In that sense, the consumers actively participate in the offer of retailers, with the new significant roll of modern customer. Based on that, the retailer can meet the requirements and satisfy the needs of consumers, and this business relationship is continuously expanding.

3. MANAGEMENT OF SMSEs RESOURCES FOR RETAIL FDF

SMEs have limited resources, grow rapidly and undergo significant organizational changes over time (*Tatikonda et al.* 2013; *Valtakoski & Witell*, 2018). For the operation of every technical or organisational system, according to *Omerbegović-Bijelović* (1998, p.37), besides the presence of resources, other essential elements that contribute to the management are: the plan - as the information, employees and human resources - their knowledge and readiness for action, the authority of the employees - as the potential for starting and conducting activities. In fact, these relevant resources contribute to smooth business. Indicators of completeness, timeliness and efficiency contribute to better quality of resource security.

This paper section will describe SME resources for the retail of fashion and decorative fabrics, and will presents how SMEs manage their resources.

3.1. SME resources for the retail of fashion and decorative fabrics

According to *Figar* (2015, page 44), some resources are universal for all companies, and some are unique. Companies create and use them only for their own needs. Resources with their special purpose are at a

higher level than standard resources. The resources that are engaged in the retail of FDF are the following (Omerbegović-Bijelović, 2006, p. 101):

- Location and business-production space
- Equipment for a realisation of operation (machines, tools, etc.)
- Working objects - raw materials, materials, components, etc.
- Energy, fluids, water
- Human Resources
- Funding
- Time
- Information and knowledge
- Communication

The SMEs resources for retail of the FDF are as follows: Retail stores, goods and human resources. From these resources, the following performances which significantly influence the quality of resource management, are derived from,:

- The performance "quality of the sales store" - one of the most important factors for selling are the "location of the retail store" and "attractive sales space";
- The performance "quality of goods" - which represents parameters of properly selected goods, in accordance with consumer needs;
- The performance "quality of human resources" - which is considered crucial for retail, because sales staff are the key resource in retail business sales.

3.2. How SMEs manage their resources

The primary purpose of resource management is to adequately procure and exploit all business resources and especially those unique to a particular type of business. By separating the performance and further, the key performance indicators, the information used in planning the strategy and guidelines for the quality of resource management comes up.

According to Omerbegović-Bijelović and Krsmanović (2011, p. 397), the management means cyclical activity, in which the following phases are continuously going: planning, organising, realising and controlling. The basic phases of the management process (including resource management) are (Omerbegović-Bijelović, 2010, pp. 139-153):

- 1) Management planning - the stage of creating and selecting the goal, decomposing the goals from the highest to the lowest level, defining the activities of achieving goals, balancing resource requirements and determining ways to meet these needs;
- 2) Organisation of Management - involves delegation organisational entity and individuals for the realisation of specific objectives and assigning authorisations to organisational units or individuals for acquiring and disposing of resources and for initiating activities necessary to achieve the set goals;
- 3) Realisation of management - as a phase with groups of operations for: a) preparing the subject of work object, i.e. resource, which means ensuring availability, i.e. acquiring sufficient amount of resources and delivering them to workplaces (so-called "job closure"); and b) transforming the form, content and/or object work position;
- 4) Controlling the management is a phase of the following groups of operations: a) controlling and measuring the value and intensity of the performance indicators; b) comparing the obtained and planned values of the observed performance indicators and finding the causes that led to the deviation; and c) creating recommendations and corrective measures that will be applied in the next management cycle (which should be more successful than the previous cycle).

Based on previously defined resource management performances of SMEs for MDT, indicators of these performances can be defined. These performance indicators enable management to review the quality of enterprise resource management (and even the quality of enterprise management). By analysing scientific and professional literature, for this paper, indicators of selected performance are defined:

- 1) For the performance of the quality of the sales store facility, the following indicators have been selected:
 - Retail store distance from the centre of the town [km]
 - Business premises arrange [1]
 - Retail space area [m²]
 - Area of the street side of the retail shop [m²]
 - Distance from competitors' retail shop [km]
- 2) For the performance of goods supply quality, the following indicators have been selected:
 - ROA = Net profit / Total assets (%)
 - ROE = Net Profit / Equity (%)

- Realization of the sales plan (quantity) = Realized sales in the reporting period * 100 / Planned sales in the reporting period [%]
 - Realization of the sales plan (money) = Realized sales in the reporting period * 100 / Planned sales in the reporting period [%]
 - The coefficient of inventory turnover = Cost of goods and services sold / Average inventory balance [1]
 - Average turnover time = 360 / Coefficient of inventory turnover, in [day / turn].
- 3) For the performance of human resources quality, the following indicators have been selected:
- Productivity [k.j./v.j.]
 - Motivation [1]
 - Customer satisfaction caused by employees behaviour [1]
 - The average level of education [1]
 - Employee satisfaction [1].

According to *Vujic* (2013, p. 625), in the present conditions of the increased offer of goods, consumers are becoming more and more demanding, which results in quick satisfaction with a particular customised product or brand. There is an increasing desire for new and better quality products on the market. There is a real turning point in the world market, and it is emphasised that the key to competitiveness is the quality of products, resources and other elements in business.

4. SURVEY ON CHARACTERISTICS OF RESOURCES MANAGEMENT QUALITY OF SME IN FASHION AND DECORATIVE FABRICS

Most small and medium-sized retail enterprises have a problem with resource management due to their limited availability. By researching the quality of resource management in retail FDF, key performance indicators have been highlighted, which will - in the further process of measuring the resource management quality - serve for comparison with the results from previous measurements and point out the guidelines for planning strategies and operations to improve the quality of resource management.

The company expects that key performance indicators will provide answers to questions that the company needs to determine the quality of resource management. In order to obtain efficient and effective management, it is necessary for the organisation to ensure that key performance indicators provide information that is accurate, measurable, reliable and usable for the implementation of corrective measures.

Research on the quality of resource management for SMEs engaged in the retail of textile goods is based on the use of different ways of determining the quality of resource management.

4.1 Research methodology

The specific problem that is being investigated in this paper relates to characteristics of resource management quality (RM) of SMEs that deal with retail FDF. It means that it is necessary to define the performance of this quality and their indicators. Then, a "pattern" for determining the quality of the RM should also be determined. This information is later used in determining the quality of enterprise management, tracking this quality through history, for comparison with competitors, defining measures to improve business results / and selling FDFs) and others.

One of the methods used for the theoretical foundation of the research problem is the review and analysis of literature (i.e. table research). Relevant literature, as well as Internet sources, were used correctly. In field research, a survey method with the questionnaire was used. The crated questionnaire was on the quality of SME resource management for the retail of textile goods.

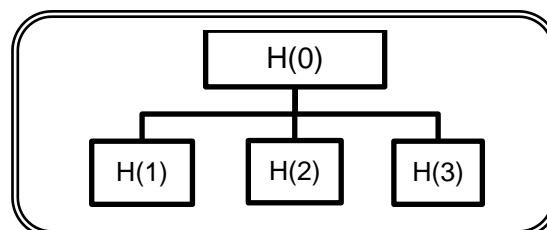


Figure 1: Structure of the main hypothesis

Given the complexity of the issues discussed in this paper, the main hypothesis is defined: H(0): It is possible to define the desired quality of resource management and determine the limits of tolerance. The general hypothesis H (0) can be further decomposed into individual hypotheses:

H (1): It is possible to define the resources that are most significant for the quality of the SME business in retail FDF.

H (2): It is possible to define the quality of resource management as a function of the value of their key performance indicators.

H (3): It is possible to determine the limits of tolerance for the quality of resource management for SMEs that deal with a retail of FDF.

All three individual hypotheses refer to defining the quality of resource management. To obtain the necessary data of research object (the selection of key performance indicators, and the determination of tolerance boundaries, it is necessary to consult the practitioners in this field. Therefore, a questionnaire was made to gather relevant data from owners and employees in SMEs that retail in FDF, and verify proposed hypotheses.

The questionnaire consists of three parts: information about the respondent, information about the company, as well as the attitudes and statements of the respondents about the subject of the research (to determine the performance and their importance, key performance indicators and the quality of the resource management). The survey was conducted on the territory of the Republic of Serbia, in November 2017, on a sample of 35 owners and employees of SMEs in the business of FDF retail. The obtained sample was from following cities and municipalities: Ub, Belgrade, Novi Sad, Sabac, Smederevo, Požarevac, Valjevo, Obrenovac, Lazarevac).

4.2 Results of research and discussion

Starting from the general hypothesis H(0): It is possible to define the desired quality of resource management and determine the limits of tolerance, the truthfulness of the proposed general hypothesis H(0) is proved through three individual hypotheses: H (1), H (2), and H (3). In order to verify the truthfulness of the individual hypothesis H(1): "It is possible to define the resources that are most important for the quality of SME business in retail with RTF", first research question (RQ1) was proposed. RQ1 is about the significance of the observed SMEs' resources for retail in FDF.

Table 1 presents the observed resources of SMEs for the retail of textile goods. Respondents were offered three groups of resources (RQ1, Table 1) for evaluation. They were evaluated according to their significance, percent, i.e. distributing 100 [%] among these three resources. It was possible to "vote" on more resources with the same or different importance (in percentage up to 100%) Two respondents did not answer this research question in compare to 33 respondents who did it.

The most significant resource (Table 1, RQ1), with the highest percentage value, is "goods" (40.61%), followed by "human resources" (31.96%) and "sales facilities" (27.43). This distribution is accepted as assigning coefficients of significance to the observed resources. This result in Table 1 confirms the individual hypothesis H(1): It is possible to define the resources that are most important for the quality of SME business in retail with RTF."

To verify the truthfulness of the individual hypothesis H(2): "It is possible to define the (desired) quality of resource management as a function of the values of their key performance indicators (KPI).", the research questions RQ2-RQ20 were set up.

The majority of questions include answers based on the Likert scale. For each of the statement in question - the respondent was required to show the degree of agreement with the statement, with response from a set of 1 to 5, where "1" is the lowest estimate, and "5" - the highest score. The Researches questions RQ2, RQ8 and RQ15 required the respondents to round off offered responses as the selection of most important performance indicator.

The second research question (RQ 2) is: "Which of the mentioned indicators best demonstrates the importance of a retail object as a SME's resource for retail in FDF"? Table 1 shows the respondents' answers to this question. The most valuable indicators were: Retail store distance (54.3%), business premises arrange (20%), and distance from the competitors (17.1%).

Location of the retail facility is marked as an indicator that best demonstrates the significance of a retail store as a SMEs' resource for FDF retail. Furthermore, all respondents were asked to reply to the additional research question: "Estimate the value of indicator that presents distance of the retail facility from the town

centre (RQ3). According to the results of the survey, the average values of the distance of the retail facility from the centre was 4.43, which represents a high value on the scale of 1-5, with high of importance.

Table 1: Research results - research questions: RQ1 - RQ7

RQ	Question	Respondents answers	Frequency (%)
1	Significance of observed retail resources performance	Retail store	9 (27,4%)
		Goods	13 (40,6%)
		Human Resources	11 (31,9 %)
2	The Indicators that best show the importance of retail store as a SME resource.	Retail store distance from the town centre	19 (54,3%)
		Business premises arrange	7 (20,0%)
		Distance from competitors' stores	6 (17,1%)
		Area of sales space	2 (5,7%)
		Area of the street side of the building	1 (2,9%)
RQ	Estimates of indicators value (scale 1-5)	Mean	Std. deviation
3	Retail store distance from the town centre	4,43	0,65
4	Business premises arrange	4,34	0,72
5	Area of sales space	3,57	0,85
6	Area of the street side of the building	3,66	0,87
7	Distance from competitors' stores	3,40	1,12

In the research question no. 4, respondents were asked to assess the value of the Business premises arrange on a scale 1-5 (Table 1, RQ 4). The average value was 4.34. Similarly, the average estimate values on others research question RQ5, RQ6, and RQ7, with performance indicators are respectively: Area of sales space was 3.57; Area of the street side of the retail shop was 3.66 (on scale 1-5); Distance from competitors' stores was 3.40.

Table 2: Research results - research questions: RQ8 - RQ14

RQ	Question	Respondents answers	Frequency (%)
8	The indicator that best shows the importance of the goods a SME resource	Sales realization plan (cash)	10 (28,6%)
		Inventory turnover ratio	8 (22,9%)
		Sales realization plan (quantity)	7 (20,0%)
		Average turnover time	7 (20,0%)
		ROE - Return on equity	2 (5,7%)
		ROA - Return on assets	1 (2,9%)
RQ	Estimates of indicators value (scale 1-5)	Mean	Std. deviation
9	ROA - return on assets	3,80	0,90
10	ROE - Return on equity	3,86	0,97
11	Sales realization plan (quantity)	4,14	0,83
12	Sales realization plan (cash)	4,34	0,72
13	Inventory turnover ratio	4,46	0,74
14	Average turnover time	4,29	0,75

Answers to the research question (Table 2, RQ 8) "Which of these indicators best demonstrates the importance of goods in a retail store - as a SMEs' resource for dealing with retail FDF", show that these are: A sales realization plan (cash) with 28,6%, inventory turnover ratio (22.9%), sales realization plan (quantity) (20%) and on average turnover time (20%). The average estimate of key performance indicators values related to their importance for the resource goods are (Table 2, RQ 9-RQ 14): ROA - return on assets (3.80); ROE - Return on equity (3.86); Sales realization plan - quantity (4,14); Sales realization plan - cash (4.34); Coefficient of inventory turnover (4.46); Average duration of one craft (4.29).

Distribution of the answer to the research question no. 15 which presents the indicator that best demonstrates the importance of human resources in the retail FDF business is given in Table 3 (RQ 15). The results of the response on the scale 1-5 show the following most important indicators: Customer satisfaction with employee services (54.3%) and employee productivity (28.6%). Table 3 also shows the average response values to research questions (RQ16-RQ20) related to the importance of the following key performance indicators: Productivity of employees (4.60); Motivation of employees (4,69); Customer satisfaction caused by employees behaviour (4.83); Average level of education of employees (3,49); Employee satisfaction (4.66).

The results for the research questions in Table 1 (RQ 2-7), Table 2 (RQ 8-14) and Table 3 (RQ15-20) and the conclusions drawn from these data confirm the proposed individual hypothesis H(2): "It is possible to

define the (desired) quality of resource management as a function of the values of their key performance indicators (KPI).",

Table 3: Research results - research questions: RQ15 – RQ20

RQ	Question	Respondents answers	Frequency (%)
15	The Indicators that best show the importance of a human resources as a SME resource?	Customer satisfaction with employee services	19 (54,3%)
		Productivity of employees	10 (28,6%)
		Employee satisfaction	4 (11,4%)
		Motivation of employees	1 (2,9%)
		Average level of employees' education	1 (2,9%)
RQ	Estimates of indicators value (scale 1-5)	Mean	Std. deviation
16	Productivity of employees	4,60	0,60
17	Motivation of employees	4,69	0,47
18	Customer satisfaction caused by employees behaviour	4,83	0,38
19	Average level of employees' education	3,49	0,89
20	Employee satisfaction	4,66	0,54

The research questions (RQ21-RQ23, Table 4) are defined in the process of verifying the truthfulness of the individual hypothesis H (3): It is possible to determine the limits of tolerance for the quality of resource management for SMEs that deal with a retail of FDF.

The RQ21 are related to the determination of the desired upper limit for assessing the quality of resource management in the observed company. The average values of respondents' responses to RQ21 were 4.46. Similar, the question RQ22 was about (acceptable) lower limit for assessing the quality of resource management in an enterprise. The average value was 2.77 on a scale of 1-5. Regarding the assessment of the current quality of resource management in respondents' enterprises, in Table 4 (RQ 23) the average results of the respondents' responses were 3.91 on a scale of 1-5. This result, which represents the level of quality of resource utilisation, is considered adequate because the desired upper and lower limits are defined within the framework.

Table 4: Research results - research questions: RQ21 - RQ23

RQ	Respondents estimates (scale 1-5)	Mean	Std. deviation
21	Desired upper limit of resource management quality	4,46	0,51
22	Desired lower limit of resource management quality	2,77	0,77
23	Assessment of the current quality of resource management	3,91	0,70

According to Omerbegović-Bijelović (1998, p. 57), in order to determine the real condition of the resource management quality, it is necessary to measure data on current state of business performances.

The survey results in Table 4, confirm individual hypothesis H (3): It is possible to determine the limits of tolerance for the quality of resource management for SMEs that deal with a retail of FDF.

The real state of the quality of resource management in the SMEs dealing with retail FDF in Serbia (at the end of 2017) is obtained from the respondents estimates, according to the following formula QRM (where: CIP is Coefficient of Importance of selected Performance, and EVIP is Estimated Value of Indicator that best represents selected Performance):

$$QRM = \sum_{j=1}^3 CIP(j) \times EVIP(j) \quad (1)$$

$$QRM = 0,274 \cdot 4,43 + 0,406 \cdot 4,34 + 0,319 \cdot 4,83 = 1,214 + 1,762 + 1,541 = 4,517 [1]$$

In our survey we selected following indicators that best represent observed performance: 1) For performance Retail store (CIP = 0.274) it is: retail store distance from the centre of the town (EIVP = 4.43); 2) For performance goods (CIP = 0.406), it is: sales realization plan (cash) (EVIP = 4.34); 3) For performance human resources (CIP = 0.406) it is customer satisfaction caused by employees behaviour (EVIP = 4.83).

The truthfulness of the individual hypotheses H(1), H(2), and H(3) is verified, and it can be concluded that the general hypothesis H (0) is confirmed.

5. CONCLUSION

Defining the quality of the management of small and medium-sized enterprises (SMEs) dealing with the retail of fashion and decorative fabrics (FDF) can also improve the management of the SME itself. Therefore, the

significant performance of the management of the resources of such SMEs and the corresponding quality indicators are defined; This allows generating measures to improve the management of resources that are engaged in retail (for more successful / higher quality business, i.e. increasing retail sales of these SMEs). The results show that respondents recognize the importance of certain management indicators, as well as the objectives and importance of management. The survey results also show that the quality of resource management can be defined. The research process in the retail of FDF was difficult due to the resistance of owners, employees and their over-ambitious presentation of the current quality of resource management of SMEs. The response rate in the survey was low due to the resistance of owners and employees of SMEs. This could be observed as the limitation of this survey. A part of data was collected by distributing on-line questionnaires to respondents, without direct contact. Therefore, the respondents did not have the opportunity to get explanations of possible uncertainties in research questions. Besides the survey confirmed proposed individual hypotheses H (1), H (2), and H (3)) was the main hypothesis H (0).

The survey limit was the method of frequencies used to evaluate the results. Future research directions would be, comparison of small, medium-sized and large enterprises in the field of the resource management quality improvement.

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PROBLEMS WITH RESOURCES MANAGEMENT IN CATERER-SME IN THE DIGITAL AGE

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Abstract: *This paper deals with the research of relationships to the problems of SMEs management (management of small and medium-sized enterprises), as well as management of catering/restaurant SMEs (RSMEs) in Serbia in the digital era (with the typical use of ICT and, consequently, the necessity of data). The example given refers to the resources management (RM) in catering RSMEs; the first steps of "problem management" (or "problem solving") are observed here - identifying and registering the problem (i.e. generating and storing data). These data are also used to determine the Management Quality (MQ) and for Management Quality Improvement (MQI). The issue with the RSMEs that we look into is the lack of records (lack of databases and / or data files, both electronic and / or hard copy) about the problems identified in RM enterprises. The general hypothesis implies that it is necessary and possible to identify and register problems occurring in RSMEs; this means that it is necessary and possible to generate and store problem data, and subsequently use them to determine the MQ, even the MQI. The survey was carried out in November 2017, on a sample of 35 SMEs owners in Serbia, in the catering business. It has been determined that there is a need and possibility to detect and register problems (as the first stages of problem solving / problem management), but that, in practical terms, the problems are modestly observed and even more modestly registered, which interferes with (and even prevents) MQI; thus threatening the quality of catering services and the quality of RMSEs, diminishing the success of the tourism industry, even the entire economy (of Serbia). The results help ICT designers, MQI consultants, scientists, and especially managers, namely all those who are seeking to improve the quality of RMSEs, as well as the management of complete enterprises (and RSMEs) - so that they can work on problem solving (with RM and other areas of management - even with the lack of data) and to deal with MQI (for which they need data). The results are applicable not only to RSMEs, but also to all SMEs and other types of organizational systems, but also may be an inspiration for further research in the areas mentioned here: problem solving / Problem management, Resources management (RM), SMEs management, Management quality (MQ), Management Quality Improvement (MQI), as well as in other areas of management.*

Keywords: *Enterprise management quality (EMQ), Management quality improvement (MQI), Resource management, Small and medium enterprises (SME)*

1. INTRODUCTION

In the 21st century, for a long time, the problem is not related to technologies (farming methods, plastic toys production, or persuading customers to opt for a particular product / service), machinery and automatization, not even to financing, advertising, data and information handling. Solutions are now being sought to create new needs, to open up new markets, to use still unused management resources, and new principles of organization and other tools for improving MQ in the enterprises (even SMEs), and all for greater competitiveness and more successful business (Omerbegovic-Bijelovic, 2016/2017b).

Since the MQ is a measure of fulfilling the purpose of management, it (through performance, indicators, key indicators and their measurement systems) determines the actual and desired MQ and compares their differences with a tolerant (difference). When this difference is greater than tolerant difference, the situation is perceived as a problem and corrective action is defined (and taken). In this process, a variety of data (a lot of data) are used (the entire history of the behavior of the management object and the planned and realized management decisions). They rely on ICT implementation in the management of large databases, because it assumes the availability of these data and the application in generating management decisions - even the decisions regarding MQI. As SMEs, as a rule, do not have many choices and have very limited amounts of resources, it is more important that their decisions are right, that is, based on the right data processed in the right way. This is also true for solving business problems and for basing the decisions on the right data and processing methods - in generating management decisions on corrective actions.

This paper deals with one kind of relationship to problems - as an ongoing topic in all organizational systems. More precisely, it is observed whether (and how) the problems are observed and registered - to serve as an

incentive for further, more successful problem management (and their resolution). For starters, this work is important for identifying and registering problems, but also for further development of scientific support for Problem solving, Quality improvement, and thus for Management Quality Improvement.

To illustrate this, we use RSMEs as a special type of SMEs operating in Serbia nowadays. The lack of data on the types and intensity of the problems they face, and the solutions applied to these problems, is perceived as a research problem. But for "diving into" the research, a thorough preparation is required. In this case, it means getting familiar with the following topics: RSMEs, resources of RSMEs and their management, problems with (management) resources of RSMEs. Then it is possible to investigate the problem(s) encountered by everyone who seeks to improve the quality of SME. With no data, any attempt to help such companies is either based on memories and feelings, or needs to wait for the previous collection of data - until "history of occurrence and problem solving" is done. More on these topics can be found in Zivadinovic (2018).

2. RESOURCE PROBLEMS IN CATERER-SME

In every area of management in the company (as well as in the RSME) there are problems - with the possibility of predicting them, more or less. It depends on the management how careful the RSME will be in looking for the first symptoms of the problem (or even in predicting them), as well as in the ways of "fighting" the problems. One thing is certain: there is no permanent success in dealing with the problems if that is not done systematically (consciously, intentionally, publicly - at least for participants, based on authentic data, with recording and storing data, and with the adequate use).

Of course, the purpose of solving the problem, the type of the problem, the object in which the problem was manifested, the resources involved in occurrence of problems and their solving, the availability of data on the problem, the intended data processing methods, the future application of the solution, and other aspects are important and some of them are discussed in this paper.

2.1. Caterer-SMEs

"Catering is an important business, which is mostly a part in the structure of tourism; its capacity enables the realization of tourist traffic in a particular tourist place, a specific region and the country as a whole". (Rikic, 2001, p.235) According to the UNWTO (2017) World Tourism Organization, tourism turnover has reached a value of 1087 billion (in 2013). The increase is recorded worldwide and relates not only to tourism in general, but also to the catering business as a significant part of it. The rising trend is also reflected in the business of hotels and resorts as the largest catering companies, but it has the same effect on the RSME (performing as catering companies: restaurants, cafes, bars, fast food restaurants, family-type apartments, mini-hotels, etc.), more details in (Zivadinovic, 2018, p.13).

The trend of employment increase in the service sector continues, so catering is an attractive activity (especially since the modern man spends much more than 8 hours a day, and there is no time, no energy, and no interest also in preparing the meals. Furthermore, RSMEs have remained the places for socializing, negotiations, celebrations, having fun ... and even eating.

2.2. Resources of RSMEs

Resources are "all possible tangible and intangible goods that make organizational systems alive" (Omerbegovic-Bijelovic, 2006, p.98). "We give the name "resources" to all material and non-material sources of material wealth and economic well-being. It should especially be emphasized that the population is a resource over resources" (Veselinovic, 2012, p.49). They "enter" the organizational system (here: RSME), participate in the transfer of values and in its addition, namely in creating more value for RSME products / services. They are the "transmitters" of value (materials and the product itself, but also the object, equipment, etc.), as well as creators of value - human resources, business connections, etc. (Lazic-Rasovic & Omerbegovic- Bijelovic, 2006, p.5).

Like every company, SMEs, and those who deal with catering (RSMEs), use all of their business resources. In the aforementioned work of the co-author (Zivadinovic, 2018), numerous resources of the RMSEs are used as illustrations: location, facility and business space, material / foodstuff, employees, financial assets, as well as the market (service users). The specifics of resources in catering industry are also presented (Ibidem, pp. 5-59). It refers to people, most of all - their competence and behavior in the workplace (according to resources) in the RSMEs. Bearing in mind that each organizational system has two

subsystems - management and the managed one, then one must not forget that the first one (management) performs based on data (and corresponding information and documents, as well as data handling tools). Management is based on data. Therefore, data must be the right type, reliable, accurate, available, and also to have the necessary quantities of them (and in time, throughout "history").

2.3. Resource problems in RSMEs in the digital era

In the business of each company (even RSME), when handling any resource (and their combination), besides creating and transferring values, there are problems and it is necessary to deal with them. These problems are related to the nature of resources, but also to the behavior of the system (RSME) towards specific resources (in terms of expectations from the resources, and also attitudes towards them).

Since catering entails a steady and close relationship with service users, special importance in RSMEs must be attributed to human resources (HR). The aspect of HR education and training for work in the RSME is often emphasized, but the significance of the variability of HR behavior and the difficulty in controlling such conditions are not disregarded (Bateson & Hoffman, 2013). There are numerous problems in the HR management to be solved. The same holds true for the relationship to all other RSME resources. This is because "business performance in companies in the catering industry requires, above all, acceptance of these problems, dealing with them and overcoming them, involving all the participants and interest groups" (Zivadinovic, p.60).

In the digital era, there are also many other resource expectations, as well as many new responsibilities towards resources: the modernity / digitalization of objects, equipment, and communications, certainly, the availability of data and their interpretations (information, knowledge, ideas. Etc.). Therefore, when discussing MQ and the necessity for continuous improvement of MQI, the importance of having the right information at the right time, with the right processing and the use of data and information is emphasized.

When it comes to this resource (data), it is especially important that there is a will (as a resource) in companies (and RSME) to "face the truth" (in terms of disposing of data and information and their publicity / availability) as well as to provide relevant data. It further states that the data (both resource problems and solutions to these problems) are recorded and stored, and, before that, to predict the emerging of problems and to monitor the emerging itself. It is a serious set of activities in the area of "problem management" and there are few companies that can boast to deal with it in a systematic way.

3. A POSSIBILITIES FOR IDENTIFICATION AND DESCRIPTION OF RESOURCE PROBLEMS IN CATERER-SMEs RESEARCH

In reducing public resistance to data problems, and in facilitating more successful problem solving and improving the overall management of RSME problems, it is necessary to clearly define the research problem (whose object is the RM problem in RSMEs). It is also necessary to define the idea (general hypothesis and its structure) about solving the researched problem, to elaborate the research methodology and to consider the results of the research and the authenticity of the general hypothesis.

3.1. Research problem

Bearing in mind the problems of successful management of RSMEs, and especially resource management problems in such RSMEs, as well as the history of occurrence and management of different categories of problems, the focus of this paper is to provide data for future researchers, consultants, competent managers, etc. In any subsequent attempt to help improve the quality of the management of RSMEs, they will need data on problems that may arise in RSMEs and ways of solving such problems. Therefore, for the purposes of writing this paper, it was necessary to define the problem that was to be solved.

The research presented in this paper, as part of the research conducted in the master thesis of the first author - Zivadinovic (2018), focused on the evident problem of the lack of adequate information (and data) in RSMEs. The lack of data on the history of occurrence of problems and their management in the specific RSME is particularly important. The aforementioned master thesis offered a model for solving problems in resource management of RSMEs; the first two steps refer to the detection and identification of problems (and operatively undertaken activities for their management). The reason for pointing out the importance of these two steps is the notion that RSMEs in Serbia do not pay enough attention on the data upon which the decision-making / management system is based. It seems that SME restaurant owners, in view of limited management competence, ignore the data on problem detection and management, and without them effective (nor efficient) improvements in management quality are not possible. Therefore, the authors of this

paper addressed the issue of detection/recognition and identification/description of problems that may occur in RSMEs.

3.2. Research methodology

The aim of this paper is to verify the primary/general/basic hypothesis H (0):

H (0): It is possible to identify and describe problems in resource management in RSMEs.

This hypothesis is decomposed into three individual hypotheses (Figure 1):

H (1): There is a constant need to identify and describe resource management issues in RSMEs.

H (2): It is possible to identify problems in resource management in RSMEs.

H (3): Problems in resource management in RSMEs can be described.

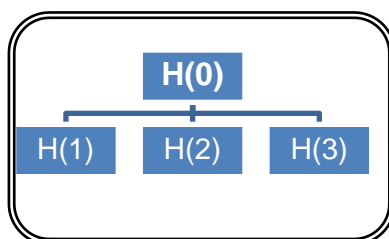


Figure 1: Structure of H(0)

The verification of the general hypothesis H (0) is performed upon the verification of all three individual hypotheses. The veracity of individual hypotheses is performed through "packages" of research questions (RQ) – and checked through "Table research" and through "Field research" which use a questionnaire as a research tool.

The questionnaire contains 7 questions about the "sample" (respondents, ie research participants, or owners of RSMEs). They are followed by 11 questions on RSMEs and 19 questions on the topic of identifying and describing resource problems in RSMEs. Research packages are defined for each of the three individual hypotheses: 5 RQ for H(1), 6 RQ for H(2), and 8 RQ for H(3).

The survey was carried out in November 2017, in SME restaurants (hereinafter RSMEs) in Serbia. The data (answers to questions in the questionnaire) were obtained through personal contacts with respondents (35 of them). All the examinees are RSME owners (of which 26 examinees belong to micro enterprises, 74.2%). The majority are men (27 examinees, 77% of the sample), and their age and work experience have (mostly) uniform distribution - in the interval of 20-50 years. They differ greatly by occupation (3 examinees (8.6%) are economists, 9 examinees (25.8%) are caterers, followed by 2 examinees (5.7%): chefs, butchers, graduated tourism managers (15 or 42.8%) named "other" as their occupation. According to the level of education of the examinees, the sample contains the highest (15 examinees, 42.9%) examinees with secondary school and faculty education (12 of examinees, 34.3%). Most examinees (24, 68.57%) own one company, and there are also some with more than two companies (3 examinees, 8.57%). Regarding the length of entrepreneurial role (ownership of SMEs), the answers are the following: 11 examinees (31.43%) are the owners for 5-10 years, 10 examinees (28.57%) are the owners for 10-20 years, 9 examinees (25.71%) are owners of the company for less than 5 years.

The enterprises owned by the examinees, besides catering, also deal with other business activities (wine production, shops, exchange offices, photography services, transport services, printing houses and music agencies), and have the following characteristics (in the main lines), ie. according to the indicators: a) The number of employees, the structure of the sample indicates that 18 examinees have less than 5 employees (51.3%), 8 examinees have from 5 to 10 employees (22.9%), the same as in the SME category from 11 to 25 of employees, while one examinee (2.9%) has more than 50 employees; b) The location of the catering facilities owned by the examinees, the majority (19, 54.3%) are in the city (of which 63.16% is located in the city center); c) Area of catering facilities, the majority (16 examinees, 45.71%) have facilities with area not larger than 100 square meters, although there are (6 examinees, 17.4%) and those with facilities larger than 1000 square meters; d) How to approach the catering objects of the examinees, access by motor vehicles is provided almost in all (29 facilities, 82.85%); e) For the ability of employees to identify and solve problems, the examinees expressed (unreal) high reliability: for 20 examinees (57.1%), their employees deserve grade 3 (for problem solving), for employees (22.9%) they deserve grade 4, and 7 examinees (20%) give their employees grade 5 (for identifying and solving problems (Zivadinovic, 2018).

3.3. Research results

The research results are presented according to individual hypotheses, and within the hypotheses themselves according to research questions. The hypothesis "H(1): There is a constant need to identify and describe resource management issues in RSMEs" is verified through responses to 6 research questions that the respondents (owners of RSMEs) were asked to answer: RQ1 Are there problems of different categories in your company? The respondents (35 of them) were able to choose more than one answer; the structure of their answers can be seen in Table 1.

Table 1: Structure of responses on resource management problems in RSMEs

Potential responses on problems in RSMEs	Number of respondents	Score (in [%])
Interaction between the employees	24	68,57%
Interaction between the clients and the employees	19	54,29%
Location selection	14	40,00%
Construction and equipping of restaurants	14	40,00%
Organization of space in restaurants	14	40,00%
Storage of food	17	48,57%
Financing business activities (i.e. problems with financial assets)	21	60,00%

Several problems from different categories may appear in RSMEs (hereinafter RSMEs). All problems are, to a lesser or greater extent, related to resource management in RSMEs, hence the focus on resource management: RQ2: Do you often have resource management problems (human resources, facilities, equipment, food, water, energy, financial resources, etc.) in your company? Respondents' answers are presented in Table 2.

Table 2: Structure of responses on frequency of resource management problems

Possible answers	Number of respondents	Score (in [%])
Never	2	5,70
Very rarely	11	31,40
Sometimes	8	22,90
Often	14	40,00
Always	0	0,00
Total	35	100,00

RQ3: Do you have difficulty in classifying resource management issues (by category, people in charge...)? Respondents' answers are presented in Table 3. The respondents reported frequent and occasional occurrence of resource management problems (14+8=22 responses), as well as frequent occurrence of difficulty in classifying resource management problems (13+7=20). (There were opposite statements, but the objectivity of the RSME owners should be verified.)

Table 3: Structure of responses on difficulties in classifying resource management problems

Possible answers	Number of respondents	Score (in [%])
Never	3	8,60
Very rarely	12	40,30
Sometimes	7	20,00
Often	13	31,10
Always	0	0,00
Total	35	100,0

The responses to RQ4: How serious are the resource management problems that you meet in your company? are presented in Table 4.

Table 4: Structure of responses on gravity of resource management problems in RSMEs

Possible answers	Number of respondents	Score (in [%])
Problems are not serious	12	34,30
Problems are very rarely serious	7	20,00
Problems are sometimes serious	3	8,60
Problems are often serious	13	37,10
Problems are always serious	0	0,00
Total	35	100,00

RQ5: Is there a need for identifying / detecting resource management problems in your company? Respondents' answers are presented in Table 5.

Table 5: Structure of responses on the necessity of detection of resource management problems in RSMEs

Possible answers	Number of respondents	Score (in [%])
It is not necessary	5	14,30
It is very rarely necessary	5	14,30
It is sometimes necessary	10	28,60
It is often necessary	2	5,70
It is always necessary	13	37,10
Total	35	100,00

According to the statements of RSMEs owners, the problems may or may not be serious, but they agree that there is a need to detect/recognize these problems; this indicates that they are aware of the potential gravity of RSME problems.

The hypothesis "H(2): It is possible to detect the problems in resource management in RSMEs" is verified through the answers to 6 research questions that the respondents were asked to answer:

RQ6: Do you find it possible to identify resource management problems? The structure of responses provided by respondents is presented in Table 6.

RQ7: How do you detect resource management issues in your company? The structure of respondents' answers is presented in Table 7.

Respondents agree that it is possible to detect/recognize problems; they also indicate the ways how to detect problems - which are mainly related to the personal experience of employees and/or to the gravity of failing to detect the problem. That is why further attention is directed towards organization of the problem detection.

RQ8: Who detects/recognizes problems in your company? The response structure is presented in Table 8.

Table 6: Structure of responses on possibility to detect resource management problems in RSMEs

Possible answers	Number of respondents	Score (in [%])
It is not possible	1	6,37
It is very rarely possible	2	2,13
It is sometimes possible	5	14,30
It is often possible	10	28,60
It is always possible	17	48,60
Total:	35	100,00

Table 7: Structure of responses on the ways of detecting resource management problems in RSMEs

Possible answers	Number of respondents	Score (in [%])
Problems are detected upon the outbreak of a scandal, i.e. everybody can detect them	3	8,60
Problems are detected upon their physical manifestations, i.e. everybody can detect them	1	2,90
Problems are detected through personal experience of the employees who point them out	14	40,00
Problems are detected upon financial difficulties (even endangering the business)	4	11,40
Problems lead to various consequences including image deterioration and closing down the business	13	37,10
Total:	35	100,00

Table 8: Structure of responses on the responsibility of employees for the detection of problems

Possible answers	Number of respondents	Score (in [%])
I am always the first to detect a problem	6	17,14
Employees in charge of certain operations detect problems in their sector	3	8,58
All the employees have to alert/detect a problem	6	17,14
There is a person in charge of detection and identification of problems	0	0,00
All together (I, the employees and the person in charge of detection of problems) are actively involved in identification of problems	20	57,14
Total:	35	100,00

RQ9: Do you have employees in your company who are trained to detect/identify problems? The response structure is presented in Table 9.

Table 9: Structure of responses on the presence of employees in charge of the detection of problems

Possible answers	Number of respondents	Score (in [%])
There is no such employee	14	40,0
We are currently training employees to detect/recognize problems	17	48,6
There is such an employee	4	11,4
Total:	35	100,0

The research (Table 8 and Table 9) shows that respondents believe that all employees in the RSME are actively monitoring the occurrence/threat of a problem, although a small number of RSMEs have a person in charge. It seems that RSME do not put enough effort into the detection of problems. Hence research questions on the procedures for anticipation of problems and warning against potential threats: RQ10 Do you have procedures for anticipation of problems in your company? The structure of responses is presented in Table 10.

Table 10: Structure of responses on procedures for anticipation of resource management problems

Possible answers	Number of respondents	Score (in [%])
There are no procedures for anticipation of problems	14	40,0
There are procedures for anticipation only of certain types of problems	5	14,3
There are procedures for anticipation of several types of problems	15	42,9
There are procedures for anticipation of all types of problems	0	0,0
There is a systematic approach to anticipation and prevention of problems	1	2,8
Total:	35	100,0

RQ11: Do you have, within usual procedures, mechanisms to alert you to a potential problem? The structure of responses is presented in Table 11.

Table 11: Structure of responses on alert mechanisms to resource management problems

Possible answers	Number of respondents	Score (in [%])
We do not have alert mechanisms	11	31,4
We monitor the employees (health, focus, motivation)	4	11,4
We monitor all the resources	5	14,4
We sometimes use control cards with warnings	13	37,1
We regularly use control cards to detect a threat	2	5,7
Total:	35	100,0

According to respondents's responses there are generally no procedures for anticipation and warning against problems. They also claim that they sometimes use control cards. (It should be verified whether this applies only to HACCP and food safety and safety of people involved in the process of "production", "delivery" and "consumption" of foods.)

In regard with the hypothesis H(2), the research indicates that there is no system for detecting and/or warning against a potential problem, and likewise, there is no clear, formal organization (procedure) of operation in case of "imminent danger" (potential problems). Food related aspects are an exception, since they are regulated by standards and cannot be omitted in this kind of industry.

The hypothesis "H(3): It is possible to describeresource management problems in RSMEs" is verified through responses to 8 research questions that the respondents were asked to answer:

RQ12: Does your company keep records of problems? The structure of responses provided by respondents is presented in Table 12.

RQ13: What types of record-keeping procedures are practiced in your company? The structure of responses provided by respondents is presented in Table 13.

Table 12: Structure of responses on frequency of detected problems in RSMEs

Possible answers	Number of respondents	Score (in[%])
Never	10	28,6
Very rarely	6	17,1
Sometimes	3	8,6
Often	15	42,9
Always	1	2,8
Total:	35	100,0

Table 13: Structure of responses on documenting resource management problems in RSMEs

Possible answers	Number of respondents	Score (in [%])
We do not have alert mechanisms	11	31,4
We monitor the employees (health, focus, motivation)	4	11,4
We monitor all the resources	5	14,4
We sometimes use control cards with warnings	13	37,1
We regularly use control cards to detect a threat	2	5,7
Total:	35	100,0

Respondents claim that there are detected problems in RSMEs, but they also remember and talk about some problems without written records.

The respondents' attitudes about the need for the "epic" treatment of RSME problems arise as answers to IP:

RQ14: Do you think it is necessary to keep records on resource management problems in your company? The structure of responses provided by respondents is presented in Table 14.

RQ15: What purposes are the data from records (databases) on resource management problems used for? The structure of responses provided by respondents is presented in Table 15.

Table 14: Structure of responses on the necessity to keep records in RSMEs

Possible answers	Number of respondents	Score (in [%])
It is not necessary	6	17,1
It is sometimes necessary when there is a major problem	10	28,6
It is constantly necessary to keep records	19	54,3
Total:	35	100,0

Table 15: Structure of responses on the purpose of keeping records on resource management problems in RSME

Possible answers	Number of respon-dents	Score (in [%])
To deal with similar problems (that might come up later)	14	40,0
To be able to subsequently analyze the cause of problems and determine why they occur	1	2,9
To define long-term "corrective measures" for a specific type of problems	2	5,7
To prevent similar problems that might occur again	1	2,9
To prevent new problems and be able to handle them automatically	17	48,5
Total:	35	100,0

Respondents are aware that the problems RSMEs cope with should be recorded. (And even if the questions had a mere didactic effect, this research would be worthy.) Respondents opted in favor of the record keeping on problems—in order to solve similar (future) problems, with the idea of doing this automatically. (They do not seem to be acquainted with, always desirable and possible, methods of problem solving and improving the quality of management, which points out the necessity to learn about it or/and seek/receive professional help.)

Responses to RQ16 and RQ17 provide more information on recording certain types of problems (workplace injuries, for example) and specific data on problems (characteristics of problems) in RSMEs. It is evident that more attention is paid to bigger problems, and especially to consequences to the users of services (almost an entirely new viewpoint) and to material consequences of problems (prices, costs, penalties).

RQ16: What information on resource management problems are regularly documented in your company? The structure of responses provided by respondents is presented in Table 16.

Table 16: Structure of responses on types of recorded data on resource management problems in RSMEs

Possible answers	Number of respond.	Score (in [%])
Records on material consequences of problems	11	31,4
Records on financial consequences of problems	5	14,3
Records on consequences to the reputation of company	6	17,1
Records on consequences to the employees	0	0,0
Records on consequences to the users of your company	13	37,2
Total :	35	100,0

RQ17: What types of problems (by size) are documented in your company? The structure of responses provided by respondents is presented in Table 17.

Table 17: Structure of responses on the size of recorded problems in RSMEs

Possible answers	Number of respondents	Score (in [%])
Records on major problems	20	57,1
Records on middle-size problems	3	8,6
Records on minor problems	2	5,7
Records on all problems	9	25,7
No records are kept on any problems	1	2,9
Total:	35	100,0

By suggesting standardized descriptions of problems to the respondents (which they have accepted), it was also noted how, at the time of the research, problems in the RSMEs were generally described. In practice, the recordkeeping of problems is at a very low level (especially in terms of employee care); problems are still (epically, making "legends") "remembered" or/and "notes are made" (meaning on small pieces of paper).

RQ18: Do you think it is possible to prescribe/define a standard description of problems in resource management in RSMEs? The structure of responses provided by respondents is presented in Tab. 18.

Table 18: Structure of responses on defining standardized descriptions of resource management problems in RSMEs

Possible answers	Number of respondents	Score (in [%])
Problem descriptions cannot be standardized	4	11,4
Some parts of problem descriptions may be standardized	8	22,9
Half a description may be standardized	1	2,9
Almost anything about a problem can be described by a standardized description	4	11,4
Anything can be standardized (full problem description)	18	51,4
Total	35	100,0

RQ19: Which way of problem description do you use in your company? The structure of responses provided by respondents is presented in Table 19.

Table 19: Structure of responses on the ways how to describe resource management problems in RSMEs

Possible answers	Number of respondents	Score (in [%])
We remember problems and describe them later	11	31,4
We make notes on problems (we record the type of a problem and the date).	21	60,0
We keep thorough records on problems (who, what, when, where, how, why).	3	8,6
We document problems and sort them by gravity/ /category into the corresponding databases	0	0,0
Total	35,00	100,0

The hypothesis H(3) deals with the possibility of problem description in resource management in RSME. From the responses provided by the respondents, it can be concluded that in practice this area of management is at a very low level (only major problems are described, the focus is only on the users and the survival of RSMEs, etc.). However, the support that the respondents showed for the problem description and the automatization of the job keeps faith in the potential and relatively rapid introduction of new management concepts for data management, as well as for the complete business operation and survival of RSMEs.

3.4 Discussion

From Chapter 3.3 it is evident that respondents (given their competence for RSME management) are relatively aware of:

- The necessity to recognize and describe resource management problems in RSMEs, which confirms the hypothesis H(1);
- The possibility of detecting/identifying resource management problems in RSMEs, which confirms the hypothesis H(2);
- The possibility of recording resource management problems in RSMEs (and subsequently using the data from these documents to improve the management quality in RSMEs), which confirms the hypothesis H (3).

Since all three individual hypotheses (H (1), H (2), and H (3)) have been confirmed as true, the general hypothesis H (0) can be considered true as well, i.e. confirmed.

4. CONCLUSION

The authors of this paper aimed to show that it is possible to eliminate the main obstacle to improving the management quality in RSMEs by making entrepreneurs, owners and managers of these (and all other) RSMEs "more aware". Their attention is focused on detecting the danger of potential problems, as well as on the needs and possibilities of describing and keeping records of the problems encountered by the organizations that they lead/manage. This confirmed the general hypothesis H (0): It is possible to identify and describe problems in resource management in RSMEs.

Field research surveyed the current (insufficient) practice of identifying and recording/describing problems, as well as the willingness of entrepreneurs, owners and managers of RSMEs to improve the practice. It brings hope that professionals dealing with management quality improvements (consultants, designers, organizers, as well as managers, planners and other experts in quality management of organizational systems) will be able to do their job - based on actual data from the past/practice.

There is still a lot of work left for science – in terms of the sample size, objectivity (measurement) in the collection of attitudes and experiences of the respondents, methods for verifying the hypotheses, but also the same or similar research in large organizational systems (public enterprises and institutions, for example).

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EDUCATION PERFORMANCE INDICATORS FOR ENTREPRENEURSHIP IN THE SECONDARY SCHOOLS OF SERBIA AND IN THE WORLD

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Abstract: *The topic of this paper is the Secondary/High Education for Entrepreneurship (SEE) in Serbia, with the fact that there are still few secondary schools in which entrepreneurship is taught. More specifically, SEE performance indicators (IPSEE) are studied in order to enable the evaluation of the quality of education for entrepreneurship in secondary schools in Serbia. IPSEE should serve as a benchmark with the best examples from the world, and to inspire the massive offer of content from entrepreneurship at all levels of education. On the road to incorporation into the European education system, Serbia needs to get to know the diversity of the "European model" in detail, and to define the one that mostly corresponds to local needs and culture or that it generates itself, relying on the best models. The idea is that the best models of IPSEE are presented, compared and offered a choice that, at this moment, would correspond to secondary schools in Serbia. The intention is to help the creators of school programs in us, ie. To the Ministry of Education, but also to schools and teachers (to be able to monitor and improve the quality of their work), to enterprises (to provide adequate practice, for example), to students and their parents (to be active participants in the SEE system). The problem that is discussed here refers to defining the characteristics of SEE that at the moment correspond to national (as well as European) needs. This creates a model of Serbian SEE, with numerous functions to satisfy, considering the needs of practice (public administration, employment, education, enterprises and their structures, etc.). The contribution of this paper is in the systematic presentation and comparison of the IPSEE model, in concluding on the acceptable characteristics of SEE, as well as in reference to the directions of the development of model and practice.*

Keywords: *Entrepreneurship, Entrepreneurship Education in High-schools, Entrepreneurship Education Performance, Performance Indicators for Entrepreneurship Education, Usage of performance indicators.*

1. INTRODUCTION

According to Vukmirovic (2005), entrepreneurship becomes especially important and decisive in societies facing major and significant changes. This can be explained by the organic need for the structural formula for the development of society in the period of technological, economic, political, cultural, institutional and conceptual changes. These processes are led by certain people who behave in a specific way and have a specific value system. Modern entrepreneurship appears as a dynamic developmental combination of ideas, talent, capital, knowledge and risk. It is a new sociocultural phenomenon that enables the achievement of people's capabilities in the economic sphere. According to Piters and Waterman, modern entrepreneurship is developing in two directions: As an individual (external) entrepreneurship based on the market competition of small and medium-sized enterprises and usually represents a mixture of ownership, management and differences in one person or entrepreneurial group; As an internal (corporate) enterprise that appears in the form of new business units within large corporations, and associated with limited competition and the division of ownership, management and risk functions (interpreneurship). Academic studies of the phenomenon of entrepreneurship begin in the 18th century (Herbert, 2011, p. 241). According to Mutibarić et al, the characteristics of a successful entrepreneur are competent, creative, characteristic (moral), communicative, cooperative, etc.

2. EDUCATION FOR ENTREPRENEURSHIP

It defines education as a process of acquiring knowledge, skills and habits. It is a pedagogical and didactically designed process, more or less systemically organized (self)learning by which an individual adopts general and special knowledge about the world surrounding him, develops intellectual abilities, social and practical skills and habits, thus forming his own view of the world. There are different criteria for the classification of education. It is possible to talk about general, professional, political, specialist, classical, humanistic, economic, natural-scientific and other types of education (Milanković, 2014, p. 387). According to Đaković & Radojčić, the quality of education contributes to productivity, innovation, democracy and social cohesion.

Galloway suggests that the "cross disciplinary approach" of entrepreneurial education can affect a range of industry sectors, including art, science and technology discipline. In their evaluation and evaluation of a number of entrepreneurial programs, Hytti and O'Gorman found that more successful programs were those who had the opportunity to integrate learning through general education, student experiences and the introduction of entrepreneurial education in other subjects.

According to Paunović (2010), the importance of education for entrepreneurship stems from the essence and importance of entrepreneurship as a key development resource, an action-oriented way of thinking and behavior and business philosophy that puts innovation at the core of interest. Increasing dynamics of technological changes, their globalization, increasing the level of competitiveness and the constant change of technology, especially information, in front of entrepreneurs, as "leaders of the new millennium" pose great challenges. According to Kecman (2016), practical teaching and working with this population must be carried out with the help of trained mentors. Mentors must organize work so that children learn through entertainment, in accordance with their inner desires and abilities.

3. HIGH-SCHOOL EDUCATION FOR ENTREPRENEURSHIP

In order to compare the performance indicators of educational models of education for entrepreneurship, a "desk research" was carried out: eight different countries with a built-in fruitful system were observed. Below is a brief summary of the most important facts of national SEEs. In Norway, entrepreneurship is studied at lower and higher levels; It is spread across six thematic areas and includes several programs for practice (See the Opportunities and Make them Work !; Program JA-YE; Lego League). In Austria there is a developed dual education system through which apprenticeship, practice (ALCA Voxne GMBH) is recognized. In Ireland, entrepreneurship is taught in multiple subjects; Entrepreneurship is characterized as a career guidance, a creative learning process, i.e. cooperation between students and teachers. Tiernan emphasizes that the themes of the Irish model are "What is Entrepreneurship", "Identifying Opportunities and Their Exploitation", "Creativity and Innovation", "Developing Entrepreneurial Culture in the Classroom" and "Teachers and Trainers in the Role of Entrepreneurs." In Finland, entrepreneurship, there are more practice companies (so students have the opportunity to develop a business plan for the company), the Student Company program (opening of mini-companies that operate with real money), teaching staff (prepared according to the model "training with personal experience in the field of entrepreneurship"). France allows for the creation of fictitious companies and competitions; teacher training is organized, and Entrepreneurship is integrated into many elective courses. Practice is being applied - according to the JA-YE program, where company rights are established In Germany, entrepreneurship is in the main elective subject, teacher training. Project: Junior Project; Fairs, national and regional competitions, Go! to school. Italy - Entrepreneurship is not included in the curriculum; The Professional Institute is a milestone for the study of entrepreneurship; Practice - Junior Achievement Italy; Teachers get involved in the program as support; Entrepreneurship is more stimulated by out-of-school organizations.

According to the Policy paper and measures for support for the development of entrepreneurship in Serbia, (2015). Unreformed education system, low level of knowledge and skills, and lack of educational programs and initiatives lead to an atmosphere in which the development of entrepreneurial spirit has been distorted.

4. RESEARCH OF THE PERFORMANCE OF MIDDLE/HIGH SCHOOL EDUCATION FOR ENTREPRENEURSHIP

Indicators are indicators that measure (qualitatively or quantitatively) a certain phenomenon. Educational indicators point to the quality of the educational institution. They are an indispensable factor in monitoring the quality of teaching and the work of the institution itself, and they can serve to uncover management reserves and improve the performance of these educational institutions. Each country, but also each school can / must have its own quality monitoring indicators; it would be ideal if they could agree - by educational institutions / types of schools) in order to compare the quality of their work. Based on indicators, the SEE program can be monitored and improved.

4.1 The problem being researched

The problem that is being investigated in this paper is based on the key performance indicators of SEE in Serbia and their adaptability for inclusion in the European education system. How SEE Performance Indicators enable the evaluation of qualitative and quantitative facts, factors and systems - which analyze the level of quality of education for entrepreneurship, should be used in different countries, in the present and the future, depending on the needs of the education system itself. This paper presents / analyzes the existing SEE systems (by examples of countries that have a successful educational system), through performance and their indicators. The problem of adapting the performance and indicators used in Serbia to those in the world is solved by comparing and choosing commonly acceptable performance indicators of

SEE, that is, adapting Serbia's SEE to that used in Europe, while respecting national specifics. The core of the problem with the SEE model in Serbia lies in its inadequate adequacy for inclusion in the European education system (due to incomplete and inadequate implementation) and should be improved.

4.2 Research methodology

This paper uses partial analysis; More precisely (according to the criterion of the research subject), a comparative analysis is used, highlighting the similarities and differences in the subject of research (eg comparing the European model with our current SEE model). Descriptive analysis sought to clarify certain elements of the model, so that they were massively understandable in order to clarify existing models. As a "response" to the problem, a basic hypothesis is defined (Figure 1):

H(0): It is possible to compare performance indicators of high high-school education for entrepreneurship (SEE) used in Serbia and other countries.

Specific hypotheses:

H(1): It is possible to present the performance and their indicators used for SEE in Serbia.

Individual hypotheses of the special hypothesis H(1):

- H(1;1): It is possible to present the performance used for SEE in Serbia.
- H(1;2): It is possible to present the performance indicators used for SEE in Serbia.
- H(2): It is possible to present the performance and their indicators used for SEEs in other countries.

Individual hypotheses of the special hypothesis H(2):

- H(2;1): It is possible to present the performance used for SEE in other countries.
- H(2;2): It is possible to present the performance indicators used for SEE in other countries.
- H(3): It is possible to compare the performance and indicators related to SEE in Serbia and other countries.

Individual hypotheses of the special hypothesis H(3):

- H(3;1): It is possible to compare the performance related to SEE in Serbia and in others countries.
- H(3;2): It is possible to compare the performance indicators related to SEE in Serbia and in other countries.

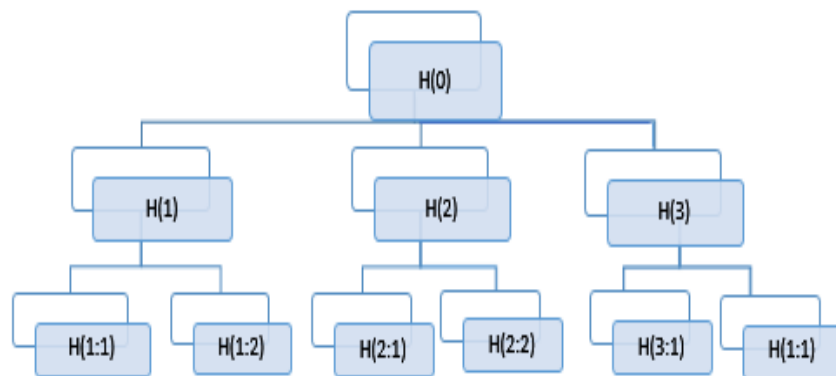


Figure 1: Hypotheses structure

The field research is carried out through a review of scientific papers on the topic of entrepreneurship education, as well as available documents published by the Ministry of Education of the observed countries. As for sources for models of foreign countries, relevant school sites and scientific works listed in "Literature" were used.

4.3 Research results

This section of the paper discusses the performance indicators of countries whose educational systems are mentioned as examples. Based on the available data, relevant parameters are presented and presented, by country.

a) Educational performance indicators for entrepreneurship in Norway

Perforation of the Ministry (Ministry of Research and Science, Ministry of Local Government and Regional Development and Ministry of Trade and Industry): Improving entrepreneurship education in all educational institutions. Based on the above, it appears that these ministries have a complex strategy for the improvement and development of education, which also includes entrepreneurship that is being studied in many secondary schools. Previously presented represents future performances, i.e. what should come from

the activities of these ministries. Accordingly, indicators should be based on monitoring of implemented activities. According to Johansen, & Schanke, various forms of interdisciplinary projects in which schools, local employers and the public sector cooperate are also organized by schools.

Key Performance Indicators are:

- The status of the subject in secondary schools is an indicator that shows the subject of entrepreneurship as an elective or compulsory subject. Indicators of tertiary knowledge tend to explore the extent to which the application of theoretical knowledge is the basis for easier overcoming of practical activities. The performance that arises from these indicators is aimed at increasing the productivity and applicability of student knowledge in practical work.
- Practical knowledge indicators strive to check the efficiency of the application of pupils' knowledge in practice. The performance of these indicators has a wide range of users, of which direct users represent: students, schools and firms for practice.
- The indicator of own business, is an indicator that examines the number of students who started their own business after the completion of high school. Performance is again targeted at several users: the ministry (economy), school, student ... Indicator is the satisfaction of companies by the work of students.
- The indicators and performance of an action plan that can be identified under the See the Opportunities and Make them Work program are characteristic exclusively for Norway. This program aims at linking leaders and owners of educational institutions, teaching staff and students, and accordingly, the following indicators can be proposed:
- Number of students attending the program; The performance resulting from these indicators will indicate the qualitative and quantitative characteristics of the observed phenomena, and the aim is to develop strategies for improving and developing entrepreneurship (in terms of programs) and entrepreneurial education (based on students) based on the obtained results.

b) Performance indicators of education for entrepreneurship in Austria

The Austrian school system of education is based on dual education. Accordingly, Performance Indicators should examine the following:

- Number of interested companies for practice;
- Quality of knowledge provided to students by practice firms;

Performance Indicators at ALCA Voxne GMBH

- Number of schools involved in the program;
- Number of students involved in the program;
- The number of relevant subjects for working in the company.

c) Educational performance indicators for entrepreneurship in Ireland

Ireland is one of the countries with an innovative learning system and has long overtaken the traditional one. Characteristic of their education system is the emphasis on the difference in education for managers and education for entrepreneurs, so the following indicators should be examined:

- Number of students who are educated for future managers;
- Number of students who are educated for future entrepreneurs.

The performance of these indicators would show whether students tend to innovate and be entrepreneurial or to be effective in their business as managers. Given that a modern learning system is being implemented and the freedom is given to teachers and students, the following should be examined:

- The quality of the lessons learned from the perspective of students;
- Quality of teaching observed from the aspect of the professor;
- Self-evaluation of students;
- Development of personal skills and students' sense of responsibility.

d) Educational performance indicators for entrepreneurship in Finland

Finland is another country where the Ministry of Education is strongly committed to entrepreneurship within the entire education system. Ministries' performance would be related to the goals that they want to achieve, which is to integrate entrepreneurship into as many schools and subjects as possible. Therefore, some of the performance indicators would be:

- Number of pupils who study the subject of entrepreneurship;
- The quality of entrepreneurial culture and climate;
- Number of newly started start-up projects during the school year;
- Number of students who want to start their business after secondary education;

In accordance with their strategy, performance of the general model should be examined and demonstrated if they achieved the set goals based on the following indicators:

- Number of students who independently show initiative for entrepreneurship;
- Number of students who prefer simulation work (virtual enterprises);
- Number of students who prefer work in real companies.

e) Educational performance indicators for entrepreneurship in France

France is one of the countries where entrepreneurship within the strategy has been set as a multidisciplinary goal, and based on this performance would be related to achieving the set goals. In this case, the performance indicators would be:

- The number of subjects paying attention to entrepreneurship in some of their work;
- Ability of students to convert ideas into actions;
- Ability of students to define the main steps in projects;
- Ability of students to define risks and strategies;
- Ability of students to understand the company's life cycle.

According to Léger-Jarniou, Measurement of the evolution of the response after Training is real and allows certain ones optimism, especially on the rise self confidence and ability in problem solving.

f) Educational performance indicators for entrepreneurship in Germany

Germany, although one of the best developed European countries still has no integrated entrepreneurship in curricula. Performance would be aimed at demonstrating how much entrepreneurship is represented and how, through the following indicators:

- Number of secondary schools studying entrepreneurship;
- Number of teachers teaching teaching subjects in secondary vocational schools;
- Number of companies offering practice to secondary vocational school students;
- The number of students who started their own business after high school.

These indicators would examine how much entrepreneurship is represented in the secondary school system and how much learning this subject has brought about.

g) Educational performance indicators for entrepreneurship in Italy

Italy, a country known for creating the Bologna Evaluation System, did not integrate entrepreneurship as a teaching subject in secondary vocational schools. Indicators and performance have not been identified for this country, due to the similarity with the IA programs, so that there will not be any repetition.

h) Performance indicators of the Ministry of Education and Science of the Republic of Serbia

In 2005, the Ministry of Education, in cooperation with the Ministry of Sport, made a strategy for the introduction of entrepreneurship into secondary vocational schools and general education schools. The model presented in this document is more in line with the guidelines that should be guided by some concrete initiatives. However, entrepreneurship as a teaching subject did not get its place in high school programs to the extent that was expected. Based on the available information, it is concluded that the performance of the Ministry of Education is improving the education system for entrepreneurship in schools through an adequate curriculum. Therefore, the performance of the Ministry of Education are:

- Participation of the Ministry in improving the education system for entrepreneurship;
- Adopting a concrete program for education for entrepreneurship;
- Undertaking concrete initiatives for the introduction of entrepreneurship into the secondary education system;
- Dual education system adopted.

The indicators of these performances would be:

- Number of schools that have a teaching subject by 2016;
- The number of secondary vocational schools according to the types of teaching subjects that have already been included in their program (eg. economic, technical, agricultural, mechanical engineering ...);
- The number of teachers who are qualified to teach the subject of entrepreneurship;

These indicators also look at the past and into the future. The first indicator would show the real state, or how many schools actually have a teaching subject entrepreneurship. Furthermore, this indicator also has a qualitative dimension, and the following indicators could be examined:

- The quality of current programs in schools (divided by type of school);

- The quality of teaching in the subject of entrepreneurship in secondary schools;

Quality of teaching qualifications currently held by teachers who teach entrepreneurship;

- Qualification of teachers required to hold classes in the subject of entrepreneurship;
- Quality of practice firms that are open to student practice;
- Quality of students' knowledge after practice in business entities.

h1) Performance indicators of secondary vocational schools and general education schools

The performance of secondary vocational schools and general education schools would increase the productivity of the education system (dissemination of knowledge) and the increased number of students interested in a particular type of school. Each school wants their students to come up with concrete and useful knowledge, which is the purpose of each educational system.

By introducing the subject, entrepreneurship (according to the guidelines of the author's model of education for entrepreneurship) can significantly contribute to increasing practical skills through this course. In order to follow this trend (increasing knowledge), the following indicators should be used:

- Number of (total) students attending teaching subjects entrepreneurship;
- The number of directions on which the teaching subject is taken up;
- Number of available literature for the subject of entrepreneurship;
- The number of classes envisaged for the subject of entrepreneurship;

After quantitative indicators, qualitative ones can be identified, and this implies another performance, which is the quality of the current model of entrepreneurship programs in secondary schools in which they exist. The following indicators again include checking the quality of the current state and checking the future:

- The quality of the current curriculum for entrepreneurship;
- Quality and contribution of improved model and curriculum for entrepreneurship;
- Quality of students' knowledge with an improved model of the program;
- Achieved students' results in competitions.

h2) Performance indicators of the teaching staff for teaching classes in the subject Entrepreneurship

The performance indicators of teaching staff on the subject of entrepreneurship are directed towards the quality of the educational staff and the number of teachers who fulfill this quality. The quality of teaching staff has already been said that the Ministry of Education should make a list of necessary qualifications on the basis of which this indicator could be measurable.

Teacher performance ie. teaching staff whose weight can be:

- Adequate conditions for teaching;
- Possibility of professional development;
- An adequate general model for entrepreneurship education;
- Adequate curriculum;

Quantitative indicators to check these performance are:

- Number of classrooms providing adequate conditions for teaching in the subject of entrepreneurship;
- Number of students attending teaching subjects entrepreneurship;
- Number of seminars and other activities that were attended for professional development;
- The number of working hours envisaged for the subject of entrepreneurship;

Qualitative indicators that can be measured are:

- Quality of the curriculum for the school year;
- Quality of the curriculum by course;
- Quality of seminars attended and other professional development activities;
- The quality and outcome of teachers' activities;

h3) Performance indicators evaluated by pupils

Performance by which students are more difficult can be focused on improving their skills and competences, the quality of theoretical and practical knowledge gained on this subject, as well as satisfaction in the work and study of entrepreneurship. Another performance to which it is tended is the possibility of employment after the acquired education.

Indicators that evaluate performances are:

- Assessment by teachers;

- The number of competitions and other activities in which the student participated related to subject teaching;
- The quality of the achieved results of the aforementioned activities;

h4) Performance indicators evaluated by business entities

Performance indicators evaluated by businesses that will be listed can be applied in the future when most schools really introduce the subject of entrepreneurship and when they start to take students into practice. The performance of business entities would be directed towards more productive work in the business sectors, satisfying the quality of students' work, as well as ensuring that in the future there will be already trained personnel for work in their company.

The indicators of these performances can be as well as to date qualitative and quantitative character:

- Number of professional staff in the role of mentors of professional practice;
- The number of students who have reached the practice satisfactorily;
- The number of students to be employed by the company after the completion of education;
- Quality of business improvement achieved by pupils' work;
- Quality of student learning improvement in practice;

i) Overview of comparable indicators of the performance of our country and the observed countries

In this paper, general models of education for entrepreneurship of selected European countries are presented as well as an overview of the indicators and performances in our country directed at the users of entrepreneurial education models. In each of these countries, including ours, there are the same beneficiaries of the education program for entrepreneurship and are listed collectively:

- Ministry (education, science and development, etc.);
- Schools;
- Teaching staff;
- Students;
- Practice firms.

The performance of the ministries globally is an improvement of education for entrepreneurship at all levels of education. School performance strives to increase the productivity of the education system (dissemination of knowledge) as well as the increased number of interested students for a particular type of school. The performance of teachers is a tendency towards an improved education system as well as adequate guidelines for the individual curriculum. The performance of students aims to improve the quality of theoretical and practical knowledge, as well as the use of acquired knowledge in further work and education. The performance of the practice firms implies more productive work in the company, increasing the satisfaction with the work of students, as well as providing trained and skilled personnel to continue working in the company. Common indicators can be:

- Status of the subject;
- Territorial knowledge indicators;
- Practical knowledge indicators;
- Indicator satisfaction of students by the work of students;
- The quality of the lessons learned from the perspective of students;
- Quality of teaching observed from the aspect of the professor;
- Number of secondary schools studying entrepreneurship;
- Number of teachers teaching teaching subjects in secondary vocational schools;
- Number of companies offering practice to secondary vocational school students.

4.4. Discussion of research results

Individual hypotheses H(1;1): "It is possible to present the performance used for SEE in Serbia" and H(1;2): "It is possible to present the performance indicators used for SEE in Serbia" are confirmed through part 4.3. Results research, where indicators and performances of stakeholders, ie stakeholders in Serbia are listed. Thus, the special hypothesis H(1) can be considered confirmed.

Individual hypotheses H(2;1): "It is possible to present the performance used for SEEs in other countries of the world" and H(2;2): "It is possible to present the performance indicators used for SEEs in other countries of the world" confirmed through a more detailed overview of indicators and performance in the observed countries (in section 4.3). Thus, the special hypothesis H(2) can be considered confirmed.

Individual hypotheses H(3;1): "It is possible to compare the performance of SEEs in Serbia and other countries" and H(3;2): "It is possible to compare the performance indicators related to SEE in Serbia and

others countries "were confirmed in section 4.3.i)" Overview of comparable indicators of the performance of our country and the observed countries ". Thus, the special hypothesis H(3) can be considered confirmed.

By confirming the truth of specific hypotheses (H(1), H(2), and H(3)), the general hypothesis H(0) is confirmed, which says that it is possible to compare performance indicators of high school education for entrepreneurship used in Serbia and in other countries.

5. CONCLUSION

This paper points to the SEE performance indicators that can be observed in the observed countries, as well as in Serbia. As for European countries, performance indicators of SEEs are formed by measuring them and pointing to the goal (in them) of the already implemented activities. The real situation regarding SEE in our country is quite different. A small number of schools generally incorporate the subject matter of entrepreneurship into their curriculum, education model and curricula. Therefore, in this paper, performance indicators are proposed based on existing knowledge and on the basis of prediction and projection of future educational needs. (This SEE model is proposed in the author's master's thesis, defended by FON, the Entrepreneurial Management of SMEs module, 2016). The goal is, in the near future, that more schools will place this subject in their curriculum. Therefore, performance indicators have been identified; they can monitor the current state, as well as project the (desired) situation in the future. Although the SEE of our country is late for the European SEE mode, common indicators have been found (for monitoring the state of SEE, for calculating SEE quality, for comparison with other values and for encouraging further progress, which is very important - to check if , after education, we are approaching successful and developed countries.

The stated hypotheses in the work are confirmed, and the work is mostly used by the mentioned stakeholders (state, ministry of education, schools and teachers, companies - partners, etc.). By taking concrete initiatives, the Serbian Ministry of Education, Science and Technological Development can accelerate, at the same time apply, the inclusion of the Entrepreneurship in the Secondary Education System; dual education system enables students to check and improve their knowledge in practice. Teacher qualifications for teaching this subject need to be systematized and carefully accredited. Furthermore, when checking and establishing shortcomings in terms of qualifications, the Ministry's education ... should be taken care of for the improvement of teaching staff, which is achieved through master-classes, but also through less formal education channels (seminars and other types of activities). Regarding the quality of practice firms, this, looking to the future, requires better, more thoughtful activities, and time is needed (which is related to the experiences of student practice). The last indicator coincides with one indicator of the Ministry of Education. The author of the paper considers that the follow-up of students in continuing their careers (how many were employed after secondary school and how many continued their education at a higher level of education), should be monitored by schools, and the data sent to the Ministry of Education - in order to assess the success of initiating the initiative for the introduction of entrepreneurship in secondary schools. The directions of further research concern the quality of SEE, SEE Costs, links of educational programs from entrepreneurship - at all levels of education, and so on.

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BUSINESS ASPECTS OF PUBLIC-PRIVATE PARTNERSHIP IN DIGITAL ECONOMY ENVIRONMENT

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Abstract: *This paper emphasizes strategic orientation of public-private partnership according to new investment trends. Competitive advantages of the public-private cooperations in the conditions of European management are analyzed, considering strategic deployment of contracting parties. The relation between European integration and the development of public-private partnership is researched, under the influence of different European funds framework on managerial decisions. Integration processes referring economic indicators are pointed out, with the objective of analyzing their impact on the microeconomic level of public-private collaboration. Enhancement of efficiency and European business models is a precondition for development of knowledge based management in the European Union framework. Original contribution of European funds activities is important, in the discontinuity conditions of the European inclusion environment. Digitalization is a component for strengthening the competitiveness and preparing societies and economies for the future of European Union.*

Keywords: *Public-private partnership, Business, Digitalization, Capital Funds, European Union*

1. INTRODUCTION

Public-private partnerships in developing countries are becoming a new source of long-term economic stability in the broader sense, with a particularly significant impact on sustainable development of small and medium enterprises (Osei-Kyei and Chan 2017). Different approaches to the risk management, defining budget constraints, the financial performance indicators and resource allocation consists out of combination of private and public sector as part of the effective long-term partnership. Cooperation with the private sector created a new framework for pricing strategy, reducing the total cost, but also to increase the transparency of the results achieved within this type of partnership. Empirical studies suggest that a particularly important catalyst for economic growth in the transfer of knowledge is through greenfield investment projects and concessions (Hodge and Greve, 2018). These projects also provide the ability to share responsibility and reform in relation to the partnership, where often the private sector fulfils operational obligations with the aim of increasing efficiency, while the public sector assumes the responsibility of implementation of regulatory policy and oversight of project management. Given that these projects are based on long-term contractual cooperation redistribution of business risk, in order to increase the quality of products and services, the synergistic effect of the association of resources leads to the establishment of financial stability and the protection of important public and private interests (Madden, Phillips and Beth 2018). Implemented as a contractual or institutional partnerships, with frequent support by co-financing from EU funds, which implies their significance for the financing, construction, reconstruction and management of infrastructure facilities.

Taking into account that public-private partnerships can be formed for a common good or the provision of public services for which the state is required by law, projects last up to 50 years, and is therefore very important optimization of capital investment expenditures on the basis of equality of the contracting parties (Madden, Phillips and Beth 2018). Feasibility study, output specifications and determine the qualifications of interested parties shall be based on a detailed analysis of the economic feasibility of the project. Estimates of the expected investments, height guarantees private partner and expected demand is an important part of the analysis. Obtaining capital subsidies and foreign donations depends on the local authorities, who examined the legal, social and environmental risk management and is thus a very important optimization of capital investment expenditures on the basis of equality of the contracting parties (Bayliss and Van Waeyenberge, 2018).

2. THE IMPORTANCE OF BUSINESS MODELS FOR PUBLIC-PRIVATE PARTNERSHIP

The new conditions of market economy require the timely adoption of optimal business decisions in order to achieve the planned economic results of operations. The current global environment requires flexible

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adaptation to new markets, due to the existence of different quality and quantity of basic resources such as knowledge, capital and technology. The management of these resources is the key for future optimal and sustainable development of a company. Thus we could define a business model as a form of managerial equivalence scientific test method, based on the hypothesis that later empirically tested, which in turn delivers the appropriate methodological conclusion (Magretta, 2002).

Feasibility study, output specifications and determine the qualifications of interested parties shall be based on a detailed analysis of the economic feasibility of the project. Estimates of the expected investments, height guarantees private partner and expected demand is an important part of the analysis (Uzunkaya, 2017). Obtaining capital subsidies and foreign donations depends on the local authorities, who examined the legal, social and environmental risk management. Thus, optimization of capital investment expenditures on the basis of equality of the contracting parties is very important (Hodge and Greve, 2018). Feasibility study, output specifications and determine the qualifications of interested parties shall be based on a detailed analysis of the economic feasibility of the project. Estimates of the expected investments, height guarantees private partner and expected demand is an important part of the analysis (Uzunkaya, 2017). Obtaining capital subsidies and foreign donations depends on the local authorities, who examined the legal, social and environmental risk management.

Public-private partnership is a newer model of diverting risk using modern technology, know-how by creating core competencies in the context of the knowledge based economy, the education of highly skilled labour force and an efficient use of infrastructure. The establishment of common interest increases proportionally the potential profits of company and economies of scale. Budget restructuring to new development objectives is adjusted according to the degree of competitiveness and innovation, which was given the private sector. Transparency and broad focus of covering running costs are particularly noticeable, meaning that the complex procedure of preparing the project proposal must be adapted to the requirements of the private sector, and thus expand the capacity and cooperation between enterprises. Multiple choice modalities of private sector involvement encouraged a large number of participants in the project, which affects the orientation of risk to subjects who have the greatest interest of its elimination (Uzunkaya, 2017). The operations of the contracted performance depend on the number of uncontrolled market factors, which are yet another reason to accurately determine subcategories of risk. Method comparators costs in the public sector compared to the cost of implementation of a public-private partnership in relation to the costs that would have been achieved if the project is implemented through public procurement.

Extensive methodology is used for microeconomic analysis of changes in a dynamic business environment with the aim of reducing the residual risk and incentive principles of efficient use of public funds. Combined models of the management contract and service delivery creates many advantages, with the private partner is paid for services on behalf of users, by mutual monitoring and evaluation of the results. The impact of public-private partnership in the manner of functioning of the public sector includes the provision of expert guidance, informing the public about the concept of the project, the development of open capacity and encourage intensive cooperation in the area of public service delivery centralized control of the project (Uzunkaya, 2017). The identity of networked business entities when it does not change, which increases the efficiency of capital mobilization and combines organizational capacities of cooperation (Xiong, Zhao and Yuan, 2017). The ratio of public-private partnerships is based on an advanced exchange of information with the aim of providing quality products and services for mutual benefit.

Since the projects are public-private partnership created on the basis of many forms of cooperation contract, it is relevant to analyze the various examples of partnerships, as well as their importance in developing countries (Osei-Kyei, R. and Chan, A.P.C. 2017). Connection management practices of companies, multidimensional approach to business challenges, the mutual financial support for the implementation of business ideas are some of the multiple benefits of managing this type of project. The complexity of the project management and the creation of competitive advantage in the long run have been observed within the analyzed case, and facilitated coordination of priority areas of business.

3. CONTEMPORARY PUBLIC-PRIVATE COOPERATION IN THE CONTEXT OF EU DIGITALIZATION

Promoting development of the public-private partnerships in the European Union is based on the extensive support of European Funds, the European Commission and European banks. Projects of public-private partnerships in the territory of the European Union encouraged the efficient system of incentives, which in the formation of a single EU energy market should serve as an example for the application of the same measures in developing countries. Suitability of business instruments in the development phase of the project is designed according to specific needs and the technological intensity of the investment (Klabe,

2009). Overcoming obstacles to project financing small and medium size is achieved by forming a program for investment support and technical cooperation in the form of providing assistance with feasibility studies, structuring of programs, business plan development, financial audits, implementation of the project and so on (for example, JEREMIE - Joint European Resources for Small and Medium-sized Enterprises). Instruments of the European Investment Bank and the European Bank for Reconstruction and Development provided support to projects in phase of product commercialization.

The European Commission has established a strategy of Energy in 2020 with the aim of achieving greater sustainable development of the public-private cooperation in all EU countries in order to increase the competitiveness of the market, based on the knowledge economy. Eliminating disparities between countries is a prerequisite for economic development, and the political cohesion provide extensive financial instruments within the European Union. The European Regional Development Fund (ERDF - European Regional Development Fund) to promote economic and social cohesion participation in the development and structural change in the region the EU, with a view to reducing regional disparities. The Fund stimulates the transfer of eco-technology and knowledge in the small and medium enterprises, with the aim to increase efficiency and the use of private funds investment in underdeveloped areas (Osei-Kyei and Chan, 2017). Areas of intervention include all sources of renewable energy, with companies in the field of biomass energy main beneficiaries of ERDF, with over 200 million in 2012 (Directorat-General Regional and Urban Policy, 2017). By 2020 it is planned that 6% of the total cost of the ERDF to be set aside for renewable energy in countries with economies in transition (as it will get more funds for research and development) and 20% for developed countries (Directorat-General Regional and Urban Policy, 2017). The European Social Fund (ESF - European Social Fund), the European Commission is responsible for the social stability of countries, boosting productivity and promotion of environmentally friendly entrepreneurship. A special focus is on a holistic approach to business and the provision of equal opportunities for employment of all members of society. It acts as a multiplier of the financial indebtedness of private funds through participation in risk management. ESF fund to promote investment in public private partnerships from the perspective of employment growth.

We can give an example of successful public-private partnerships in the field of renewable energy production. Balancing the public sector's profitability needs and economics interests of private parties is based on energy performance contracting schema, that minimizes the difference between the net profits gained by contractual parties (Carbonara and Pellegrino, 2018). According to statistics EREC (European Renewable Energy Council) since 2005, there is a constant increase in employment in the renewable energy industry, but in 2009, employment measured in the amount of 550,000 jobs (EREC, 2011). Less developed countries in the EU that have a special benefit from ERDF and ESF funds are Portugal, Greece and Slovakia. From 2007 to 2013 these two funds invested funds in the amount of 4.760 billion euros (European Commission, 2017). In that period, the ERDF is only in the city of London has invested 182 million euros, in which it plans to half of the energy used is from renewable sources, but also to cooperate with private partners within the project (Directorat-General Regional and Urban Policy, 2017). Structural funds can function as an innovative holding funds that is through business intermediaries rely on other forms of financing, including grants, guarantees, equity investments, etc. Financial engineering instruments are invested in the sustainable development of small and medium enterprises and supplement the energy efficiency of the urbanized areas (EREC, 2011). Public-private partnership is also significant with aspects to competitiveness increase of international business in digital economy environment (Sofronijević, Milićević and Ilić, 2014).

JEREMIE instrument, developed with cooperation of the European Investment Bank and the Commission of the European Investment Fund, serves as financial leverage in financing small and medium enterprises through private funds with less reliance on grants. The need for renewable energy grant JEREMIE covers from developed network of holding funds in 15 EU member states, which have a wide range of financial instruments renewable nature. Responsiveness to market conditions is high, considering that it is a process and not on the fund, which is financing instruments adapted to the cycles of deployment (Carbonara and Pellegrino, 2018). So far invested about 3.5 billion EUR in SMEs in this program, with the intention that by the end of 2015 (EIF, 2011). The fully adjust the EU's cohesion policy to promote sustainable energy through new business creation support.

JESSICA (Joint European Support for Sustainable Investment in City Areas) program was created to support investment in sustainable urban development and renewal of existing infrastructure through promoting close ties with the private sector. Program is proper support through structural funds revolving instruments and so far has thus invested a total of 1.6 billion euro in energy efficiency measures (Deloitte, 2011). Financial engineering instruments that are commonly used are (Deloitte, 2011):

- VCMF (Venture Capital Mutual Funds) funds, which are not constituted as legal entities, but consist of a number of specific continent run by the managers of the fund. VCMF not bear the tax burden and flexible in character, but they were also very useful instruments support;
- A joint stock company, through which it invests in other funds through long-term bonds. The only shareholder of this society is the state, which guarantees for the entire amount of the debt;
- Fund loan guarantees for small businesses, which as a financial institution, supported by both the countries in which to invest, develop a series of benefits and guarantees for loans.

Program for research and development of the Horizon 2020 is the successor of the Seventh Framework Program FP7 and includes all EU initiatives together, based on the concept of a triangle of education, research and innovation. The program of safe, clean and efficient energy will last for six years, starting from 2014, with the clear objective of reducing the use of primary energy, which should not amount to more than 1,474 Mtoe (million tonnes of oil equivalent) by 2020 (European Commission, 2017). The program provides the infrastructure, the use of thermal energy, encouraging the development of eco-industries and sustainable energy financing. Innovation approach projects under Horizon 2020 are focused on technology extraction of harmful gases, energy networks with self-regulation, energy storage and its connection with the current system, new concepts of integration of the underground energy storage, etc (Carbonara and Pellegrino, 2018). The outcome of the initiative development of "smart" cities of the agreement the mayor more than 5,700 cities around the world that are committed to these cities achieve higher energy efficiency than planned under the EU's 20/20/20 (European Commission, 2017).

The digital transformation of societies is a complex multidimensional phenomenon that needs to be addressed through the application of systematic approach across sectors and across domains (Matusiak and Kleibrink, 2018). Institutional capacity of public company can be very beneficial in terms of smart specialization of partnership, while technology transfer from private sector can lead to long run economic sustainability. Tangible assets and activities are supporting research commercialisation by targeting capacity increase and systematic business planning. Cooperation in the region is essential, with special focus on opening up geospatial datasets to the public (Matusiak and Kleibrink, 2018). Effective use of heterogeneous technology in digital environment is a precondition for developing digital single market. As a part of broader digital transformation strategy, public-private collaboration is pointed towards innovation and competitiveness. A well-articulated combination of public and private sector can result in an extensive knowledge transfer and synergy effect for the scope of synchronized business objectives. Important opportunity for innovation ecosystem development is also a data infrastructure development for macro-regions. Great example is program digitalization of data infrastructure that will encompass whole Danube region. Project called "Danube Data and Service Infrastructure" makes impressive advancements in field of harmonized data set on various issues related to the region (Matusiak and Kleibrink, 2018). Evidence-based innovation strategies and quality enhancement in terms of research and development capacity are already deployed for public-private partnership of Western Balkans.

Joint Research Centre of European Commission is actively working on creating a "Digital Agenda for the Western Balkans". One of the EC Enlargement Strategy flagship initiatives is dedicated Digital Agenda for the Western Balkans. This is crucial component for strengthening the competitiveness of the region and preparing our societies and economies for the future EU membership, and future as such. The Strategy outlines inclusion of the Western Balkans countries at the Council meetings and European Commission working groups in areas of common interest- it is important energy, transport, digital policy, research and innovation are mentioned among those and that the inclusion starts as soon as possible. Serbia is also aware of the need and benefits of the regional cooperation in these areas- from security, to technology transfers, digitalisation of industry, start ups etc. There is no reason Serbia should not cooperate much more in building technology parks, regional - cross border start up centres, enhancing cooperation between our scientific and economic actors. Digitalisation and technological development poses in addition huge challenges as well as opportunities - it will also influence the future of jobs and employment. Uncertain set of skills should be prepared, in addition to the digital ones.

The "Intelligent Energy for Europe" (IEE - Intelligent Energy Europe) is part of the framework program for competitiveness and innovation. IEE aims to raise awareness about the transformation of the market by building new capacity and coordination of projects with technological and financial point of view. Since 2003, more than 600 projects have been supported by the IEE (European Commission, 2013). Rational use of energy, reduction of transport costs of energy, monitoring the impact of other industrial sectors are some of the actions taken enforced by the IEE. Typically financed projects the volume of 1 million EUR. From 2007 through the IEE provided the approximately 730 million investments for RES (European Commission, 2013).

Close cooperation with the International Energy Agency in accordance with the ELENA program is implemented external expertise in projects of mutual cooperation in the amount of 6-50 million, requiring the

participation of at least three companies in the field of renewable energy (European Commission, 2017). It is estimated that by the end of the program will be invested a total of more than 6 billion in the energy sector. The "Intelligent Energy for Europe" (IEE - Intelligent Energy Europe) is part of the framework program for competitiveness and innovation. IEE aims to raise awareness about the transformation of the market by building new capacity and coordination of projects with technological and financial point of view. Since 2003, more than 600 projects have been supported by the IEE (European Commission, 2013).

Rational use of energy, reduction of transport costs of energy, monitoring the impact of other industrial sectors are some of the actions taken enforced by the IEE. Typically financed projects the volume of 1 million EUR. From 2007 through the IEE provided the approximately 730 million investment for RES (European Commission, 2017). ELENA (European Local Energy Assistance) is an initiative of the European Investment Bank for technical assistance, financial structuring during the initial phase of the project. Currently ELENA funded 31 projects, which will bring energy savings of 913 GWh, eliminate 496,000 tons of carbon dioxide and about 25,000 new jobs (European Commission, 2013). External control and the establishment of standards in project management ELENA preparing management for the difficulties in the process of project financing and management costs.

Some of the suggestions for business risk hedging of contemporary public-private partnerships are:

- reduction of financial leverage ratios, which most of the risk takes the borrower;
- shorter period of repayment, in order to minimize operational risk, the use of cash sweep processes (borrower used the excess cash flows for payment of debt);
- requirements for larger DSRA (debt service reserve account) and MRA (maintenance reserve account) indicators, in order to ensure reserves from the current lack of repayment of the loans;
- flexible structure of debt (upside sharing) as well as the concept of fulfilling the obligations arising from the debt above the planned level, for the period when the cash flow above the average level. This bank provides the potential variation in the exploitation of energy sources.

The accelerator facility would provide equity and quasi-equity capital Fund to innovative small and medium enterprises (SMEs) at the early stages of their development. This facility could also be used to provide finance in support of SMEs commercialising their products or services (Cumming, Haslem and Knill, 2017). The financial instrument under consideration would involve a co-investment product providing equity financing to SMEs financing (equity and quasi-equity) at the early stage of their existence and ensure the technology transfer. While it is difficult to quantify the expected impact of such a facility conducted by public-private partnership, it is possible to assess qualitatively that the expected effects would be important, both in terms of jobs and economic growth as the current financing conditions almost preclude the launching and development of innovative SMEs (Cumming, Haslem and Knill, 2017).

The objectives of this Capital Fund are to:

- Strengthen equity financing and quasi-equity financing for companies in pre-seed, seed, creation, development and turnaround stages;
- Support the companies in any stage, based on a good business plan;
- Strengthen the capitalization of SMEs with high growth potential (innovative or traditional);
- Encourage the structuring of capital market, including Business Angels;
- Fill the lack of the existing equity financing supply in the country (business angels, investment funds etc.) and attract, among others, outside investors who currently do not operate.

In the long run, this facility could represent a major opportunity for the Serbian economy to diversify and move in the upper segments of the production value chains. The main value added areas expectedly generated by the implementation of this financial instrument is as follows: promoting entrepreneurship, improvement of companies' projects, creation of new innovative enterprises, possibility to focus on special categories of final beneficiaries (in terms of investment amounts and SME development phases) and risk sharing with the private sector (co-investment funds).

Start-ups and innovative SME in the pre-seed, seed, creation, development and turnaround stages. The focus of the accelerator facility would be small innovative SMEs at the very early stage of their existence (creation or early development). Risks and advantages related to the implementation are:

- Part of the investment will come from the financial intermediary (co-investment funds) in the SMEs capital using IPA resources, its own resources and attracting other investors to mobilize its own resources;
- Access to support provided by the support facility, for example: access to an incubator facilities and coaching by an experienced entrepreneur, support in conducting market research, feasibility studies and

"market testing" as well as information on other existing mechanisms for the development of innovation and/or entrepreneurship in general;

- Its purpose is to create synergies with other venture capital and investment funds as well as attract investors from Serbia and abroad.

The percentage of the public contribution in the financing of each operation will vary depending on the phase of the SMEs in its life cycle. The manager of the co-investment fund will be an independent entity that makes all investment decisions/divestment as a professional manager, economically and legally independent. The governance of the co-investment funds should include mechanisms to avoid potential conflicts of interests within the manager co-investment funds of public-private partnership. The details of the Call for Expression of Interest shall ensure that the financial intermediaries have the necessary permissions and approvals to exercise the activities as a fund manager. The selection of the financial intermediary will cover the provision and blending of both equity financing and quasi-equity financing for public-private capital fund (Cumming, Haslem and Knill, 2017). The groups targeted include SMEs of all development stages (seed, creation, development and turnaround stages) using funding from EU funds.

The financial instrument could draw on the EU funds and be blended with funds provided from other financing sources (grants or loans). Grants are usually provided in the initial phase (when the company is in the idea generation stage and/or creation of prototypes). The accelerator facility would support companies to commercialise these ideas or prototypes (in the ready to be marketed stage) (Cumming, Haslem and Knill, 2017).

4. CONCLUSION

The strategic orientation of public-private partnership provides an important basis for the realization of competitive advantages in European Union terms, the achievement of business success in the long run and the development of European cooperation. The specificities of the market and industries, created in the environment of diversified business elements and under specific feasibility study conditions, lead to the growing need for European companies to place their products and services on the market through public-private partnership, often in the presence of hypercompetition. Digitalization inputs are of the great importance for a strategic commitment of providing long-term successful business collaboration, which implies the development of new public-private models. In doing so, there is a specific European contribution to the development of the theory and practice of public-private joint efforts, which is derived from the committed support of European funds. Digitalization is becoming an important part for smart specialisation and contemporary data restructuring. In this sense, there is an increasing attention of entrepreneurs, but also of all those who want to apply examples of best practices in order to improve their business. On the other hand, European business and management face new challenges, but also limitations and above all challenges from the global environment, which imposes a proactive approach with the implications of managerial actions at the microeconomic level in the future of public-private partnership.

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INTRODUCTION OF THE NEW SERVICE ON SERBIAN TELECOMMUNICATION MARKET: VIRTUAL PHONE NUMBER

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Abstract: *This paper presents the solution for keeping the private mobile number private, and having multiple phone numbers while still using only one SIM card. Namely, the virtual phone number service is presented as a simple solution. Virtual phone number means having one or more additional mobile phone numbers, whose incoming calls are forwarded to the original phone number. It provides a higher level of control regarding incoming work-related phone calls. Other most common uses, advantages and disadvantages of proposed implementation are listed, also. The current market situation is favourable for virtual phone number service in Serbia. Based on market analyses and financial assessment, the idea should be implemented in the near future.*

Keywords: *temporary phone number, virtual phone number, SIM-less, privacy, ads web portals*

1. INTRODUCTION

Serbia has over 120 mobile phone subscribers per 100 people (World Bank, 2016), meaning that there are people with two or even more mobile phone numbers. There are a lot of possible reasons for having multiple phone numbers, and some of them are overcoming coverage issues and having all the benefits from different subscription plans. But, the most common reason is separating work and private life and saving personal privacy.

Mobile phone, as instrument has changed roles in the family, modified interpersonal relations, re-defined the limits of communicative possibilities, rewritten the present functioning of institutions such as hospitals and schools, intensified work dynamics, rationalized the organisation of work relations, in a word, changed society (Fortunati, 2002). Almost everyone has access to at least one (mobile) phone and can call anyone on the planet. Mobile phones are “always-on-us” communication devices (Kuo, Wu, & Deng, 2009) and this is an additional reason to control who will be able to contact us and when. Some researchers are dealing with prevention of private phone number leakage via mobile phone applications (Pak, Cha, & Yeo, 2015). Unfortunately, there are situations when we cannot evade giving contact information, which then can be misused. Below are listed some of the most common cases in which people expose their private number:

- **Selling stuff via ads**
People who are selling stuff on online portals are required to leave contact information, including a phone number. Depending on the nature of merchandise and demand for it, they can get a significant number of phone calls. After the ad is expired or removed, the number often remains on cached pages and is displayed in a search engine query results. Even thou the ad is not active anymore, the user gets unwanted calls even for months.
- **Entrepreneurs not having a separate work phone**
Entrepreneurs, craftsmen, traders usually use a private phone number for the business. This causes receiving business-related calls on the private number, even after working hours, on weekends, and holidays.
- **Loyalty programmes**
It became common practice for businesses to offer loyalty programs to their customers (Bolton, Kannan, & Bramlett, 2000; Yi & Jeon, 2003). Those loyalty programs are usually a way to discounted products or some other financial benefits. One of the potential problems with joining loyalty programs is unwanted disclosure of private phone number and receiving unwanted calls and messages.

This paper presents an idea for evading exposure of private phone number in mentioned and similar situations. The proposed system is named “virtual phone number”, meaning that you have additional phone number without actually owning SIM (subscriber identification module) card.

Medhanyie et al. (2015) discovered that many of the health workers complained about carrying two phones, work phone and their private phone. As a result, many of them stopped carrying their private phone and started using the smartphone as their primary phone. The great advantage of using virtual phone number is a possibility to receive phone calls to two phone numbers while having only one mobile phone (without dual SIM feature).

In the last six months, a few solutions for this problem emerged, and all of them are intended for mobile operators. Operators have to integrate the specific solution into the Internet Protocol (IP) Multimedia Subsystem (IMS). Those solutions cost hundreds of thousands of euros (Metaswitch, 2018; SmarTone, 2018; Swytch, 2018). Disadvantages of these systems are high integration costs and requirement of all operators' support on the specific market. It cannot be expected for Serbian telecommunication market to get a system like this in the near future. On the other side, there is a simple solution for this problem, which though wouldn't provide all the features offered by the previously mentioned systems. Namely, the suggested solution would give the most essential feature - incoming calls - in the short time period and with the small investment required. The only drawback of this kind of solution is the unavailability of outgoing calls and SMS.

After making an introduction to the problem, the paper is organised as follows. In section two the virtual phone number is presented with more details, steps needed for the idea to be implemented and key market segments. Section three contains basic financial assessment of proposed idea, and finally, conclusion is in section four.

2. VIRTUAL PHONE NUMBER

A practical example of a virtual phone number in action is presented in Figure 1 and can be described in following steps with example of selling a used car using a web portal:

1. Seller chooses his virtual phone number, which will be used for his car ad;
2. When a potential buyer calls the virtual phone number, it is forwarded to seller's primary phone number;
3. After the car is sold, seller cancels virtual phone number and receives no more calls, as his primary phone number has never been listed and cached.

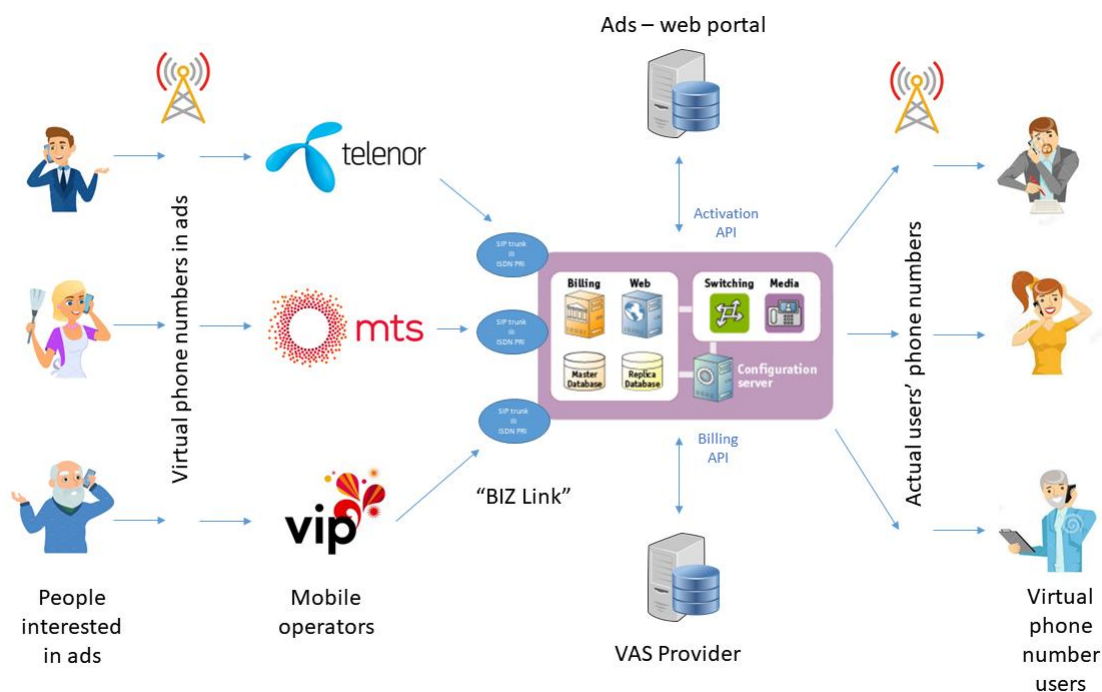


Figure 1: Illustration of the suggested solution

Virtual phone number renting can be temporary (ads and other short-term needs) or on long-term (business phone number for craftsman and entrepreneurs).

To implement the idea, the following steps have to be taken:

1. Opening a new company;

2. Presenting the idea to the operators, with emphasis on the simplicity of implementation (no need for any interventions on the operators' system);
3. Renting a range of numeration scheme from a mobile operator;
4. Negotiating business model with web portals;
5. Development and installation of system for call forwarding.

Development and installation of the system include developing API (application programming interface) for integration on web portals and Value-Added Service (VAS) Short Message Service (SMS) provider, but also portal for user settings (valid for up to 30 days). It is estimated that the service can be offered at the market in the near future.

In the following subsections, the key market segments are presented.

2.1. Ads web portals

There are a lot of web portals with ads, like *Halo oglasi*, *KupujemProdajem*, *Polovni automobili*, who are potential business partners. Namely, those portals have two primary sources of income: 1) paid, featured ads, and 2) rented banners for advertising. By offering them a share in revenue from virtual phone number service, they will most certainly be interested in collaboration, as this would be their third income channel.

When the seller is leaving ad on the portal, in the step where he enters his phone number, he would be offered to temporarily rent the virtual phone number for receiving calls. All calls would be forwarded to his own phone number. In that way, he would keep the privacy of his phone number, as it is not used for the ad. Also, the virtual phone number is used only while the ad is active. This prevents receiving calls regarding the inactive ad.

Most of the sellers will accept this offer for the symbolic price of RSD 200 monthly. The alternative for keeping the phone number private is much more expensive. It would require purchasing prepaid SIM card, and additional mobile phone. Besides being cheaper, getting a virtual phone number is much more simpler, as it is available as a part of the process of creating an ad.

The only expense for web portal is time needed for integration. This means creating API functions for communicating with virtual number server, and it requires a few programmer-days, which is already hired for maintaining web portal.

2.2. Entrepreneurs and craftsmen

Virtual phone number, which can be used for business purposes, enables keeping the private number undisclosed and reserved for the family and private usage. Also, it allows the user to define the time of the day when he is available for receiving calls.

Using virtual phone number on long-term has a couple of advantages: there is no need for carrying multiple mobile phones; user can define working hours on the portal – only in that time period calls are forwarded; there is no need for additional SIM card (postpaid contract or prepaid recharge); it is possible to forward calls to voice mail after working hours or to the other employee who is working in the other shift. Practically the user is getting a “company phone number”, which can be forwarded to other employees if that is the business requirement.

2.3. Avoiding SPAM calls

After using a primary phone number for a couple of years, we are getting attached to it, all of our friends and business partners have it, and we are not gladly giving it to the third parties. We never know if they will misuse our phone number. On the other side, it is required to leave the phone number in most of the loyalty program applications. What follows afterwards are usually unwanted phone calls, questionnaires, SMSs, which never ends.

Owning a virtual phone number allows us to never disclose our private phone number. We would be giving virtual phone number instead and avoid getting unwanted phone calls, while still having benefits of using a loyalty program.

3. FINANCIAL ASSESSMENT OF PROPOSED IDEA

Napitupulu and Kartavianus (2014) showed that ease of payment does significantly affect purchasing decision online, so the most convenient payment method for potential customers is suggested, Value-Added Service (VAS) Short Message Service (SMS) (Kuo et al., 2009).

The payment procedure on the example of leaving ad on web portal would be:

1. The customer creates an ad and enters his phone number;
2. The web portal is offering the virtual number service, and the customer chooses to use it;
3. The customer gets SMS to confirm with "yes" if he wants to use the virtual number service;
4. The service is active, and the customer sees the assigned virtual phone number.

Initially defined price for the service would be RSD 200,00 monthly. The income will be shared in a way that mobile operator gets 40% of VAS SMS price (RSD 80,00) for renting numeration scheme and connection (Integrated Services Digital Network Primary Rate Interface – ISDN PRI or Session Initiation Protocol - SIP); web portal gets 30% (RSD 60,00) and Virtual number company 30% (RSD 60,00).

Analyzing most popular web portals specialised in ads in Serbia, the number of published ads is collected on 06. March 2018 (Halo oglasi, 2018; KupujemProdajem, 2018; Nekretnine, 2018; Polovni automobili, 2018). The data is presented in Table 1.

Table 1: Number of ads on most popular web portals

Portal	Website	Number of ads
KupujemProdajem	www.kupujemprodajem.com	1.846.327
Halo oglasi	www.halooglasi.com	393.862
Polovni automobili	www.polovniautomobili.com	191.353
Nekretnine	www.nekretnine.rs	107.205

Those are only some of the most popular web portals. Let's assume that there are 2 million ads in Serbia and one user has two ads on average. Based on small survey results, 13% of web portal users would use the described service, but again with taking conservative assumption that only 2% of them buy virtual number service, we are getting the figure of 20.000 users and over RSD 1 million in monthly revenue.

The initial investment would be roughly RSD 700.000 for servers, portal and API development, and integration with ads-specialised web portals. Based on these estimations, the presented idea shows excellent potential for fast return on investment.

It should be noted that other types of revenue, like previously mentioned entrepreneurs and craftsmen, people who would like to avoid spam and private phone number revealing, are not taken into consideration. Also, with less conservative assumptions (more than 2% of sellers accepting the virtual phone number service) for web portals and including the revenues from other consumer segments the revenue would be significantly higher.

4. CONCLUSION

Gant and Kiesler (2002) state that until the beginning of the twentieth century most people lived close to their workplace and that their co-workers were often members of the family or friends. With the availability of modern technologies, like electricity, motorised transportation, communication systems the separation between work and personal life grew. The same authors listed socialising during weekends, commuting to work and having a separate personal or social life as twentieth-century concepts. The virtual phone number is another step in that direction. It provides a higher level of control regarding incoming work-related phone calls.

The current market situation is favourable for virtual phone number service in Serbia. On one side, there are no mobile operator integrated solutions present, as they are costly and require a lot of efforts to implement. On the other side, there is a demand from users, and present alternatives are both too expensive and complicated for everyday usage (owning the separate mobile phone and additional SIM card). Based on market research and financial assessment, the virtual phone number will surely be a successful venture.

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