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POSSIBLE TRENDS OF ESTABLISH AND REALIZATION OF PERSPECTIVE RESEARCH AND INNOVATIVE PROJECTS SUITABLE FOR SMES IN SERBIA

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Abstract: *The achievement of competitive advantage and better positioning of business entities on the market can be able to be in cooperation between SMEs and inventors (authors of patents). The preliminary research results of the proposed model of possible cooperation SMEs and inventors are presented. In the subject sense, the authors, through forward-looking discussions tried to draw the attention that in the field of innovation management, and at the level of engineering management, it is necessary to solve multidisciplinary problems, from the perspective of technics, technology, economics, law, intellectual property etc. The possibilities for satisfy sustainable action wit innovation operationalization are presented according to situation in republic of Serbia.*

Keywords: *research-innovation projects, SMEs, trends of action, benefits*

1. ITRODUCTION

The achievement of competitive advantage and the positioning of business entities on the market is one of the most current areas in the development of the private sector, especially small and medium-sized enterprises (SMEs). The process of creating and applying innovations as needs and ways for improving the model for understanding how a new product of high quality with the current or advanced technological level is created is presented with a concrete concept. Thus giving an appropriate contribution to understanding the complexity

and importance of the issue of generating and applying innovations at the level of a possible regulation system (not only control), as well as their further commercialization. In this sense, various research and innovation projects are being defined, established and realized with the content and methods of realization of such projects different. One thing is certain, most of such projects are realized by companies from the SME group (most often it is the implementation of research-innovation results with prototyping). Continuous realization of serial units, especially for very complex configuration of products and large serie, of course can be entrusted to the large companies with SMEs participation.

These issues necessarily involve consideration of the following issues:

- Operationalisation of plans for realization of innovation policy;
- Methodology, models and research programs with the identification of suitable resources and potentials;
- Identification and selection of suitable programs and projects.

The significance of the development of innovation activities, insight of the identification and treatment of intellectual property (from inventions and patents to the achievement of commercially available products and services with market valorization) in the following considerations, will be illustrated.

Estimation that SMEs are a key factor in economic development and innovation. The final confirmation of all efforts and consistency of achieving successful realization of innovative actions is going with a feedback from the market (by users of these products or services). The discussions are primarily focused on seeking the possibility for realization of products based on the nonrealized patents (from the Registry of the Intellectual Property Office of the Republic of Serbia - IPO), with entrust to the certain group of SMEs in order to realize commercially usable products with innovative content.

There so many funds for normal development and realization of the new products. For example, the existence of the framework program "Horizon 2020" and the thematic area of "Industrial Leadership" focused on the areas of development and innovation, and the improvement of business activities of SMEs. This businesses based on the correct positioning and work of SMEs are enable the task to be realized with the intention of achieving the set goal and effective results in accordance with the constructive, pragmatic and balanced access. (Tomić et al. 2014; Tomić, Pajić, 2017)

2. MARKET DEMAND OF THE INNOVATIVE DEVELOPMENT WITH THE PROMOTION R&D RESULTS

With the emergence of increasing and sticter demands on the market, products are become increasingly complex, with high quality and high performance, driven by the efforts of companies to achieve a competitive advantage over competitors. The same is, or even more serious, the situation with the services. It needs to bear in mind that a service requires appropriate input of materials, energy, products, in different processes and information but any service is not possible without buyers. (Vukotić, 2012)

The obtain useful, reliable, efficient and economically cost-effective solutions are necessary in order to meet the most diverse requirements at the level of users but and at the level of

global sociate goals. For example, that is in improving health and safety at work of workers on workplaces, raising the general quality of life, improving standards of interest for society's prosperity, general welfare, protecting the environment, etc. Because of that, there is a growing tendency needs for promotion the R&D and innovative activities, with motivation and their essential support.

There are different models of innovative processes: the linear, chain and synergetic model based on knowledge (integrated model). About the models more widely are discussed in. (Popper, 1972; Tomić, Arsić, 2013)

The aim is to expand the knowledge necessary for accepting innovation activities as a way of thinking and acting, in order to realize, through the realization of appropriate projects with innovative content, the results of interest for realization of a sustainable solution of the program or project.

It needs to strengthen the economy and the general development of the country, as well as for the creation of global assumptions that an innovative sociate and environment is being built in Serbia with a clear orientation towards acquiring the status of a medium-developed country suitable and attractive for investment. (Micanovic, 2016, Povrenovic, 2011) It is also necessary to harmonize all relevant activities aimed at bringing Serbia to the European Union closer.

3.INSTITUTIONAL FRAMEWORKS IN R&D AND INNOVATION IN SERBIA

In a society where maximum support and promotion of innovation activities (together with the knowledge) enable them, they become one of the most important sources of market success and sustainable competitive advantage. That is why the issue of an understanding innovation and measuring benefit of innovations (on the both levels, companies and the state) is of key importance in a certain such environment.

In addition, in the conditions of the modern global world market, each region and state that has the tendency to participate equally in global development must have an efficient national innovation system (NIS). In order for scientific and R&D institutions and companies can to achieve positive results in the development of each region and state, they must be globally competitive. At the same time, there must be an effective system for cooperation, but and dissemination of the results of all activities, in the economy, such that the duration of the cycle from generating of good ideas to the level required for sale of final products at the world market can be minimized. (Arsenjevic, Vemic, 2009)

In this regard, it is necessary to emphasize that a very efficient and well-designed scientific and technological policy and adequate mechanisms are needed, as well as to work on the development of the Serbian innovation system, adjusting this institutional system to the EU system.

The Serbian patent law ("Official Gazette of RS" No. 99/11) is contained experience results of the achievements and solutions with the evident needs for the including of improvements. The new law has established a correlation with the World Trade Organization to harmonize with positive provisions, directives and regulations, including EU directives

and patents (Tomic et al., 2014). Now, the Law on patents represents the obligation to make a final report relating to the state-of-the-art prior to the publication of the invention. The new provisions have a focus on shortening the time obtains initial information on the facts about the current state of the art for the applicant. There are also documents denying the actuality, originality or inventiveness of the invention for which the application is filed, while raising the efficiency of the conduct of proceedings (Tomic et al., 2014).

The aim is for the applicant (particular with good unic offer) to be in a more favorable position, because if it needs necessary, so a revision of the patent application may be carried out prior to the publication of the application. It should be pointed out that the major amendments to the provisions on a small patent have been made (the present Law prescribes that, in addition to the patent, a small patent has the same inventive level as the patent. It is now clear what is substantive examination of the application in connection with the invention, so that the difference between a recognized small patent and an examined small patent can be identified here.¹ The global tendency about this topics was reflected and in the Republic of Serbia. Innovations are being realized, innovation activities support, registration of patents goes on the basis of appropriate applications. But, it is very important to point out and present significance of SMEs and everything that is important for satisfy with correct implementation, type and mode of promotion with a more active role of the patent system and more efficient use of specific intellectual property. It is important to increase the competitiveness of SMEs and because of that theirs innovative activities (as a rull, SMEs have not adequate human resources in R&D and innovation process) can be directed to the fact that patents (by external authors who often have not got adequate production capabilities) must be operationalized and brought to the level of commercially available goods, products and services, which can be made in SMEs. (Tomic, Pajić, 2017; World Economic Forum 2011-12) First of all, here an important role is played by the Intellectual Property Office of the Republic of Serbia (IPO, ZIS)², the “National Strategy for Intellectual Property” has been adopted, as well as the very significant expert support of the World Intellectual Property Organization (WIPO). Activities have been defined and objectives through the operation of all institutions involved in respecting intellectual property rights. In addition, it is important to inform subjects about the work of this international organization, as well as the Patentscope database.

Within these innovative activities, it is important to point out that intellectual property is very important for the sustainability of the innovation system and the overall care of innovations.

As far as concern and in particular of the importance and works of the intellectual property sector, it can be saz that is sector of companies and institutions that have a commitment and special needs (time constraints, resource constraints, current knowledge, skills, business language etc., with precisely and understandable behaviour and features). It can be also say that they are not at a satisfactory level and that, with some progress in their development and work with better results will come to expression. (Tomic, Pajic, 2017)

As already mentioned, the Intellectual Property Office of the Republic of Serbia (ZIS) is the National Center for the Protection of Intellectual Property and the provision of strategic information when it comes to intellectual capital. The Intellectual Property Office supports

1 http://www.kombeg.org.rs/aktivnosti/c_tehno/Detaljnije.aspx?veza=6363

2 <http://www.zis.gov.rs/pocetna.1.html>

the development of a competitive knowledge-based economy in accordance with the general progress of the Republic of Serbia. (Tomic, Pajic, 2017)

The Serbian Chamber of Commerce (SCC) continuously ranks the most successful SMEs in order to get a real confirmation that efforts and dedication have been recognized. The Center for Development and Transfer Technology and Ecology, within the sector for the development of inventions and designs, also supports the development of these activities in the SCC.

The Innovation Fund was established by the Law on Innovation Activity with the aim of encouraging entrepreneurship and providing funds for the purpose of financing innovative activities, and as a support to the Strategy for Scientific and Technology Development of Serbia. (Tomic, Pajic, 2017)

It is necessary to point out the need to stimulate innovative activities with continuously efficient mechanisms and certain benefits, with activating the potentials that are available to stimulate innovative activities, increase the number of registered patents, and achieve successful results in their commercialization. It is necessary to have a very good strategy in order to successfully projects implement and obtained bennefit business results.

4. POTENTIALS FOR THE PROMOTION OF THE INNOVATIVE DEVELOPMENT IN SERBIA

The Republic of Serbia (by examining the potentials and possibilities) is not at a high level in terms of the number of patents, despite the fact that there is a high level of competent knowledge about innovation and initial good results from the realization of innovative projects. But, there is no firm commitment and created the conditions for the innovation activity and innovative development to be consistently, broadly and effectively applied in the continuity at the level of self-sustaining innovative development.

In particular, considered situation is not at the necessary level of operationalization of patents that define new solutions in accordance with the current level of scientific knowledge, expertise and specialization, and technical and technological development and best practice in the world.

It is necessary to keep in mind also life cycle of product or life-cycle-cost. The product's disappearance may be after the maturity phase, but through innovation, the product will continue to be accepted on the market, and thus the lifetime of the product will be further extended. Certainly there is a key role in accepting and adapting to the demands of consumers (customization).

It is important to point out the challenges and possibilities of more meaningful work and bringing initial intellectual property to the level of commercially available goods. So someone is interested to develop product based on this goods, where it is understood that current solution is appropriate for the perspective of patent (of course, the fact is that many discovery they are not protected as patents, but by creating conditions for their implementation in practice, new advanced solutions and commercially viable products can also be reached).

Here are some relevant data related to the situation in Serbia (IPO, 2018):

- Good marketing of inventions on the market depends on many factors, but each inno-

vator and his partners should first review the market's needs. Currently, Serbia has around 5,000 patents in force (their deadline is maximum 20 years).

- At the international level, only 10% of patents are used: in the USA, from 3,000 just one patent is commercialized, in Germany it is every hundredth, while according to the 2013 surveys in Serbia about 20% of patents are in use (in an absolute amount it is about 250) .

- According to the latest data from the World Intellectual Property Organization, out of 126 countries, Serbia is 47th.

- Innovative companies mostly earn on existing products, and only 15 percent of them make money on new ones. As a barrier to innovation, costs and opportunities for patent financing are most often imposed.

- In 2017 there were 1,264 registered patents, which is 55 percent more than in 2016, when there were 815.

- During 2013, 492 patents were registered in Serbia, out of which 119 are domestic (24%) and 373 are foreign (76%); In comparison, in 2006, there were 925 patents, the ratio was 42:58 domestic to foreign; - which means that the number of patents of domestic authors has absolutely decreased, while foreign patents practically retained at the same level [24].

- In Serbia, 39 patent applications are filed per million inhabitants, in Croatia it is 58, in Germany it is more than 500. In South Korea and Japan, the number of patent applications exceeds 2,000 per million inhabitants[23].

- In the last three years, the foremost innovations are in the field of medicine, agriculture and electrical engineering.

- Education and Information IPO Center operates in our country (<http://www.zis.gov.rs/pocetna.1>).

Based on the analyzed content of comparative published works, for example (Povrenovic, 2011; Radovanović, 2012; Tomic, Pajic, 2017) it is evident that Serbia has enough information and knowledge about the world that affirm positive results through innovations. In the world, a lot subjects work in very professional way, competently with a lot of dedication and perseverance, while this is not exactly the case in our country. Nevertheless, in Serbia has a competitive knowledge of innovations and there are initial results based on the realization of innovative projects. But, there is no firm commitment, patient, enough perseverance and created conditions for innovative activity (that is innovative development) to consistently and broadly represent and effectively and continuously applied system at the level of self-sustaining innovative development. (Tomic et al. 2013; Tomic, Pajic, 2017)

The idea of the author regarding the procedure for conducting the process of identifying the subject of work and reliable implementers of realization of innovative products and services is more widely explained in (Tomic et al., 2014). The procedure with activities of project management from initial research activities to the acceptance of the achieved results (in accordance with the methodology established for EU projects), is illustrated by the appropriate algorithm (Tomic et al., 2014; Figure 9.1). In the above mentioned paper concluded that all depends on a good selection and connection of compatible pairs of patents (by their authors) and SMEs suitable for patent operationalization.

5. RESEARCH AND OPERATIONAL ACTIVITIES FOR SECURING PERFORM RELIABLE ACTION AND RESULTS

For purpose of carrying out relevant research, in order to achieve the aforementioned goals, surveys and questionnaires for the target groups are necessary. Each of the beneficiaries must necessarily and clearly goes with its business-economic, professional and logistic parts.

The authors of this paper created one such questionnaire (see table 1) and conducted an appropriate field research with a team of researchers. This tabular presentation here is reduced only on the average final values of variables and functional characteristics.

The close range of innovation based designs, in conjunction with the established question in the questionnaire, put the following in the forefront:

- The innovation process in the development can be defined as the ability to transform the idea into useful new results in achieving technological innovations.

- Inovative development contributes to accelerated productivity growth, while strengthening the real position of the company on the market. Innovation implies a production and economic dimension, but it also concerns all other domains of life (social, educational, cultural, etc.).

- Innovation, through the identification of the invention and corresponded results (productivity, competitiveness, technological level rise) appears as a need for strengthening science, management and economic development (including globalization and the achievement of benefits through it).

- We must always bear in mind that increase in quality of life is driven by economic growth, in spite of economic growth which does not directly cause an increase in quality of life.

- The innovations provide a much more secure one's own future existence of company.

- The process of transforming the production and selling into a business-marketing and corporate society goes hand in hand with change management.

- The innovation process gives full contribution to the creation of innovative organization. Here are the inevitable cadres, their knowledge and abilities, the style of operation and the total value, which is the parameters of the type of the organizational structure (particularly soft variables).

- It should be noted that continuous success is achieved by the fact that, at the time of the best business results achieved by the company with the existing production programs, company must always have a clearly explored and designed concept of a new production program.

- Only production does not motivate companies, but it makes profitability, in which productivity and technology are not the only means.

- Productivity and competitiveness are a reflection of technological innovation and productivity growth (very significant change in achieving of productivity).

- A significant distance between technological innovation and productivity (although the time gap is more and more shorter) appears in order that technological discoveries can be widely correctly implemented (to the level of the entire economy). All participants increase the productivity growth with operations will be subject to significant changes.

-Technological innovation can be defined as the ability of the economy to engage economically and human resources more rationally in order to lead to better overall business results (at national level, this is reflected in the rise in real income).

- Economic growth is going with the structural knowledge based changes (knowledge is thus the main source of productivity). The new knowledge basically changes the content, style, mode and intensity of the activities of the subjects in the market and the labor market (more profound interests are related to the emergence of a new mode of work, new processes in production, new experiences, etc.).

Regarding the above, it can be said that there is a new technological paradigm (especially if we take into account the organization of new, powerful and flexible information technologies) which enables the information itself to become a product as an output of the production process, or its raw material as an input.

Technological innovations, according to the Schumpeter version, refer to entrepreneurship. However, innovation and entrepreneurship are not a parameter and function (entrepreneurship is not only a goal for themselves) but they are going in package and represent the core of national competitiveness.

The authors investigated a number of models with including results by the research of a large number of scientists and experts. It was necessary to accept some of the postulates of these research. There are also important references such as the following³:

- GCI, (2008); with GCI 2006-7 by WEF;
- GCR, (2008), with report by WEF 2007/2008;
- SDCI, (2008), Strategy for Development of Competitive and Innovative SMEs 2008-2013 in Republic of Serbia.

Here, the theoretical basis has been good, and that a careful research made. The concept and the defined questionnaire for these investigations represent a complementary whole with the previous but gives some new indicators in an interest for rapid application of inventions and their inclusion in level of innovation with market valorization (especially important points need to connect in real conditions in Serbia).

The focus has been on target groups, on typical representatives with their understanding and acceptance of novelties (and changes in general), so the questionnaire was designed precisely for actual entrepreneurs and innovators particularly. Each of them has been own point of view, carefully has considered problems and give realistic answers that should serve for the design of offensive actions regarding the set goal (the innovations and SMEs link). The response was within the limits of the expected. It comes to understand, dedication, reality regarding the evaluation of the proposal and giving forecasts for the realization of innovations.

Profitability as a company's ability to maximize profits with invested funds is also reflected here through the precondition for growth and development of the company, i.e. to be an expression of the economic and social responsibility of the company and to be an expression of the ability of an enterprise to make money by realizing innovative programs.

The responses related to profitability as the yield to the total assets are very important. Response from the field (focused on SMEs) has a very practical dimension and it is possible

3 http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2008-09.pdf

to define an appropriate action plan for improving the implementation of research and innovation projects and achieving appropriate commercial effects based on inventions, through the cooperation of the authors of patents and manufacturing innovative products with the partners-companies from the sector SMEs. In the framework of university-industry cooperation (faculties or research organizations are typically subcontractors), as is usually, individual experts will be appeared in the areas of science, education, transfer know-how, skills and intellectual property management. Operational work in the field, collecting and processing results and performed reliable conclusions were focused on assessing the tendencies and intensity impact of innovation to the business indicators (performances), as well as evaluating the overall innovation-business processes. The basic indicators regarding the selection of good prospective pairs inventor (owner of the patent) and SME (company for patent implementation, manufacturer) related to: innovation, productivity, cost-effectiveness and profitability.

Survey results:

The obtained research results are reflected to the following aspects (Tomic et al., 2014; Table 9.1):

1. The companies from the SMEs group only in Serbia were surveyed (A small sample has been considered and therefore these results will be treated as initial results).
2. There were 10 basic activities or programs.
3. SMEs from Sections A, B, and F (in accordance with the IPO nomenclature) are dominant responded on the questionnaire.

IPO has eight sections (<http://reg.zis.gov.rs/SerbIPC/index.php>):

SECTION A — HUMAN NECESSITIES

SECTION B — PERFORMING OPERATIONS; TRANSPORTING

SECTION C — CHEMISTRY; METALLURGY

SECTION D — TEXTILES; PAPER

SECTION E — FIXED CONSTRUCTIONS

SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING

SECTION G — PHYSICS

SECTION H — ELECTRICITY

4. Identification of the desired innovation and SMEs with their intentions to patents/innovations operationalization are shown in percentages in the following table.

While the cost-effectiveness, E – economy, can easily be expressed as a percentage, P - productivity and R - profitability must be relativized and reduced to the equivalents of the financial indicators or the reference year, Figure 1 and 2. For example, according to the one report a definition is based on the according to the number of employees, and how much work they are able to do (a growth of economic is obviously depending of previous factors), or, as it is simplified, production growth (GDP) can come from a larger number of engaged workers or higher productivity.

There are more and more indications that technological progress (which basically

contributes to innovation) the main driver of labor productivity growth, but it is nowadays slowed down significantly. There are so many questions about that: Will the 21st century be similar to the 19th century, when it comes to productivity growth or GDP, which was on average about 1% per year? A question about the wave of great discovery, commercialized during the technology development 20th century, needs nowadays answers to the new question about possible successfully repeatable similar scale of development in 21st century (Nikolic G., Economic Policy, 15/08/2015). Thus, in the given context, as example, the indicators for 2011 may be compared to 1980 and to comment (GDP was 29.3% lower, employment by 13.5%, and labor productivity by 18.4%). During the period 2012-2015, there was no significant change (cumulative GDP dropped by almost 2%, employment declined slightly year after year, while labor productivity was minimal). At the level of the whole economy, labor productivity in Serbia increased by 66.7% in the period 2000-12, which gives an exceptionally high average annual growth rate of 4.3%. In the same sense, data on the results of the research will be presented in Table 1 (Tomic & Pajic, 2017).

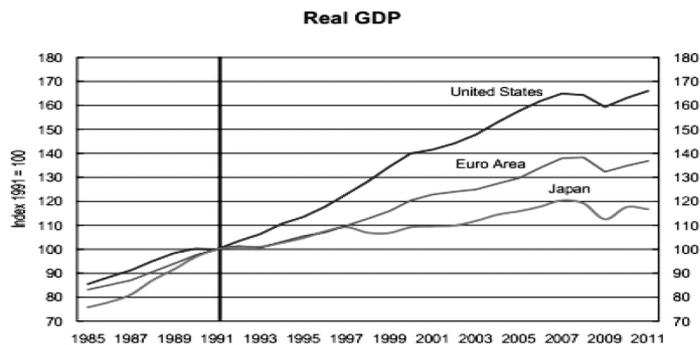


Figure 1. Possible presentation of business results data (average GDP growth, productivity, employment)

Source: <http://www.nspm.rs/ekonomaska-politika> (Nikolic, 2015)

Profitability - R represents the final and definitive expression of the financial result that represents the overall success of the company (this is the decisive measure of the efficiency of the use of the funds involved, the measure of the success of the production activity and business of the company).

Profitability, as a principle, is therefore a tendency to achieve as much profits as possible, with as little engagement as possible. As an expression of overall quality, R expresses the effectiveness of engaging these assets in generating profits.



a) Real GDP



b) Labor productivity growth

Source: a) <https://ftalphaville.ft.com/2012/08/13/1115701/labour-productivity-vs-demographics/>

Source: b) http://www.academia.edu/37619491/Productivity_puzzle_or_real_contradiction (2018)

Figure 2. Possible presentation of data (average GDP growth, labour productivity)

Table 1. Indicators for defining possible actions for achieving innovations in SMEs - Relativized data (period: 2018-2020; reference year: 2017) –

Source: (Tomic & Pajic, 2017)

| Enterprises from the SME group (area, activity) | Total number of employees | Percentage of employees in R&D (%) | Number of innovative projects implemented until 2017 | Innovation at the group level (%) | Evaluation of productivity growth with a new projects at group level (%) | Evaluation of cost-effectiveness at group level (%) | Evaluation of profitability change at group level (%) | Real opportunities and willingness to accept the realization of new products (number of patents) |
|---|---------------------------|------------------------------------|--|-----------------------------------|--|---|---|--|
| A | 247 | 14 | 4 | 4,3 | 6,8 | 1,05 | 2,14 | +3 |
| B | 452 | 7 | 2 | 2,0 | 22,3 | 1,09 | 3,21 | +5 |
| F | 925 | 13 | 11 | 2,6 | 30,2 | 1,14 | 4,24 | +10 |
| Total number of surveyed SMEs: 12 | Total: 1624 | Average: 11,33 | Total: 17 | Average: 2,97 | Average: 19,77 | Average: 1,09 | Average: 3,20 | Total new projects: +18 |

Notes:

1) - Based on the WEF data (2015, 2016, 2017), regarding the value of the Global Competitiveness Index (IGK) per competitiveness pillars (2015-2017), innovation at the country level in Serbia is growing: 2.90 (2015) ↗ 2,97 (2016) ↗ 3.11 (2017)⁴.

2) - The optimal liquidity ratio⁵ (Špoljar et al., 2016) is determined in the range:

- Coefficient of optimal liquidity level I: 1.15 - 1.25

- The second degree optimal liquidity coefficient: 1.05 - 1.15.

The results are in line with the trend of the global competitiveness index for Serbia and the average of the selected countries (Source: WEF (2007-2017)). According to the same source, the two pillars of competitiveness (SEF methodology) are factors of sophistication and business innovation, which have increased the index value. The biggest shift was recorded in the perceptions of the surveyed businessmen about the willingness to delegate the decision making process in the company (1.12 points), to emphasize the quality of local suppliers (0.3 points), as well as the development of the cluster (0.3 points). Indicators within this pillars and the pillar 'Innovation' grew in the range 0.1-0.27 points.

In accordance with (Vušković, 2019), innovation links as well as the creative industry have an increased share in achieving better business results⁶. Some other relevant indicators

4 WEF (2015, 2016, 2017)

5 https://www.veleri.hr/files/datotekep/nastavni_materijali/k_poduzetnistvo_2/6-financijskaAnaliza-pokazatelji-web.pdf

6 <https://www.cea-policy.hr/ulaganje-u-istrazivanje-i-razvoj-nije-vazno-samo->

that relate to the development of SMEs' business can be seen (for example, in the case of Croatia) in <http://www.geniusconsulting.hr/view-indicative-year-plan-the-people-for-msp-ove-in-2018-year>.

On the basis of the results of the preliminary research, it can be concluded that there is a willingness and interest of the SME sector to accept the operationalization of patents and thus achieve better business results in the near future.

Further, with these results, the IPO, CCIS, MESTD and the Ministry of Economy should first acquaint themselves with wide area of real possibilities in Serbia in order to achieve innovative results but and prepare the conditions that authors of patent solutions with the SMEs for efficient in realize their products on the basis of their own innovations. The aim is to use experience industrial realization and market confirmation with commercial effects (representatives of SMEs are obviously able to negotiate and then contract realization of innovative projects based on subject patents and innovations). It is necessary that this action is coordinated by state institutions, with the inevitable participation of CCIS and CCSMEs.

In this sense, there are a few other important remarks. The SMEs Chamber of Commerce (CCSMEs), on the invitation of the Committee on Labor, Social Affairs, Social Inclusion and Poverty Reduction, participated in public hearings on dual education in order to get improving employment (in context accepting or refusing) in the National Commission of Assembly of the Republic of Serbia. It was also confirmed that this kind of education is necessary for all the economies, both for the students and the state, but many problems and doubts about the realization of this project, which is planned for the school year 2016/2017, have been heard.

In the following period, it remains to be seen how the model was invented and what are the first experiences of this type of education in Serbia (in comparison with the achievements and experiences of the developed countries).

6. FINAL REMARKS

Starting your own business as a basic way of increasing employment and stimulating economic development in the Republic of Serbia is still not sufficiently recognized. Promotion and support to entrepreneurship and the creation of new enterprises should be created at the national level, and the implementation of quality process should be established at all levels.

Due to the stimulation of growth and development, competitiveness and innovation of entrepreneurship and SMEs, it is necessary to improve the quality of support (training, consulting services and information), to enable Serbia to compete in the international market and increase the participation of exports in foreign trade.

In underdeveloped and rural areas, the opening of new businesses could be stimulate local development and has a significant impact on reducing the outflow of the population. So, there are a number of key areas which need activities of interest in developing with the SME sector (Tomic & Pajic, 2017).

The programmatic aspects would be the establishment of suitable programs of education, guidance and support to the innovation and SME sectors.

[koliko-nego-i-kako/](#)

The Chamber of Commerce of Small and Medium Enterprises and Entrepreneurs already makes efforts in this regard. In this manner, its members thoroughly analyze all the provisions of the new laws and the consequences of applying them to the economic environment in the country and monitors all developments in the economy. Particular consideration is given to the circumstances that accompany the adoption of amendments to the labor laws and amendments to the law on tax and insurance.

In times of constant changes in conditions and modern business trends, radical changes in parts of the law are not in line with real economic circumstances and market needs. This association has its determination in terms of giving the importance of function and action with defined vision, mission and goals.

There is also a Handbook for Inventors that deals with important topics:

- New achievements and state of the art. At least one significant part of the invention has to be absolutely new (it must be certain that this new aspect, or new aspects, is never described or used for the same purpose).

- Competition and market potential. Does the idea have a strong market potential? One needs to know everything about the specific competitiveness and market potential of the new idea.

- Risk assessment in advance. Simple speaking, we need enough evidences to justify the development of this idea at quality and reliability. This is important for three reasons:

- Even if the idea is new and seems to have market potential, that does not automatically make it worth exploiting.

- At the level of initial research, the idea did not cost much. However, if we decide to go into the stage of commercialization, the costs and risks become logically much higher.

- The idea and especially the use of idea should be constantly considered. How generating the solution evolves - realisation of the project becomes more and more complex then it becomes more difficult for realization. Therefore, one must bear in mind the total potentials, efforts and costs for the operationalization of the idea and the realization of the project (hence, their own skills and abilities, plus procure what is missing especially from external co-operation, what should be based to the genuine and reliable decisions).

Feasibility studies and business plan are essential for making decisions about entering the business to transform the idea, ie the invention, to the level of products and placing them on the market. These documents help everyone (the inventor, the project team, the consortium and the investor, including the customer or the user who monitors the realization of the project, through the interim results from the periodical reports). All of them are waiting for a new more effective product than an existing one to meet their needs and achieve own goals.

In one of the World Bank's World Bank reports, for example, it has given particularly indicative of the growing trend of internationalization of the function of science, research and development in leading transnational companies. Responsible international investors are not only looking for the possibility of reducing production costs by using cheaper labor in less developed countries, but increasingly investing in scientific-research-intensive activities in order to get competitive prices in those countries.

Serbia should take advantages of the current trend, and to open up investment flows and attract investors to those sectors and regions in which programs that involve a high

level of scientific knowledge, extensive research and implementation of results on the basis of such operations are implemented. That is indeed possible.

7. CONCLUSION

The authors, through forward looking discussions, tried to draw the attention to the scientific and professional public, that in the field of innovation management as and the level of engineering management, much has to be investigated, edited and done, and engineering management must be considering as a multidisciplinary problem, from the perspective of technics, technology, economics, sociology, psychology, law etc.

It is a long way to get to valid results and, above all, the results through the impact of engineering management, but it is time to say that the subject area has been adopted, widely accepted and applied, that we understand it, and that we have continually generating better results. The actions and results need to put in the better perspective models in order to get better results with the new rules of behavior in the sphere of life and work (obviously with a new approach to the system's and systematic work).

In accordance with the efforts to reach a higher level of knowledge through different types of education, in the interest of reducing general poverty in Serbia, significant attention must be paid to the relevant aspects of management in R&D activities. (Petrović, 2020)

The existence of the framework program "HORIZON 2020" and the appropriate thematic framework "Industrial Leadership", with topics in the field of development and innovation, is offers exceptional possibilities for implementation and results with increasing performances of the business based on the correct positioning and work of SMEs (especially innovative companies). Hereby just confirmed the research goal to reach commercial results in a pragmatic way through the realization of goods, products and services in a rationally-built industrial environment appropriate to the work of SMEs.

In order to achieve the desired goal, a possible use of model with achieving cooperation between faculties, R&D and innovative organizations, IPO, Serbian Chamber of Industry and Commerce (CCIS), domestic SMEs, EU partners and foreign SMEs.

The results of our research are one of the first real activities in the realization of the program with cooperation authors of patents and SMEs. It is of interest for the improvement of the economic development of Serbia through innovations, whose implementers could be a number of innovative SMEs.

Republic of Serbia already has the first concrete potential stakeholders from the EU and the Western Balkan countries. The following is a precise plan, a principled division of business and indebtedness, and the definition of contractual obligations at the level of imperatively multilateral cooperation between very different participants in the implementation of research and innovation projects. Many of the SMEs and innovators, practically even today, are not aware that they are given the opportunity to achieve very ambitious results with a group of partners from different states and currently different program orientations.

Our future works devoted to this topic will focus on the presentation of the new results and achievements, first of all in relation to projects (in accordance with the framework programs) supported by the EU and MESTD of Serbia.

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