BUSINESS MANAGEMENT, ENTREPRENEURSHIP AND ENTREPRENEURIAL TENDENCIES

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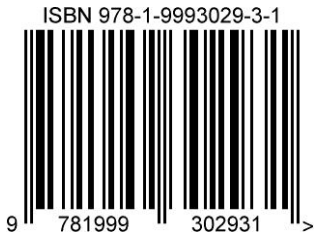

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PREFACE

The rapid rise in research on business management and entrepreneurship shows that theoretical frameworks are still being created, while traditional conceptions are tested. This book critically discusses opportunities for enhancing business management and entrepreneurship in a new business environment. The study also examines the entrepreneurial tendencies and innovativeness perceptions of business development. According to the book concept, it explored many internal and external factors that shape the entrepreneurship success.

With a focus on enhancing entrepreneurial opportunities, universities are shown to respond by creating effective initiatives that benefit the wider community through new knowledge and skills. In addition, the book identifies the close relationship between new technology and business success, communication and effective business management, and government financial support and entrepreneurial business tendencies.

Reflective and thoughtful, this book will be of interest to researchers in the field of entrepreneurship and business management. In line with this, they will find novel ideas for future research and discourse.

September,2018.

In the name of the editors,

Prof.dr Mirjana Radovic Markovic

THE IMPORTANCE OF COMMUNICATION IN BUSINESS MANAGEMENT

Mirjana Radovic Markovic[1]

Aidin Salamzadeh[2]

ABSTRACT

Communication, as a management function is the process of creating, communicating and interpreting ideas, facts, opinions and feelings about work performance, organisational effectiveness and efficiency as well as goals attainment in organisation. A manager must be an effective communicator and no organization can succeed or progress, build up reputation without effective communication skills. Poor communication system may result in mismanagement and bad business results. Our aim was in this paper to show that the success of any business lies in effective communication and that the effective communication is essential for the survival and progress of a business concern. We also pointed out that communication skills need to be developed on an ongoing basis and especially in a turbulent business environment.

Key words: *Communication, manager, organization, business environment, communication system model*

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INTRODUCTION

Communication is the act of sending a message through different media; it can be verbal or nonverbal, formal or non-formal so long as it transmits a thought provoking an idea, gesture, action, etc. Good communication is considered a learned skill. Most people are born with physical ability to talk, but we must learn to speak well and communicate effectively. Speaking, listening and our ability to understand verbal and nonverbal meanings are skills we develop in various ways. We learn basic communication skills by observing other people and modelling our behaviors based on what we see. It is however important here to point out that information is of little use until it is communicated to the person who is to receive it or who has the need for it. Communication threrefore is the process of transmitting, diseminating or passing information from one person to the other or from one place to the other. In other words, communication is the process of creating, transmitting and interpreting ideas, facts, opinions and feelings. It is a process that is essentially a sharing one, a mutual interchange between two or more persons.In addition ,communication is the exchange of information between managers.

THEORETICAL BACKGROUND

Communication researchers have increasingly sought to connect and to integrate effects across levels of analysis, from the "micro" to the macro. The social cognitive theory of Albert Bandura (1986) and the transtheoretical model of Jams Prochaska et al. (1994), for example, recognize that an individuals' behavior is formed in the context of the larger community and social environment. Therefore planned interventions must include efforts to change the larger environment as well.
Similarly, persuasion studies have focused on the chain of individual-level communication processes leading to behavior change. Some researchers tried to explain the shifting nature of organizations as they are formed and transformed through the relational interactions among mem- bers, external audiences, and cultural meaning systems (Cooren, Taylor, Van Every, 2006).

Early studies focused on opinion or attitude change in the context of such variables as the credibility of the information source, fear, organization of arguments, the role of group membership in resisting or accepting communication, and personality differences. Since the 1960s, however, research has emphasized cognitive processing of information leading to persuasion. On the other side, recent investigations have shown that business and management communication becomes a crucial and strategic partner in order for corporations to achieve their goals (Markaki, Damianios Chadjipantelis, 2013).

THE NEED FOR GOOD COMMUNICATION IN ORGANIZATIONS

Communication is an essential part of any company. Moreover, good communication skills are incredibly important in the business world. In some researches we can find many ways to manage and deal with difficult communication. She attests that the point of communication is having a conversation with another person, and this conversation must be two-way in order for communication to successfully occur. This central idea is to remember what is communicated especially during times of conflict. In fact, "you are not being effective when your voice rises, your body tenses, or your temper flares."

Some scientists believe that in order for successful communication to occur, two things must be kept in mind; the first is that everyone has his/her own ideas and perceptions and these must be respected. The second is the idea of closure; that every conversation needs closure. Tucker states that you need to keep in mind that each person comes to the conversation table with his or her own perception of what happened, what exists, or how to do something.

It doesn't help the situation to negate a person's viewpoint without facts and concrete examples of behavior or acts that were considered inappropriate, unprofessional or unacceptable. However, it is important to communicate until you get "closure" on the conversation. Closure means you and the other person have discussed all of the issues and, while the person may not agree, he or she has listened to you in a non-threatening, non-defensive environment and clearly heard what you had to say

This concept is incredibly important to remember in the corporate environment. Companies are made up of various types of employees and managers, each with their own personalities and viewpoints. Therefore, it is important to remember to respect everyone's opinions no matter how different they may be. Also, the notion of closure in a conversation is essential because leaving a conversation up in the air or even with hostility can often result in damaging or breaking business relationships. Good communication is necessary in order for businesses to run successfully and smoothly.

While an organization is separated from its environment, it has to have some ways of communicating with the environment. Anything which is external to a system belong to the environment and not to the system itseif. This is true of all types of organizations. The environment exerts considerable influence on the behaviour of an organization at the same time, the organization can do little or nothing to control the behaviour of the environment.

The environment affects the performance of a system. Using a business organization as an example, the following environmental factors might need to be communicated to it (Radovic Markovic, Omolaja,2009):

- The number of competitors in the market place and the strategies they adopt;
- The product of competitors, their prices and qualities;

- The strength of the domestic currency of the organization' countries of operation;
- The structure of the company and personal taxation;
- The policies adopted by the government of ruling political body/party;
- Social attitute-concern for the natural environment; and
- The regulatory and legislative framework within which the company operates.

An organization need to be kept well informed of all these, and this is possible through the process of communication. Internally, all participants in an organization have to interact, strategies have to be maintained, policies have to be formulated, strategies have to be developed, and programmes have to be planned, executed and evaluated. Also employees have to be renumerated and motivated, decisions have to be made, etc. In fact without an effective and efficient means of communications, there will be no management function. Everything will just have to be incremenetally disjoined in disorderly and disrray manner.

This implies that information is a very vital part of management. Management decisions and policies need be communicated to those that will use them in order to achieve the policy objectives. This is to be done through effective means of communication whithin and outside the organization. Decision, irrespective of its purpose, is useless unless it is communicated. If the Sales Director instance, of some industries for decides to lower the price of product X and institute an interactive campaign, nothing will happen unless the advertising departments is informed and even the other department concerned with preparation of new packaging to lower the price.

At the heart of all communications cysle outside the organization are the messages which should include:

- Developing and positioning experts
- Targeting and connecting with traditional media
- Distributing messages
- Monitoring and measuring the effectiveness of efforts

***The importance of communication for a* manager**

The most effective managers are those who unerstand communication and its use in he organisaion setting. Communication is the vehicle that allows managers to fulfil each management function. To plan successfully, managers must be able of effectively communicate their vision to the rest of the organization (Radovic Markovic ,M. and Omolaja M ,2009). To organize successfully, managers must allow for and encourage free-flowing communication both up and down the hierarchy, as well as between departments and colleagues.

To lead successfully, managers must clearly communicate organizational goals to employees and through that communication, inspire employees to trust in their leadership and to perform at the highest levels possible. To control successfully, managers must effectively communicate with employees to monitor progress to re-emphasize organizational goals, and to correct on-going processes. Consequently, communication is more than simply talking, writing, reading and listening

(Radovic Markovic ,M. and Omolaja M ,2009). Effective communication is the key to successful management.

Communication allows managers to share goals with shareholders both inside and outside the organisation. It permits managers to stimulate behaviour changes in employees and suppliers. It enable managers to inspire loyalty from employees and customers. It allows managers to convice employees and unions to abandom counter productive practices. It enables managers to persuade leaders to provide financing and it permits managers to calm angry customers and to impress new ones.

Hence, managers must be effective communicators to function. But what makes managers successful communicators? First, they must understand what communication is. Next, they must understand how communication works, on both an interpersonal and an organisaional level and finally, they must understand what barriers can impede communication so that they can overcome such impediments and improve communication throught the organization.

In the modern day organizations, communication is popularly considered in terms of; the media of communication such as internal memoranda, reports of various forms, etc; the skills of communi-cation such as giving instructions, interviewing, charing meetings, etc and the organization of commu-nication like chain of command, briefing groups, work committees, etc.

However, communication at its basic levels involves three basic elements or components, which are encoder, channel and decoder. The source or the origin information is known as the encoder. That is, the encoder is the originator of the information to be communicated to the other party. The channel is the medium chosen or to be used in communicating the message or information to other party. The decoder is the person to whom the message or information is being sent. He is the receiver of the message. However, he may, or may not, be the user of such an information.

For instance, if the Managing Director of company 22 telephoned the personnel manager of copany 33, the managing director is the encoder, the telephone line the channel and the personnel manager is the decoder in this exapmle. However, the three of them must always be present regardless of the size or system of communication. A typical communication model may be as presented follows.

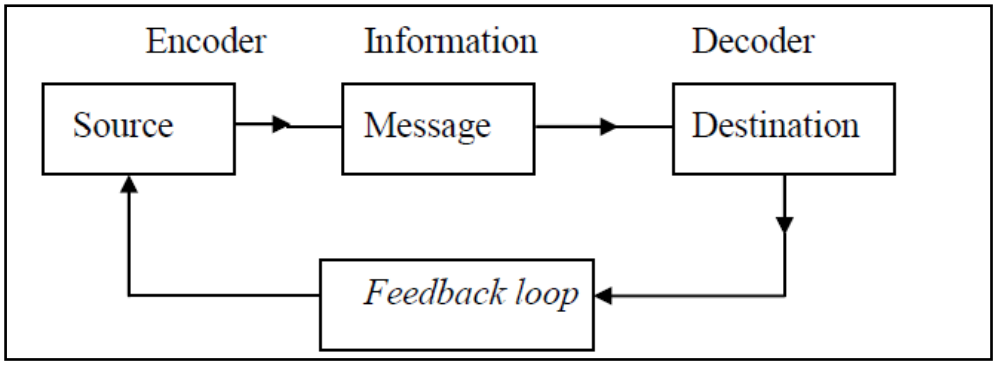


Figure 1: Communication System Model

From Figure 1., it can be seen that communication is the process by which the senders and the receivers of information interact in a given social context. Information conveyed might be message, instruction, idea, view or knowledge. It may be communicated from superior officer to a subordinate officer, and vice-versa. It may also be communicated across among colleagues at the same level or having similar status along the organizations hierarchy.

However, communication process in modern organizations normally follows the pattern bellow:

- The sender has an idea,
- The idea becomes a message. Remember that the process of putting the message into a form the receiver will understand is called encoding,
- The message is transmitted to the receiver,
- The recever gets the message and interpret it, a process known as decoding, and
- The reveicer feedback the sender about the effectiveness of the information that was communicated

From our discussion so far, we would observe that the process of encoding involves determination of the way that the message should be written down or spoken in order to be able to communicate with another person. Variation of words and understaning can however alter the meaning of a message. Facial expression, voice, emphasis and gestures; all play a part in the encoding process when conversation is used. Also, it is clear that the decoding is the process of achieving understanding from the message. Different people derive different meanings from the same message influenced by their experience, attitudes and value systems.

COMMUNICATION METHODS

There are many methods or techniques of communication depending on the nature, scope and level of technology and those of application of information in the organization. For instance, in small scale business organizations like a sole proprietorship (Sole trader or one-man business), small scale dry-cleaning firms, etc., most communications whether between the business owner and the workers or between him and his clients are done on face-to-face personal contacts.

However, as business expands and nature of operations becomes more complex, there will normally be the need for more documentations which necessitates written rather than simple oral communication. This essentially the is the main feature of the medium scale business units like the partnerships, and private and public limited liability companies.

In addition, most of the giant companies especialliy the multi-products, multi-national and trans-national companies, etc, make use of the modern day high technology.In nearly all these companies, most communications are done using computers, telephone, Internet, Intercom, telex, telefax, radiogram, telegram General System of Mobile communications (GSM) and the like.

An organization can choose from variety of channels available for effective communication of busiess or management information across the lines within the system on the basis of its own peculiarities. Also, the nature of linkages between organizational systems will vary, depending on the requirements of each subsystem. Consequently, typical means or channels of communication from among which an organization may choose may be categorised as in the following subsections.

Oral Communication

This express information through the use of languages, which is composed of words and grammar. To create a thought, words are arrangeed according to the rules of grammar so that the various parts of speech are in the proper sequence. Then the message is communicated either in Oral form or Written form.

The expression of ideas through spoken word. Managers communicate with colleagues and employees using such oral media as face-to-face conversion, telephone calls, (including messages left on answering machines), private meetings, group meetings, teleconferencing (the use of telephone equipment to allow people in differing locations to take part in discusion.

Oral communiction is generally easier and more efficient than written communication. It allows for immediate feedback. Managers tend to rely more heavily on oral than on written communication for sharing information on a day-to-day basis, although they generally put important messages in writing.

From this analysis, it can be observed that oral communciation may occur in a face-to-face personal situation or by telephone. Information regarding business can be communicated using the telephone. For instance, an oral contact can be made through the telephone by the sales ledger subsystem to find out when payment of an overdue debt is expected, the request and responses are both provided verbally. A major limitation of oral communication, however, is that, even though it provides a personal and dynamic form of expression, its transitory nature makes it subject to misinterpretation and mis-remembering.

Having discussed oral and communication thus far, attention here will be focused on an indepth study of the potency of oral communication. In this sense, emphasis will be laid on the "Power of word concepts" as it has been revealed right from the beginning of the universe. "Word" itself has been explained by various philosophers and the use or potency of it has almost become unquestionable.The potency or the power of *words* is undoubtable. For instance, in saying prayers, in cursing one another, in praising, etc., word or oral communication is very important.

Knowing the simple ways of saying "I am sorry", "Please", "Let us do it together", "Kindly help me" or even constructive criticism by word of mouth can do a lot to dictate the success or otherwise of an administrator or manager at work, at home, within a society, etc. Consequently, a good administrator should be mindful of what he says all the time with a high degree of consciousness. Once you have altered a word or statement, you cannot deny it; else you become a liar. Hence, a manager can use his word of mouth to damage his or her own chancess

of success at work not to talk of those of his subordinates or evern colleagues. Likewise, the employees can make or mare the corporate objectives of their organization if care is not taken.

Electronic Communication

In many big companies or organizations where computerisation has gained a lot of grounds, much information is transferred between subsystems by computers. Interfaces between modules of computer systems enable automatic transfer of electronic data in the forms of signals and waves. Consequently, detailes of despatches of good from stock might be automatically passed on to the sales ledger or accounting subsystems, so that invoice can be raised.

Electronic communication is also possible for one off messages, for example, through the use of electronic mail. The benefits of electronic communication are speed, accuracy and the elimination of much human processing. Typical examples of electronic communication is the use of internet facilities such as E-mail, voice-mail, etc.

Information systems play a vital role in the e-business and e-commerce operations, enterprise collaboration and management, and strategic success of businesses that must operate in an internetworked global environment. “Access to information and communication technologies (ICTs) implies access to channels and modes of communication that are not bound by language, culture or distance. New forms of social organisation and of productive activity emerge which, if nurtured, could become transformational factors as important as the technology itself (International Development Research Centre, 1996)” Internet services, in conjunction with existing and more widely used communication media, will enable the broadest enhancement of information and communication resources. Other Means of Communication

We can notice non-verbal and non-writen communication. They express information without words, through gesture and behaviour and it is often unplanned, even unconcious while it is governed by few rules. Non-verbal communication and non-writen communi-cations can convey the following meanings:

- *Gestures and Postures.* For instance, learning forward and maintaining eye contact show interest.
- *Facial expressions and eye movement*. For example, genuine smile indicate warmth or approval.
- *Touch.* This can have both positive and negative connotations. It can commu-nicate caring and support as well as intimidation and instrusion.
- *Dress and Personal Traits.* Appreciate communication style, personality and status. In most organization, a professional image is important.

From this section, we would observe that communication methods include written, verbal, formal and informal communication. Written communication encompasses letters, memos, notes, emails and all other forms of writing. Verbal communication includes face-to-face discussions, phone calls, i-chating over the

Internet and group meetings. Both verbal and non-verbal communication is extremely important within the business world and also in people's personal lives. Being able to communicate properly can make uneasy situations or tough times much easier to handle, remaining calm and understanding can lead to resolve of uncomfortable situations. One of the biggest components of being a good communicator is being a good listener. Without the ability to listen you cannot be a good communicator.

Good communication skills are essential in the business world for three main reasons: First ineffective communication can be very expensive. If a business does not effectively and efficiently communicate to its employees its objectives, rules and regulations, along with its business culture, then the employees will not know how to be effective at the work place. If employees cannot communicate with each other, regardless of whether the communication is horizontal or vertical with in the business, things will not run smoothly. Without good communication, things may not get done correctly or even at all, or, work could be done twice, overlapping each other, which can be wasteful and costly. Good communication is essential for the operation of business in all aspects.

Second, the changing environment and increasing complexity of the 21st century workplace makes communication even more important today than ever before. The flattening of business structure and the increase in teamwork at the work place demands good communication skills. Flatter organizations mean managers must communicate with many people over whom they may have no formal control. Without effective communication, teamwork is impossible and will fail to provide any useful outcome. The collaboration of teamwork that allows organizations to capitalize on the creative potential of a diverse workforce depends on good communication.

Third, the world's economy is becoming increasingly global, meaning people need to be able to communicate not only within the organization but also outside the organization and even at times internationally. To be a good communicator internationally, you need to understand who it is you are trying to communicate with. What is their culture? Can something be offensive to others, which is not offensive to us? It is important to be knowledgeable of proper communication skills and to be aware of others culture to be an effective communicator.

We should not believe that either a man or a woman is superior at communicating. Rather, we should believe that both can be effective communicators along as they know who and what they trying to communicate too. Remaining calm and be a good listener are key to being a good communicator. It is possible for both men and women to be great communicators but it doesn't usually come without working at being a good communicator.

When it comes to difficult conversations or having to communicate bad news, it is useful to remain calm, be understanding, listen completely, put yourself in the other's position and be clear when communicating. Although there may be a lot there to grab, if you can do those things, it will be easy to overcome the pain when communication become difficult regardless of the circumstances.

However, although non-verbal communication is also important and useful, without saying anything, someone cannot determine what it is you are trying to get across. Non-verbal communication can be misleading if your point is misunderstood, since you are not directly speaking your intentions. But if the message is correctly interpreted, non-verbal communication may be extremely powerful. In all, good communication is important at the work place and in our personal lives. Without good communication, the message is lost, time is wasted and people can feel betrayed, so becoming both a good listener and good communicator is essential to day-to-day life.

Presentation of communication is also an integral part of a company's success. If an employee has a brilliant idea for reducing cost and they have an opportunity to present it to the President, they must make the most use of the opportunity. Effective presentation skills require practice, patience and the ability to stay calm in stressful situations. Along with presentation skills comes listening. If someone is giving a presentation it is important that you are able to listen and understand. This will help the company if everyone is on the same page. Lastly, there is cross-cultural communication. Language barriers and cultural differences can hinder a firm's productivity and efficiency, thus putting the company at a disadvantage. Overcoming these barriers through increasing communication skills will help the company reach its full potential.

COMMUNICATION FLOW

The communication network of most organizations consists of vertical lines of communication providing upward and downward means of transmit-ting information with a view to integrating mecha-nisms such as committees and work-groups built or developed across these lines. Again, an organization, be it in the public sector or the private sector also provide lateral lines of communication which are considered as having equal significance with the vertical lines.

There is also diagonal or the matrix type structure of communication network, which contains both the features of vertical and horizontal or lateral communication lines. Most comunications among managers or among supervisors across different departments are horizontal, while comunications between superior and subordinate officers in the same departments are siad to be vertical. However, diagonal communicaton involve a suerior officer and a subordinate officer in different Departments.

The greatest tendency in most private and public sector organizations, however, is to consider communication in terms of upward or downward lines of interaction. Particularly, management commu-nicates policies, plans, information and instructions or directives downwards communication is achieved by means of the command chain, while the upward communication is achieved by work-group meetings, joint consultation machienery and by grievance procedures. However, vertical communication tends to be dominated by what flows in the downward direction in most modern day organizations.

On the other way around, the flow of informatin across the organization is rarely comparable with the vertical flow. However, every organization has to make some arrangements for coordinating, integrating or unifying the efforts of more than one department, section or key executive officer, and this may be achieved by means of inter-departmental meetings or committees.

In the University system, for instance, there are Faculty or College Board meetings where staff from different departments meet regualrly to iron out matters which affect the Faculty or College, and to pool and share experience, ideals, etc, among colleagues across the Faculty or College. There are also the meetings of the DEOs (Departmental examination officers and Academic Board or Board of studies meetings comprising only the Heads of Departments or their representaitives.Again, there are committees of various forms such as Disciplinary Committees or Panels, Examination Committees, Transport Committees, Development Committees, Appointment and Promotion Committees' etc. All these serve as avenues for disseminating information across the organization, and the same experience applies in other public and private sectors organizations. It should, however, be stated categorically here that the use of committees is a rational and controlled approach to the problem of integration and it represents about the least that organizations can do to set up lateral or horizontal lines of communication. Where an organization is more organic in its operation, it tends to adopt the use of horizontal lines of communication among people in the same specialisation of working together, and much of the information flowing along such lines is highly technical, task-oriented and facilitate cooperation among work groups. Such information is only passed up the line if it is of particular significance or where it comes under the category of "need to know" for the manager or higher administrator concerned.

Organizations, which operate a system of "Management by Exception", are able to make wider use of lateral forms of communication compared with organizations whose management insists on being kept fully in the pressure of what happens all the time. In organizations that are less concerned with routine duties, management by exception is more popular management by exception implies a high degree of delegation and autonomy where., once responsibilities have been fixed and standards of performance agreed upon, the manager concerned will only ask for information if there is a problem, it is time for a periodic review of progarss or there is a significance deviation from plan, taget, or standard.

The priniciple of management by exception or reporting by exception implies that there are physical and mental limitations to what a manager or administrator can read, absorb and understand properly before taking actions; and enormous mountain of information even if it is all relevant cannot be handled by an average manager.

Reports for management or executive action or decision must, therefore, be clear and concise, and in many systems control, action works basically on the exception priniciple which states that slight variations between actual result and the plan may be considered acceptable while corrective action is only applied when results exceed certain established tolerance or allowable level or standard. This is especially true of practical information.

For illustration, suppose a factory has six production sections and the production manager uses efficiency ratios as tolerance limit in his scheme of control. Also, assume that if the efficiency ration for any section is below 95% or above 110% each week the manager wishes to investigate the reasons for the low or high performance in order to decide whether control action is needed for the week's operaiton of the department. The observed data appears as follows:

Section	Efficiency Ratio
1	99
2	103
3	94
4	106
5	98
6	102

In this example, it is obvious that the manager will only be interested in the poor performance of the sectioon 3. Time and efforts will be saved in preparing a report for the manger if Reporting by Exception, RBE, or Management by Exception, MBE, is applied.

Research has shown that for simple problems, the quickest and most accurate results will be obtained by means of centralised, leader dominated channels of communication. Conversely, for complex problems, the most acceptable results are likely to come from decentralised communication channels where there is greater encouragement to share views, facts, opinions and feelings (Radovic Markovic ,Omolaja ,2009).

FORMAL COMMUNICATION CHANNELS

In the contemporary private and public organizations, the channels of managemet information include the Newspaper, magazines, radio and television announcements / broad-casting, company journals, employees hand- books, notice boards telephone converstion, telex, telefax, telegram, intercoms, post office or postal services, internet, report, pictures, graphics and cartons, personal contact, libraries, and sending errand boys and messagers. Others include information obtained simply by looking round, letter writing, internal memoranda, statutory books, textbooks and the likes. All these are common in the modern day business and non-business organizations as mean of communication.

INFORMAL CHANNEL OF COMMUNICATION

Informal communication structures have no set direction and they evolve from employee's interpersonal and social interactions. It moves primarily through word of mouth and one common form is the grapevine; an informal channel of person to

person communication that is not officially sanctioned by the organisation. Grapevein usually one of four structures as follows:

- *Single Strand Chain:* In the single strand chain, each person passes the information on to one other person. The longer the chain, the more the information is prone to distortion. The usual structure of the single strand chain appears as follows in Figure 2.
- *The Gossip Chain:* In this case, informations is moved slowly because it depends on one person telling everyone else (Figure 3).
- *The Probability Chain:* This is the type of information which has no definite pattern of commu-nication. One person passes along information at random and receiver in turn passes it randomly to others – so some people hear the information and others do not (Figure 4).
- *The Cluster Chain:* This is the most predominat pattern, informaion is passed along selectively. One employee passes information to co-workers, who passes it along to other co-workers. In this grape-vine structure, people relay information to those with whom they feel most conformtable (Figure 5).

When managers and employees don't receive what they consider to be full information from formal channels, they seek it from informal sources. The more the formal communication system withold relevant information from employees, the more employee seek to develop informal communication networks which can often work against the purposes of the formal organization. However, effort to get rid of the grapevine often make it more powerful. Grapevine flourishes in climate of high uncertainty, when information from formal channel is especially scarce. Some organizations have to set up formal communication channel to difuse the anxiety caused by grapevine rumour. Employees consder the grape-vine as a highly credible source, so they cannot ignore information that flows through it. Mangers can use it to unofficially propose new ideans and monitor emp-loyee reaction to them. The response, however, gives clues to how the proposal could be reversed for better acceptance.

Figure 2: A Single Strand Chain

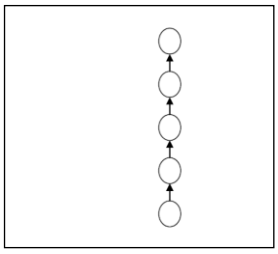


Figure 4.: The Probability Chain

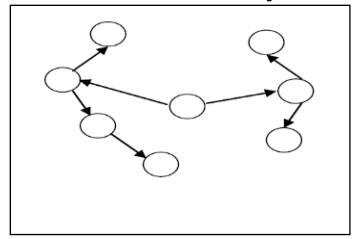
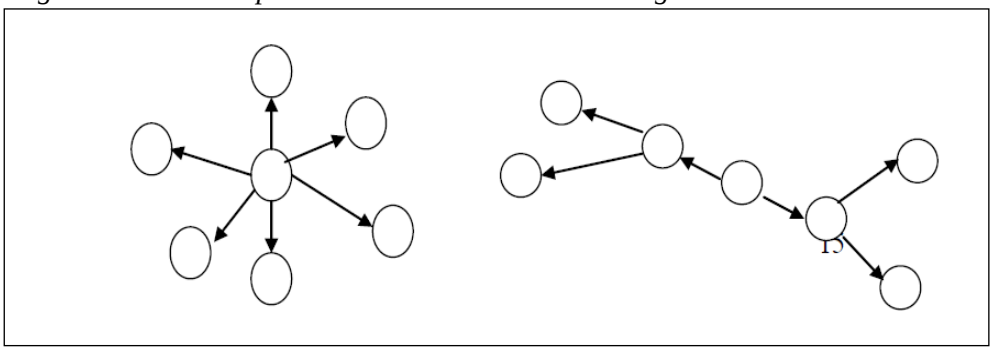


Figure 3: The Gossip Chain *Figure 5: The Cluster Chain*



COMMUNICATION FEEDBACK AND CONTRO

The encoder of an information can not know whether the message therein is effective or not unless, he receives a feedback from the decoder. And it is only when the decoder can "digest" or understand the full meaning and implication of the message that he produce a feedback to the encoder. Hence, the communication model can be represented as follows in Fig 11. that follows. It is when the information feedback is received through the feedback loop that control action can be taken.

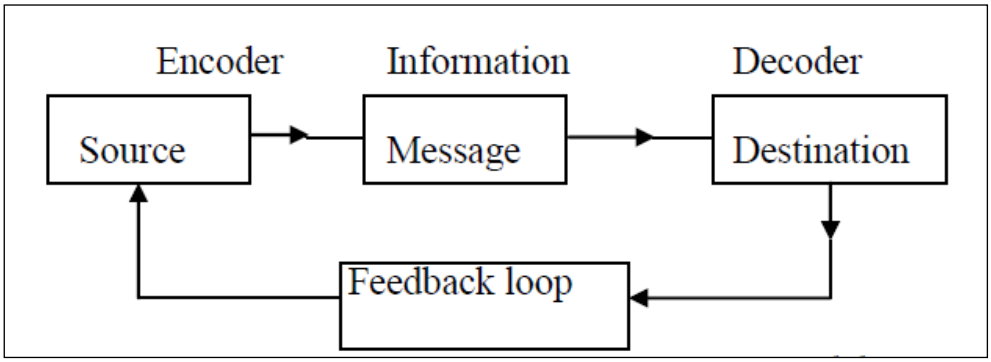


Figure 6:Communication Model

Management control, by the way, is a systematic effort by organizations management to compare performance wiith predetermined standards, plans or objectives. This help to determine whether actual performace is in line with these standard and presumably in order to take remedial action to see that human and/or corporate resources are being used most efficiently and effectively. To be succeful, any organization, whether a factory, local authourity, puplic parastatal or whatever must produce output in the form of goods and services or facilities that meet its objective. A crucial difference, between organizational and mechanical control system, is that in organizational systems, control is exercised by the use of information

In organizational control systems, the basic control information required consists of (a) action by the control unit to alter performance in accordance with the plan, (b) a standard specifying the expected performance, and (c) a measure of actual perfomance. Without a proper communication network, these will be very difficult to achieve.

The system of feedback loops described here allows us to know that control is an integral part of the system and that feedback, based on output measurement, must be fed back to make appropriate alterations to the output. This is a close loop system. A typical close loop management example is a stock control system with a planned level of stock. On the other hand, open loop systems occur where no feedback loop exists and control is external to the system and not an integral part of it. Control is effective when it induces behaviour, which is in accord with achievement of the organizational objectives as specified in the plans.

MANAGING COMMUNICATION IN ORGANIZATIONS

Communication is the key mechanism for achieving integration and coordination of the activities of specialized units at different levels in the organization (Radovic Markovic, 2011). Managing communication in an organization requires more than an understanding of the communi-cation process. Managers must be effective communicators themselves, and they mst also encourage employees to communication effectively. They can plan well and control the working of their organizations. They have the skills to transfer their policies, decisions, objectives and job instructions to the persons working with them at all levels. So these skills are quite essential for businessmen to perform their managerial functions .Such communiation organizations take the parttern of Interpersonal communication, group communication and internal communication (i.e. the exchange of messages among organizational members). Every organization has a formal communication system in which the flow of information is dictated by the offical organisational structure. Formal channels follow the organisation's arrangement of the various levels, divisions, departments and job responsibilities.

In an organisation chart, the line of authority that links the chain of comand are the formal channels managers and employees use to transmit offical information. Formal comminications can take many forms including phone calls, memos, report, staff meeting, department meetings, seminars, company's newsletter and official notices.

Effective vertical communication provides people on lower level with information about plans, schedules, politics and procedures to help them accomplish their work and it provides upper level management with feedback to determine the responses to messages sent downward.

Downward communication is the flow of information from higherst to lowest level in the organizational hierarchy. Managers use it to accomplish a variety of key organizational functions and objectives as follows:

- To clarify and build support for the organization mission,
- To instruct, direct, query or reward employees,
- To explain policies, rules, regulations and codes of practices,
- To provide feedback from management, and
- To share information about the organization's health and about key elements in the external environments.

On the other hand upward communication is the flow of information from lower to higher levels in the organization. Managers encourge upward communication to perform the following important functions:

- To gather valuable information,
- To give employees the opportunity to air grievances,
- To find out when employees are ready for information from management,
- To get feedback from the employees in the forms of reports, complaint, suggestions, advice, e.t.c., and
- To get information about work problems

CONCLUSION

In conclusion, effectively communication can be a very useful tool when it comes to confrontation. At the work place, confrontations do occur; that is no surprise! However, effective communication can put many of these issues to bed if used properly. In a stressful situation, an effective communicator will be able to "defuse" the situation. This applies not only to aggressive confrontations but also to conflicts of interest. One team member may want to follow option A while the wants to follow option B.

The effective communicator will lay out the positives and negatives of both options and gather everyone's opinions on the situation. This not only provides a majority decision but also a calm resolution to a problem. The idea of whether women are better communicators than men is circumstantial. Sure women tend to engage in more and lengthier conversations than men, but this is dependent on personality. There are far too many stereotypes that portray women as talkers and even more persuasive than their male counterparts.

However, this is incredibly subjective. Environment and upbringing is the one factor of whether or not someone, despite gender, can become a good communicator. The argument based on the beliefs of society that deems women as more conversational is simply not enough to support the idea that women make better communicators than men.

There is a certain need for control when it comes to successfully communicating. This control applies to managing of emotions, personal beliefs, and even facial expressions. Emotions aren't always logical and when it comes to business, sometimes emotions tend to get in the way. Emotions such as anger very often can impede the process of a new business plan. Also, clashing of personal

beliefs can often lead to arguments and very often personal home life business should be kept out of the corporate world. Facial expressions tend to be misinterpreted; a slight rolling of the eyes could ruin a potential relationship between client and organizations.

Nonverbal communication can be potentially beneficial for an organization; however, the meanings of the nonverbal messages need to be shared, otherwise they risk being misinterpreted and result in miscommunication. For example, a friendly smile can be used as a sense of encouragement or telling someone they did a great job. However, nowadays it can be misread and seen as a potential sign of flirting. Nonverbal messages often risk becoming misread, however in a company where there are shared beliefs and ideals and little chance of misunderstanding it could be incredibly beneficial.

Technology has come a long way, and as easy as it is for us to communicate with people, it is just as hard to understand. For example, face to face communication is not as common as it once was, therefore, emails and written forms of communication have become more common. Internet services, in conjunction with existing and more widely used communication media, will enable the broadest enhancement of information and communication resources. Although easily accessible, it eliminates the non verbal part of communicating such as facial expressions, tone, pitch etc. Although these things seem minor, they are vital to communicating as they relay sincerity, sarcasm, and other qualities of communication. Without this nonverbal form of communication, people are quick to assume and may not always be assuming correctly.

In this context, the ability to communicate effectively is an essential quality of a businessman. Through successful correspondence, he leads his business to success. Namely, success of any business lies in effective communication and because of that we can conclude our consideration with a statement, "*Take care of communication and success shall take care of itself."*

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INFLUENTIAL FACTORS ON CORPORATE ENTREPRENEURSHIP: THE CASE OF SERBIAN PUBLIC ORGANIZATIONS

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ABSTRACT

In this study we analyzed the internal elements of the corporate entrepreneurship, and their effects on the process of creating innovation organizational culture. The subjects of the research are four public organizations from Serbia. The research instrument was Corporate Entrepreneurship Assessment Instrument based on written permission gave by authors. The data analysis consisted of descriptive statistics, ANOVA, and regression analysis was conducted using SPSS Statistics 19.0. The findings revealed that management support had effected on dependent variables: internal factors such as quickly implementation of new methods; simulating organization clime for new ideas as well as financial support (i.e. There is financial support for new projects; There are several options within the organization for individuals to get money for their new projects and ideas). Limitation of this study and directions for future research are presented, too.

***Key words**: corporate entrepreneurship, strategic management, innovative organizational culture, transition, Serbia.*

JEL Classification: L26, M13, M14

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INTRODUCTION

Since late '70-est XX the term corporate entrepreneurship had various names and definitions. Hornsby et al. (2002) used terms investment and intrapreneurship. For the purpose of this research, we accepted definition of corporate entrepreneurship that gives value to innovative abilities of organizations in process of spreading new ideas in all organizations'. Entrepreneurship could be used for the competitive position improvement and organizational transformation, as well. Many authors point to the significance of the corporate entrepreneurship as a strategy of growth and way for acquiring and maintaining of the competitive advantage (Dess et al., 1999; Kuratko, 1993). Corporate entrepreneurship focuses on increasing the organization's ability to adopt innovative skills. The role of organizational culture is to accelerate the innovation process and promotion of entrepreneurial spirit.

Some authors emphasized increased profitability as one of entrepreneurship goal (Kahkha et al., 2014). Modern business environments could be characterised as complex, heterogeneous, unpredictable, dynamic and uncertain, but two major features are - Complexity and Uncertainty (Kahkha et al., 2014). Start-up and small businesses are more exposed to complexity and uncertainty of environment. This implies that, in order to maintain in today's environment, it is necessary to possess the entrepreneurial capabilities and good interaction with the environment as well. Corporate entrepreneurship is a vital part of export strategy for companies oriented globally. To achieve upstanding results it is necessary that all organization's members are devoted to strategic goal and work as a team. Former demands i.e. independ work are not sufficient for success.

It is very important to consider adopting organizational processes that facilitate entrepreneurial attitudes, thinking and behaviour. In transition environment, the organizations must seek for something new in their functioning, new products, services, suppliers, customers, distribution channels, markets, new marketing, organizational and other technical and non-technical solutions. Corporate entrepreneurship (CE) is vital to a firm’s success, particularly in modern environment (Sebora et al., 2010).

The Corporate Entrepreneurship Assessment Instrument (CEAI) can be used to develop innovative organizational culture (Kuratko et al., 2014, p. 42). Validity assessment of the CEAI have been tested in eight studies - six of their own (Kuratko et al., 2014) and two studies by Rutherford and Holt (2007) as well as van Wyk and Adonisi (2012). This paper contributes to the existing literature by empirical testing CEAI in selected public organizations that work in Serbia. Drawing on micro perspectives on the extensive literature on corporate entrepreneurship, this research attempts to better understand managerial engagement in politics.

The current Serbian economic environment is strongly influenced by the structures inherited from before the transition period, which started during the early nineties, as well as neoliberal policies after 2000, the effects of the 2008 global financial crisis and the second wave of the crisis in 2012. Despite the many negative factors, Serbia has managed to increase its GDP per capita, become an EU membership candidate state and be among top ten European economies by GDP growth rate in 2013.

However, the overall economic environment in Serbia is still rather unfavorable. Economy is still characterized by low competitiveness on a global scale, high public debt and a rather high unemployment rate. The entrepreneurial environment is affected by all elements of the entrepreneurial ecosystem – government policy, regulatory framework, institutions, finance, culture, education, human capital, local and global markets. In order to create a better financial environment it has to be created a solid institutional and legal framework, stimulating entrepreneurship not only through legislative amendments, but also through changes in the education system, organizational culture and influential factors on corporate entrepreneurship.

Entrepreneurship has the potential to address gaps in economic growth, stability, and other measures of well-being in economies all over the world. Yet moving from needs-based entrepreneurship in the informal economy to opportunity-based firm creation can be tough, especially in emerging market economies. And the environment or ecosystem in which an entrepreneur is operating directly and indirectly affects entrepreneurial success and impact.

Hence, the subject of the research is the internal elements of the corporate entrepreneurship, especially management support in four organizations from Serbia. The implementation of a micro politics approach enables to get a detailed insight of the change process in CEE organizations (Newman, 2000; Johnson et al., 2000). The aim of the paper is to stress the role of management support, as other internal element of the corporate entrepreneurship, in creating innovation organizational culture in selected Serbian organizations. In this study we tried to answer on following questions:

1. Which of the five factors influenced on quickly used improved work methods that are developed by workers?

2. Is developing one's own ideas encouraged for the improvement of the corporation determinate by one or more internal factors?

3. Does top management financial support significantly influence on innovation organizational culture?

The subject of this research is to conduct an analysis of the mutual relations of internal elements of corporate entrepreneurship and organizational culture, bearing in mind the insufficient representation of this topic in contemporary literature. The basic research objective is to achieve a substantive shift in the understanding of the nature of the stated interdependence through the targeted review, expand the knowledge base and offer the answer to the question of how through the internal

elements of corporate entrepreneurship the organization will make the organization more innovative and flexible using its own potentials.

The conducted qualitative research includes descriptive study, comparison and interpretation of relevant scientific sources.

The implications of the research are related to a better understanding of the concept of internal elements of corporate entrepreneurship from a theoretical point of view, while a practical contribution is reflected in providing recommendations to managers to encourage concrete variants of entrepreneurial employee initiatives in order to create an innovative organizational culture.

Besides introduction and conclusion part, the paper is structured into three sections. In first section literature review in relation to the concept of corporate entrepreneurship and corporate entrepreneurship measurement is presented as well as brief review of past research; the third one is presented the research methodology. The fourth section elaborated results and discussion.

THEORETICAL BACKGROUND

Contemporary business environment impose the need of examination the effects of its characteristics on organizational performance and competitive advantage in the long term. Many studies have analyzed the effect of environmental and organizational characteristics such as Structure on Performance - and have confirmed the importance of this subject. Many pioneering organizations in the business area could overcome environmental challenges with development and deployment strategies based on entrepreneurial activities (Zahra, 2007). These activities are influenced by internal organizational elements (Zahra, 2007).

Hornsby et al. (2002) claim that the dimensions of the internal environment, including management support for corporate entrepreneurship, work discretion and strengthening programs, access to time and other resources, improve overall organizational scope. Five-dimensional Structure, as a brief description of the internal organizational elements, encourages middle management to accelerate entrepreneurial efforts in the organizations (Hornsby et al., 2002).

Corporate entrepreneurship is influenced by external environmental factors (Miller 1983, Covin & Slevin 1991; Zahra, 1993). Organizational and environmental influences, however, were usually empirically designed as main effects, and rarely as interaction effects on corporate entrepreneurship. Other indirect effects were rarely accentuated. Better financial results are caused by entrepreneurial behaviour. Antonicic and Hisrich (2001) stated that organizational and managerial elements, rewards, motivation, availability of resources for developing entrepreneurship activities and so on, are highly effective in developing organizational entrepreneurship. Further, these findings indicated that the long-term profitability was affected by entrepreneurial activities.

By carrying out the theoretical operationalization of the subject of research into the concept of analysis, we introduce more research results from the theoretical repository.

Research in Croatia revealed that there was no causality (Kahkha et al., 2014). Further research proved the opposite results amongst Slovenian and Romanian companies. Results of other studies demonstrate that organizational entrepreneurship has a great impact on the financial aspect of companies - increasing their growth and profitability (Kahkha et al., 2014).

The results of one study revealed that management support, accepting risk, bonus and promotion, innovation, financial support, time management and organizational fields support entrepreneurship activity in organizations (van Wyk & Adonisi 2011). Another researcher found that organizational characteristics including communication, formal control, external monitoring, management support and value, had positive impacts on corporate entrepreneurship and performance in observed companies in the US and Slovenia.

It is important to measure corporate entrepreneurship for two main reasons. First, measurement tools are necessary for assess the innovative culture and organization ability to participate in corporate entrepreneurial activities (Hornsby et al., 2002). Second, it enables managers to create and to communicate strategy in the process of corporate entrepreneurship (Hornsby et al., 2002). Corporate entrepreneurship measurement is more recent, but its importance is huge. At the organization level, measurement results can be used as parameters to improve operations. Based on the monitoring of performance of entrepreneurial organization there might be established the standards within the industry.

The assessment of a corporate entrepreneurial environment is a prerequisite for the successful implementation to be taken in order to support and enhance corporate entrepreneurship (Hornsby et al., 2002). Measuring their corporate entrepreneurship levels enables managers to assess current position and further activities to create innovative organizational culture (Hornsby et al., 2002).

Some studies revealed relationship between corporate entrepreneurship and job satisfaction (Van Wyk & Adonisi, 2011). Another study pointed causality between the competence of employees and corporate entrepreneurship (Ireland, Covin, & Kuratko, 2009). By improving corporate entrepreneurial activities which lead to improved financial performance, general satisfaction is better (Van Wyk & Adonisi, 2011).

Morris (1999) created the instrument named the index of entrepreneurial performance (EPI). Proactive, risk-taking and innovation are main components of entrepreneural behavior. Thefore, Covin and Slevin (1989) were incorporated into their measurement an instrument. Chronological later, Hornsby et al. (2002) have constructed CEAI. The measurement is focused on individual perceptions of corporate entrepreneurship, which is extremely important given that entrepreneurial behaviour is formed by individuals in organizations.

The Corporate Entrepreneurship Assessment Instrument, focuses employees and their crucial role in corporate entrepreneurship activities (Hornsby et al., 2002). They are active players in the companies. CEAI can be used to improve individual entrepreneurial skills (Van Wyk & Adonisi, 2011). According to same authors, two main characteristics of successful entrepreneur are maturity and self-efficiency.

Using CEAI enables managers to find boundaries and risks in organizational environment. Also, to create corporate entrepreneurship strategy it is valuable method (Ireland et al., 2009), and to increase job satisfaction (Van Wyk & Adonisi, 2011).

All characteristics of corporate entrepreneurship can be syntesized into following five factors (Kuratko et al. 2014, p. 39):

Top management support representing the highest level of readiness of managers to facilitate and promote entrepreneurial behaviour and includes encouraging ideas and providing resources for entrepreneurial activities. An organization's ability to increase entrepreneurial efforts is conditional on compatibility of managerial experience and their entrepreneurial initiatives.

Work discretion, which includes tolerance of failure, delegation of authority and responsibility to managers of medium level. It is important that employees are creative. Participation in decisions that affect the business is perceived as challenging and significant.

Rewards and reinforcement, which is the development and use of the reward system based on performance and highlighting significant achievements and praise. Reward systems are the main source of individual motivation.

Time availability for the initiation of innovation by individuals and groups, and structuring their affairs so as to implement short and long term goals of the organization. To encourage innovation, employees need the time to devote to solving long-term problems.

Organizational boundaries specify the expected results and developing mechanisms for evaluation, selection and implementation of innovations. To stimulate communications especially lateral, organization decomposition and to create multidisciplinary team, corporate entrepreneurship is very important.

The preliminary testing of internal reliability by Hornsby et al. (2002) brought following Crombach alpha for five aforementioned factors: 0.89; 0.87; 0.75; 0.77, and 0.64 respectively. Only scale organizational boundaries failed by Nunnally's criteria - alpha at least 0.70 (1978). There are many studies that have been used CEAI (Adonisi, 2003; Brizek, 2003; Wood, 2004; Rhoads, 2005; Davis, 2006; Rutherford & Holt, 2007; Goodale et al., 2011; van Wyk & Adonisi, 2012).

Therefore, CEAI had been tested on selected organizations in Serbia. The results were: Cronbach's Alpha for all scale was 0.927. Crombach alpha for five aforementioned factors were 0.918; 0.782; 0.743; 0.465, and 0.696 respectively (Author2, 2011).

The scientific contribution of the research is to better illuminate the phenomenon of corporate entrepreneurship from the theoretical point of view, to deepen the knowledge base and to better understand the connection of the internal elements of corporate entrepreneurship with the concept of organizational learning and innovative organizational culture. The expected implications of research are to improve business practice relate to clarifying the importance of internal elements of corporate entrepreneurship as factors that management should especially focus on when building an innovative organizational culture, as well as the fact that entrepreneurial activities of employees in the organization are directly conditioned by managerial approach and support.

RESEARCH METHODOLOGY

The choice of the company determinates by personal contacts with top management who were willing to participate in this study. We were focusing on public sector, therefore, one organization belongs to media sector, two organizations belong to government sector, and fourth organization belongs to financial services sector. The Serbia is case in point.

Respondents from particular company differed in their hierarchical and functional positions.

The study was conducted directly, i.e. the managers were not known questions ahead of time. This was important to avoid any behavioural bias in the responses. To encourage participation, the questionnaire provided a degree of anonymity (i.e. it did not include financial information pertaining to the company or personal information about the respondents). Electronic and hard-copy versions of the questionnaire were offered for the convenience of respondents.

We attribute this high response rate (83.5% response rate) to the survey insiders who used their business contacts successfully and to the intensive communications regarding the survey materials.

Respondent's profile in the observed companies varied by gender, age, education level, work experience, and managerial position (see Table 1.).

Table 1: Respondents' profiles

Characteristics		**Frequency**	**Valid Percent**
Gender	Female	115	76.2
	Male	36	23.8
Age	21-30	19	11.4
	31-40	55	33.1
	41-50	51	30.7
	Over 51	41	24.7
Education level	High school	44	26.7
	College	16	9.7
	University	92	55.8
	Postgraduated	13	7.9
Work experience	5 or less	33	20.1
	6-10	23	14.0
	11-20	52	31.7
	Over 21	56	34.1
Managerial position	Not	126	78.8
	Middle	25	15.6
	Top	9	5.6

Source: Authors' calculation

From the Table 1 it can be concluded that the most respondents are in the most productive managerial age (middle age and sufficient management and work experience), large percentage of respondents have been educated at the university level, but a lack can be noticed related to the managerial position, given the rather large percentage of respondents have not been at the managerial position.

The research instrument was the CEAI used according to written permission gave from Kuratko et al. (2014) (see Apendix 1 Research instrument). Respondents explained their current views of internal factors in their organizations on the scale from 1 - disagree strongly to 5 - agree strongly.

The research took place from June 2016 to September 2016.

For the purpose of data analysis, descriptive statistics, ANOVA, and regression analysis were computed. Data analysis was conducted using SPSS Statistics 19.0.

RESULTS AND DISCUSSION

Regression analysis was conducting on five factors from CEAI on the following dependent variables: 1. Internal changes (questions 2. and 3), and 2. financial support (questions 10 and 12). The results of the regression analysis, as a reliable method of identifying which variables have impact on a topic of interest, are presented according to research questions.

4.1. Which of the five factors influenced on quickly used improved work methods that are developed by workers?

Table 2: Regression - Pit 2

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.732(a)	0.54	0.52	0.78

a. Predictors: Organizational boundaries, Management support, Time availability, Rewards, Work discretion

Source: Authors' calculation

The process of performing a regression allows to confidently determine which factors matter most, which factors can be ignored, and how these factors influence each other.

Table 3: ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	113.79	5	22.76	37.25	**0.000**(a)
Residual	98.37	161	0.61		
Total	212.16	166			

a. Predictors: Organizational boundaries, Management support, Time availability, Rewards, Work discretion

b. Dependent Variable: My organization is quick to use improved work methods that are developed by workers.

Source: Authors' calculation

The one-way analysis of variance (ANOVA) is used to determine whether there are any statistically significant differences between the means of three or more independent (unrelated) groups.

Table 4: Coefficients (a)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Management support	**0.07**	**0.01**	**0.81**	**10.85**	**0.00**
Work discretion	-0.01	0.01	-0.06	-0.75	0.45
Rewards	-0.03	0.02	-0.11	-1.43	0.15
Time availability	0.03	0.02	0.08	1.20	0.23
Organizational boundaries	0.00	0.02	-0.02	-0.24	0.81

a. Dependent Variable: My organization is quick to use improved work methods that are developed by workers.

Source: Authors' calculation

Management support had effected dependent variable i.e. My organization is quick to use improved work methods that are developed by workers. Therefore, we can conclude that other four factors have not significant influence on depended variable.

4.2.Is developing one's own ideas encouraged for the improvement of the corporation determinate by one or more internal factors?

Table 5: Regression - Pit 3

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.735(a)	0.54	0.53	0.77

a. Predictors: Organizational boundaries, Management support, Time availability, Rewards, Work discretion

Source: Authors' calculation

Table 6: ANOVA (b)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	112.45	5	22.49	37.77	**0.000**(a)
Residual	95.86	161	0.60		
Total	208.31	166			

a. Predictors: Organizational boundaries, Management support, Time availability, Rewards, Work discretion

b. Dependent Variable: In my organization, developing one's own ideas is encouraged for the improvement of the corporation.

Source: Authors' calculation

Table 7: Coefficients (a)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Management support	**0.07**	**0.01**	**0.74**	**9.93**	**0.00**
Work discretion	0.01	0.01	0.06	0.84	0.40
Rewards	0.00	0.02	-0.02	-0.21	0.83
Time availability	-0.01	0.02	-0.03	-0.41	0.68
Organizational boundaries	-0.02	0.02	-0.08	-1.20	0.23

a. Dependent Variable: In my organization, developing one's own ideas is encouraged for the improvement of the corporation.

Source: Authors' calculation

Management support effected on dependent variable i.e. In my organization, developing one's own ideas is encouraged for the improvement of the corporation. Other four elements have not statistically significant influence on employees' creativity.

4.3. Does top management financial support significantly influence on innovation organizational culture?

To answer this research question we were calculating two regression models, in both predictors have been five original factors from CEAI, but in the first model depended variable was question 10. "Money is often available to get new project ideas off the ground". The second model had question 12 as depended variable "There are several options within the organization for individuals to get financial support for their innovative projects and ideas".

Table 8: Regression - Pit 10

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.629(a)	0.40	0.38	0.75

a. Predictors: Organizational boundaries, Management support, Time availability, Rewards, Work discretion

Source: Authors' calculation

Table 9: ANOVA (b)

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	60.20	5	12.04	21.12	**0.000**(a)
Residual	91.77	161	0.57		
Total	151.96	166			

a. Predictors: Organizational boundaries, Management support, Time availability, Rewards, Work discretion

b. Dependent Variable: Money is often available to get new project ideas off the ground.

Source: Authors' calculation

Table 10: Coefficients (a)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Management support	**0.04**	**0.01**	**0.57**	**6.62**	**0.00**
Work discretion	0.02	0.01	0.09	1.07	0.28
Rewards	0.01	0.02	0.03	0.36	0.72
Time availability	-0.02	0.02	-0.05	-0.74	0.46
Organizational boundaries	0.00	0.02	0.00	0.05	0.96

a. Dependent Variable: Money is often available to get new project ideas off the ground.

Source: Authors' calculation

Financial funds were dominant decision of top management. Therefore, only management support had influenced on this depend variable.

Table 11: Regression - Pit 12

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.677(a)	0.46	0.44	0.79

a. Predictors: Organizational boundaries, Management support, Time availability, Rewards, Work discretion

Source: Authors' calculation

Table 12: ANOVA (b)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	85.64	5	17.13	27.20	**.000**(a)
Residual	101.39	161	0.63		
Total	187.03	166			

a. Predictors: Organizational boundaries, Management support, Time availability, Rewards, Work discretion

b. Dependent Variable: There are several options within the organization for individuals to get financial support for their innovative projects and ideas.

Source: Authors' calculation

Table 13: Coefficients (a)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Management support	**0.06**	**0.01**	**0.71**	**8.82**	**0.00**
Work discretion	-0.02	0.02	-0.12	-1.48	0.14
Rewards	0.01	0.02	0.04	0.53	0.60
Time availability	0.02	0.02	0.07	0.95	0.34
Organizational boundaries	-0.02	0.02	-0.09	-1.22	0.22

a. Dependent Variable: There are several options within the organization for individuals to get financial support for their innovative projects and ideas.

Source: Authors' calculation

Management support effects on dependent variable i.e. There are several options within the organization for individuals to get financial support for their innovative projects and ideas. Other four factors from CEAI have not significant effect on the financial support.

This research provides evidence that management support is the most important critical success factor for corporate entrepreneurship success and is not simply one of many factors.

Managerial support is described as having a direct positive link on the levels of corporate entrepreneurial activity exhibited in organisations i.e. on innovation organizational culture in general, on employee innovative projects and ideas, and on using improved work methods that are developed by workers.

The results further suggest that firms need not to overemphasise rewards and freedom and discretion to employee, but rather strive to create a supportive organisational structure along with a collaborative work environment and support from leaders in the entrepreneurial initiatives.

CONCLUSIONS

Application of the corporate entrepreneurship should enable the formatting requirements for successful market performance and to achieve competitive ability of enterprises in the transition economies. Successful modern business will depend on the attitude of enterprises regarding the growing need for knowledge and application of the latest technological achievements in the management of the company and their abilities to transfer information to the target group of consumers and customers in the fastest, most comprehensive and most effective way.

The results of this research explicitly point out that for the construction of entrepreneurial and innovative organizations in the XXI century, management support is essential in order to create the creative power of employees and the cognitive capacities of the organization.

The purpose of this paper was to contribute to a wider understanding of the influental factors on the corporate effectiveness in order to create innovative organizational culture.

Innovative organizational culture can be encouraged by developing a positive attitude towards the need to innovate, a change in the basis for just innovative activity. Then, the constant support of new ideas, the interaction of working with others, tolerance and failure to innovative activity, ensuring the absolute freedom of the initiatives of thinking and creating innovation and, finally, recognition of the initiative, lead to the maintaining enterprises' competitive advantage and financial performance in the long term. All organizations operating in transition economies should stimulate entrepreneurial behaviour preconditions for successful market competition globally. Organizational characteristics including communication, formal control, external monitoring, company's values, have positive impacts on corporate entrepreneurship and organization performance.

The results of this study revealed that CEAI can be useful assessment tool to highlight internal organizational factors with respect to innovation organizational culture in Serbian environment. Limitation of the research indicated number of organizations as well as number of respondents. The future study will include more organizations from different industries.

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APENDIX 1. RESEARCH INSTRUMENT

The corporate entrepreneurship assessment instrument (CEAI)

We are interested in learning about how you perceive your workplace and organization. Please read the following items. Using the scale below please indicate how much you agree or disagree with each of the statements. If you strongly agree, write ‘‘5.’’ If you strongly disagree write ‘‘1.’’ There are no right or wrong answers to these questions so please be as honest and thoughtful as possible in your responses. All responses will be kept strictly confidential. Thank you for your cooperation!

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

Section 1: Management support for corporate entrepreneurship

1. My organization is quick to use improved work methods.

2. My organization is quick to use improved work methods that are developed by workers.

3. In my organization, developing one’s own ideas is encouraged for the improvement of the corporation.

4. Upper management is aware and very receptive to my ideas and suggestions.

5. A promotion usually follows from the development of new and innovative ideas.

6. Those employees who come up with innovative ideas on their own often receive management encouragement for their activities.

7. The ‘‘doers on projects’’ are allowed to make decisions without going through elaborate justification and approval procedures.

8. Senior managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.

9. Many top managers have been known for their experience with the innovation process.

10. Money is often available to get new project ideas off the ground.

11. Individuals with successful innovative projects receive additional rewards and compensation beyond the standard reward system for their ideas and efforts.

12. There are several options within the organization for individuals to get financial support for their innovative projects and ideas.

13. People are often encouraged to take calculated risks with ideas around here.

14. Individual risk takers are often recognized for their willingness to champion new projects, whether eventually successful or not.

15. The term ‘‘risk taker’’ is considered a positive attribute for people in my work area.

16. This organization supports many small and experimental projects, realizing that some will undoubtedly fail.

17. An employee with a good idea is often given free time to develop that idea.

18. There is considerable desire among people in the organization for generating new ideas without regard for crossing departmental or functional boundaries.

19. People are encouraged to talk to employees in other departments of this organization about ideas for new projects.

Section 2: Work discretion

20. I feel that I am my own boss and do not have to double check all of my decisions with someone else.

21. Harsh criticism and punishment result from mistakes made on the job.

22. This organization provides the chance to be creative and try my own methods of doing the job.

23. This organization provides the freedom to use my own judgment.

24. This organization provides the chance to do something that makes use of my abilities.

25. I have the freedom to decide what I do on my job.

26. It is basically my own responsibility to decide how my job gets done.

27. I almost always get to decide what I do on my job.

28. I have much autonomy on my job and am left on my own to do my own work.

29. I seldom have to follow the same work methods or steps for doing my major tasks from day to day.

Section 3: Rewards/Reinforcement

30. My manager helps me get my work done by removing obstacles and roadblocks.

31. The rewards I receive are dependent upon my innovation on the job.

32. My supervisor will increase my job responsibilities if I am performing well in my job.

33. My supervisor will give me special recognition if my work performance is especially good.

34. My manager would tell his/her boss if my work was outstanding.

35. There is a lot of challenge in my job.

Section 4: Time availability

36. During the past three months, my workload kept me from spending time on developing new ideas.
37. I always seem to have plenty of time to get everything done.
38. I have just the right amount of time and workload to do everything well.
39. My job is structured so that I have very little time to think about wider organizational problems.
40. I feel that I am always working with time constraints on my job.
41. My co-workers and I always find time for long-term problem solving.

Section 5: Organizational boundaries

42. In the past three months, I have always followed standard operating procedures or practices to do my major tasks.
43. There are many written rules and procedures that exist for doing my major tasks.
44. On my job I have no doubt of what is expected of me.
45. There is little uncertainty in my job.
46. During the past year, my immediate supervisor discussed my work performance with me frequently.
47. My job description clearly specifies the standards of performance on which my job is evaluated.
48. I clearly know what level of work performance is expected from me in terms of amount, quality, and timelines of output.

Permission for use

On Tuesday, May 3, 2016 12:11 AM, "Kuratko, Donald F" <dkuratko@indiana.edu> wrote:

Dear Professor Author1,

You have our permission to use the CEAI instrument for your study. I have attached the latest article that explains how to use the instrument. Please make sure to cite this article in your study. I wish you all the best in your work.
Regards,
Dr. K

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UNIVERSITIES LEAD THE CONTEMPORARY INNOVATION AND ENTREPRENEURSHIP

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ABSTRACT

The replete progression in Research and Development (RD) has led the community users to think out of the ordinary circle of life. It has evolved from its original approach that was mainly performed in governments and firm's laboratories to a new open and user-centric approach that is more and more adopted as innovation approach for product and service development. The so-called 'Living lab' is one of the concepts that have recently emerged which put users at the centre of the innovation process. This concept operates in a real-world setting and is been organised in a network that is established in various physical places such as universities. Innovation in product and service were often based exclusively on technological possibilities not on the actual needs of customers because of the constant pursuit of achievement of very quick return on investment. This has to lead the customers and other stakeholders to collaborate, integrate and participate directly in the development process in order to minimise the risks. Living labs concept provides the ways for users to participate in emerging value networks and can act as a developer, creator, producer and innovator which also enhance their entrepreneurial activities. The approach relates the way of research and development methodology where innovations are created and validated collaboratively between and the living lab stakeholders in multi-contextual, empirical real-world settings.

An exploration of the origin and roots of this concept is carried out in this research along with the explanation of the visions and the bottom-up approach of living lab-characteristics. It also investigates the Living Lab approach of user-driven innovation and its impact on innovation and entrepreneurship with a focus on universities living labs. The research will also focus on the user involvement process, their input, and will explore all the aspect of the concept in order to determine if innovation and entrepreneurship is led by community users in the actual context in the world of open and user innovation approach.

Key words: *innovation, entrepreneurship, living labs*

JEL Classification:*L26*

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INTRODUCTION

There is a growing body of literature addressing user innovation and entrepreneurship through a living lab in the academic environment. However, the literature does not widely explore the impact of community users on innovation as well as on the performance of entrepreneurial activities via the living lab concept. Living lab approach popularity is significantly increasing particularly in the universities that are real-world locations to conduct applied research and where an important amount of untapped human resources that seek for a favourable environment to express their skills and develop their ideas and projects is concentrated. The concept has been adopted by many universities in the UK and is continuously growing with various programs that involve the student, researchers, management, university staff, user community etc.

The evolution of the technologies and the changes that have intervened in the business world with the globalisation have considerably impacted on the ways that research and development (R&D), businesses as well as entrepreneurial activities are conducted around the globe. R&D has moved from its traditional way of technological research, innovation and entrepreneurship that was performed exclusively in laboratories by big firms and government to a wide, new, modern and open innovation through concepts such as living labs. It involves a large number of various stakeholders such as universities, public agencies, institutes, users and those that share the philosophy of open and user innovation to co-create, co-develop, co-innovate, test and improve available and new technologies, services, products, and systems in a real-life situation.

Nevertheless, the real contribution of this concept in the involvement of the user in innovation and entrepreneurship is yet to be determined. It is, therefore, important to carry out a deep evaluation of the results obtained with the active participation of community user in the living labs projects. Hence, the research on living labs in the universities will enlighten on the role and the importance of community user in the innovation process and help to understand the level of user involvement and contribution in their projects through the concept. On the other hand, living labs concept promote user entrepreneurship through the development of their ideas and projects into a market value product, services and applications that will result in the creation of a business.

LITERATURE REVIEW

Living labs concept has gain momentum since its launch in 2006 by the European Union. The concept which is characterised by open and user-driven innovation focus on the involvement of the users in the innovation process and allow different partners such as governments, companies, universities etc. to work together to develop products and services that fit users' needs and provide solutions

to sustainability issues. Living labs result from the evolution in research and development (R&D) concepts and strategies and the accessibility to new technologies has enabled the involvement of users in the development of products and services. This concept is established in various environments and diverse participants are identified such as universities provide the perfect environments for living labs due to their innovation capabilities and the variety of users that can be reached (Shuurman, 2015). R&D which was previously confined into government and private companies and institutions laboratories has to move to a new and innovative concept of collaborative ways for products and services development that place users at the centre of the research (Ballon, et al., 2007). The ability to innovate is closely related to who is involved in the projects and the characteristic of the system innovation. The creation of new products depends on the creative collaboration of individuals in teams. Redesigning innovation systems, nevertheless, necessarily involves building a partnership with various actors who will be co-creators, co-innovators, co-designers and co-developers as well as testers, marketers, distributors etc. that are created as constellations of actors lined up around them.

Various concepts have been used to promote collaborative innovation, co-creation and co-development which includes different partners in the innovation process (Almiral and Warreham, 2007). However, difficulties have been noticed in similar concept experimented by various private and public organisations for the production of real market value and sustainable products (Folstad, 2008). Innovation systems that are established through alliances of various actors create value if they share it. However, this value need be captured by all the partners in order to grow. Consequently, a social contract is needed for the repartition of the value between the members of the innovation system. Economic agreements are required for these social contracts to define how the value is divided and policies, technical standards and design rules to permit the association of the contributions of the different partners. Different versions of these contract are designed for innovation from open source.

LIVING LAB: AN ENTREPRENEURIAL CONCEPT

Living labs is a network that includes open innovation and place users at the centre of the process. The creation of new technologies, products and services is the main objective of business organisations which collaborate with various partners including users in an established network such as living labs that involves open innovation and places users at the centre of the process (Chesbrough, 2006). It associates users in the development of applications, products, and services, they have the potential of creation when offered the materials and the financial support, and reveal important business opportunity that can be transformed into a real business (Lynch and O'Toole, 2009). According to Almirall and Wareham (2011), living labs are established as a leading institution in the process of filling the gap between research leadership and ‘‘commercial success" of innovation.

Leminen et al. (2012), stated that living labs involves various stakeholders such as universities, institutes, public agencies, users and those that share the philosophy of open and user innovation to collaborate for creating, developing, improving, prototyping, validating and testing available or new technologies, products, services, and systems in a real-life situation; they are synergy spaces, physical regions or virtual realities. As per Bergvall-Kåreborn, et al. (2009) living lab is an approach that enables user influence in open and distributed innovation processes in a user-centric innovation milieu that engages all relevant partners in real-life contexts and is built on daily practice and research with an aim to create sustainable values.

According to Shuurman and De Marez (2012), the crossroads of open innovation and user innovation frameworks is where living labs concept of innovation has emerged from. The concept considers the user as an active participant in the innovation process and it is used in any way as the study of the different setups and conceptualisations of living labs (Shuurman et al., 2013). Buitendag et al. (2012), pointed out the crucial importance of collaboration and knowledge support activities for the success of a living lab. In addition, the concept of 'innovative districts' small regions by Cosgrave et al. (2013) is linked to the multi-stakeholder aspect of living labs, that associates innovative actor such as technology and creative industries, start-ups, and venture capitalists. The government support and the collaboration between firms characterise these 'specifics growth'. living labs are connected to the literature of triple and quadruple helix-models from its main characteristic of involving multiple stakeholders and enabling the collaboration between government, industries, universities, and end users (Arnkil et al., 2010). For instance, Shuurman et al. (2012), argued that the collaboration between these stakeholders have reduced the barriers to information flows between them especially the academia and the industry. Many authors explored the living lab innovation approach the study of the components and the different set up which reveal the specific characteristic of living labs to conduct researches in a natural setting.

The technical infrastructure reproduces the natural environment (e.g. laboratory setting) or, desirable, that the collection of user behaviour in the user's daily environment is enabled by the technical infrastructure. Users activities in this environment can consist in operating a given device, fixed or mobiles networks in the lab, sensor networks, etc. Hence, Ståhlbröst and Holst (2012), supports that living labs operations are enabled by this infrastructure both for long-term activities (e.g. monitoring of user activity) as well as short-term activities (testing and evaluating products or services) in the case of technical network and devices. Adding to that, Feurstein et al. (2008), views living labs as a systematic innovation approach that enables the direct involvement of all stakeholders in a product, service or application in the development process.

Terninko (1998), viewed systematic Innovation as an analytical process and set of practical tools that can be used to develop or improve products, process or services that deliver new value to customers. It helps improving the ability of solving problems through a set of permanent evolving tools and it impulses the

development of a process that simplifies the conceptualisation of an innovation as well as the identification of the technical problems related to the creation of the new products or services and proposes solutions that help to overcome those constraints which are vital in the innovation process. Also, the synergy and cooperation between the different stakeholders in the living lab infrastructure are pointed out by Pasman et al. (2005) through the illustration of the importance of an innovation ecosystem. From the empirical exploration of numerous Living Labs, Leminen et al. (2012) identify four living lab actors in respect of their role: utilisers, enablers, providers and users.

Utilisers wish to create within the living lab ecosystem their businesses, particularly over the short term living lab projects; their main objectives consist on creating and testing their new innovations. The living lab represent a perfect environment for the utilisers to experiment, collect and monitors data on test-users of their innovative products, services and applications through the participation of all the stakeholders in the living lab ecosystem. These actors can be considered as short-term, ad hoc 'consumers or partners of the living lab'.

Providers are usually private firms that get involve in living lab to co-create and co-develop new products, services, applications and solutions specific to their business or industry needs and target mainly long-term results. They reach these objectives with their active participation in the general living lab activities and in the living lab projects ran by utilisers. Their product and service portfolio is brought to the other actors in the living lab for the research purpose and they put considerable effort to maintain a proper research environment used for the living lab operations.

Enablers refer to different public sector actors, venture capitalists, non-government organisations, development organisations, municipalities or towns.

They facilitate the start-up and maintain the living lab operations through the provision of necessary resources mainly finance or policy support.

Users refer to 'end-users' that have been given a role through their involvement in the living lab activities for a specific project. While in some living labs the actual user group or community user are involved, other living labs enable to the creation of a community user living lab. They are considered providers in the typology of Leminen et al. (2012) academic researchers due to the fact they bring the fundamental expertise on user research. Furthermore, Perkman and Walsh (2007), pointed out the crucial position of universities as a major actor in the innovation ecosystem as mentioned in other research such as the triple and quadruple helix concepts. The input of the universities is wide and cover a various aspect of the research such as the research of technical topics connected to the living lab or policy and business researchers, and it is not restricted to the user research.

COMMUNITY USERS BRINGS INNOVATION

Innovation is a "change in the thought process for doing something, or the useful application of new inventions or discoveries" (McKeown, 2008). It has been characterised as a linear process at the beginning that is directed and monitored by firm developers of goods and services for the marketplace. Nevertheless, an important change took place through its evolution from the linear process to more what has been described as a network model that includes various partners collaborating to support innovation. The triple-helix model of engagement is increasingly one of the most used models from the numerous forms of the partnership of interaction (Etzkowitz, 2003). The industry, the government and the academia are the three types of stakeholders involve in this model often called academic-public-private partnerships. Moreover, three type of innovation process is identified by Dechezleprete et al., (2008): bottom-up, user-led innovation and living labs. Current societal challenges include carbon dioxide emission reduction, urban renewables and healthcare transformations, enhancements to public services as well as product systems modernisation. The integration of community real needs with the research and development that would assist on the providing solutions to issues and social demands through real-world experiments is the main subject of many research forums (Jerzmanowski, 2008).

User's perspective is significantly taken in to account in the process of joggling the gap between technology transfer and refining products and services in the industries. For instance, Stua (2013), supported that societal challenges can be addressed by technological innovation adoption through open and systematic innovation in a wider context. Systematic innovation is an interconnected set of innovations or technologies in relation to community users' involvement in practices and behaviours based on organisational adoptions of legal and financial aspects. The discovery of causes, interventions, dependencies and interactions in a hyper-complex innovation system are somehow difficult (Wielemaker and Gedajlovic, 2011). Exploring the procedure and the requirements for community users' involvement and their impact on innovation and entrepreneurship is, therefore, an important matter that should be addressed. It is therefore important to understand and address the systematic nature of cross-border interventions in complex systems development leading to change and innovation, and the requirements of community users.

LIVING LABS: A SYSTEMATIC INNOVATION

The concept of living labs methodology is characterised by processes which encourage collaboration in the networks for the co-development and co-creation of products and services and take into account the legal aspect related to the intellectual property management, agreement definition, negotiation on product

features and partner selection (Xie & Zhang, 2015). Ståhlbröst et al. (2015), a systematic overview of users' needs, demands, experimentation and their involvement in the development life cycle is required for the collaborative network for cross-culture product development. Nonetheless, there is need to standardise these methods and processes in this network of cross-culture product developments with projects that vary from one lab to another. Lacasa et al. (2007), supported that living labs give the opportunity to people from different areas and backgrounds to explore innovative tools through their interaction and the discovery of new ideas that expand their knowledge and to explore new ways of acting to challenge the assessment of new technologies in everyday contexts.

INNOVATION LEADS TO TESTBEDS

The collection of information on the usage context and the co-creation of new ICT-services where sometimes the collection of data is enabled by the use of ethnographic approaches (Pierson and Lievens, 2005). The focus in these living labs is on the early stage of the development process, the needs and design. Through the close interaction with the end-users a solution is being developed from an observed problem Winthereik et al., 2009). The iterative and collaborative fine-tuning of innovative products and services are the main focus of some living labs of this model that are more evaluative in nature (Shuurman and De Marez, 2012). These living labs are viewed by Amirall (2008), as a system to collect, organise and administrate user contribution and transform it into useful information.

On the other hand, the technical testing of innovation in the real world out of the laboratory is the focal point of the living labs as extensions to testbeds. Zhong et al. (2006), illustrated on their research the testbed-like type of living lab for e.g. For instance, Ballon et al. (2007), argued the possibility to conduct real-world validation researches of testbed applications constitute an important reason for many of the living labs belonging to the ENoLL. Living labs provide a favourable research environment and organise users in needs discovery exercises that contribute to the generation of ideas; it encourages and assists them to perform entrepreneurial activities, and incites the innovation process. The contribution from the users is monitored in an incremental innovation in technologies, products and services with the promotion of societal involvement in respect of the projects through localized exercises. Chesbrough (2006) describes the perspective of openness as the preoccupation of companies driving innovation processes to develop new products, services, applications or new markets. Studies in open innovation explored user's innovativeness on new innovation developments and product development capabilities (Prugl 2006), and industry development and commercialization (Hienerth 2006) as well as the use of innovative technologies as part of the innovation process (Dodgson et al. 2006). Eriksson et al. (2005), support the need of involvement of different participants from various background and different perspective in an open collaboration to boost the creativity and ideas

generation that can be exploited to develop new technologies, products and services. Thus, it is important to involve more people in the innovation process.

As per Checkland (1999), ‘‘real-world’’ situation depicts the interpretation that people have of their present situation. Living lab explicit two different ways of enabling the use of situations as realistic as possible. The first one is related by Markopoulos and Rauterberg (2000), who pointed out the creation of environments for testing and evaluating applications or products or services, that offer the same conditions of the real world; while the test and evaluation of products and services in users' real-world environments constitute the second approach (Schumacher and Niitamo 2008). Adding to that, living labs give a significant role to users in the innovation and development process; their involvement and influence in the activities operated in the labs to create products and services are based on their various needs as well as the research for solutions to sustainability issues. A focus is given on the users' ideas and activities as well as their power and domain experts which impact on the principle that differs from related concepts such as involvement, participation and engagement (Barki and Hartwick, 1989). Also, the concept considers the business value of the products and services on which the researches are conducted on and involves all form of value with a focus on the company health and well-being in the long term. Offering superior value to consumers/users is a major aspect of business success that is widely recognised (Boztepe, 2007). Moreover, the living lab ambitious vision is to enable innovation, community development and address sustainability issues. Sustainability relates both the responsibility of living lab in the development of the community and the vitality of the concept (Evans, 2015).

ENTREPRENEURIAL INNOVATION: LIVING LABS

Business knowledge, user knowledge and the technique of creating the product are a complex arsenal of knowledge and skills. A 'raw' product without the innovation team in many cases can hardly be sustained of further developed. Living labs activities that involve users in the innovation and creation process take also the participants into another phase of the concept that is the entrepreneurial activities which are very connected and interdepend. Thus, it can be supported that enhancing user entrepreneurship has an important role in the activities of living labs. Feedback from users further generates relevant additional insights for the development of innovation project as well as for technical development. Coordinating innovation in product and service with entrepreneurship brings the worlds of technical innovation and entrepreneurship closer together and generated the living labs with an opportunity to add value. Not only living labs enable users to actively participate in the innovation process, but the development of new products and services is held in an entrepreneurial process which is expected to result in the creation of a business. The commercialisation of an individual or group of individuals of a new product/or service who indeed are innovative users of the same products and/or services is user entrepreneurship (Shah, 2007).

The research on innovation with the involvement of community users has a significant impact on the promotion of users' innovation and entrepreneurship at the global level that is supported by living labs. In the number of industries, user entrepreneurship has been widely observed. As per Sekliuckiene and Kisielius (2015), the creation of social value to benefit individuals, groups and communities and ensuring a decent quality of life and obtain justice in society for all people is the main goal of a social entrepreneur. Shah et al. (2012), support that user entrepreneurs' innovations range from product improvements to groundbreaking new products that are introduced into the business marketplace which cause the creation of new industries. Several nations, states, regions and universities have adopted policies to promote and stimulate innovation through entrepreneurial firms with the aim to support economic growth based on the association of entrepreneurship and innovation. Those policies include local, national, and regional initiatives to support university-based start-ups (Grimaldi et al., 2011). Schuurman (2015), supports that living labs specific approach are used by start-ups and SMEs for community user innovation and entrepreneurship as they offer a structured approach. Most successful businesses related to entrepreneurship result from a teamwork rather than individuals. For instance, there is an indication that the collaboration of individuals in a team to create, combine and improve on each other's ideas and experiences provide more creative ideas than a single individual can generate (Mannix, Neal and Goncalo, 2009). Moreover, Phan et al. (2005), support that the creation of networks is a key function of entrepreneurship policy that is established in various forms including public-private partnerships, university-industry collaborative research program, and university research parks. However, the performance of entrepreneurial innovation requires the concomitant resources of the different ecosystems in which it is executed. The access to networks and alliances with incumbents, public support schemes, types of finances, etc. may vary according to every specific ecosystem (Hargadon and Kenney, 2012).

The increase in innovation activities is enabled by the internalisation of entrepreneurship which promotes innovative cycles for the development and the refining of products and services and the leadership management (Webster, 2004). The increase in competition and global factors have supported a systematic approach to innovations, societal developments, network-based philosophy for economic and connecting trends of global markets (Moon, 2008). The result of these developments and network is the creation of innovative ecosystems based on collaborations, interactions, knowledge and skills sharing, ideas generation and exchange. The participants that operate in the same environment sharing their resources, knowledge and competencies perform innovation and remain longer in the ecosystem (Finley, 2007). The concept of living labs offers within this context, open and user-centric real environments to conduct innovative research. According to Dechezlepretre et al. (2008), living labs enable collaborative innovation through the use of specific tools (modelling) and procedures which characterize its unique methodology (SDLC and Prototyping) that is based on experimentations, research, development and product and service innovations.

Furthermore, Abdel (2011), argued that living labs projects are operated in real life user-centric environments that allow community building through collaborative product developments from the innovative ideas generated and facilitate their dissemination. Living labs are raising the recognition of the integration of community-driven development approaches because of the main focus to operate within the market, maturing developed services and technologies for the well-being of the community through the improvement of the quality of life (Abdel, 2011). Living labs real life methodologies have been demonstrated experimented and developed in a series of European Commission Framework Programmes, and different initiatives have been adopted through the concept. The main objective of the Living labs concept is to promote and coordinate the innovation and stimulate project advance across Europe (ENoLL, 2006). Thus, the creation of the European Living Labs Network (ENoLL) represents an important route of internalisation through collaboration and knowledge exchange between the numerous centres. The developed products and services are tested in several countries and centres to assess the relevance both for the technical aspect and business opportunity before the commercialisation. Wendin et al. (2015), stated that the European Network of Living Labs (ENoLL) has further institutionalised the concept and 388 labs operating in the whole world for community development projects were noted by 2015.

Nevertheless, Van and Joshi (2007), stated that living labs require more empirical tests on its effectiveness, impact and methodologies for a better understanding of the cross-border requirements even though it has gradually been maturing and has created valuable products through conceptual and methodological streams of ideas. Innovation network catalyser's role needs to be performed by the methods, practices and processes by demonstrating a specialised and professional forecast. A strong integration with the innovation ecosystem in living labs is required for the articulation of the proposed product valuation (Tawney et al., 2013). In addition, open collaboration networks for innovation and product developments which facilitate the internationalisation of entrepreneurship through the participation of firms and entrepreneurs enables the strategic use of the resources, provide the competitive advantage and minimise the risks that are shared within the stakeholders (Foray, 2009).

UNIVERSITY CAMPUSES AS LIVING LABS

An important amount of untapped human resources is concentrated in Universities, which notice an increasing popularity of living labs approach and recognise the amenable real-world locations that their campus offers to conduct applied research. Living Labs use the University's infrastructure, research capabilities and practices to create new product and service and provide solutions to sustainability issues. This consist on creating the favourable conditions to allow the collaboration between the researchers, students and operations staff using the University's assets associated with the available education and research to test,

study, and apply the results to solve sustainability issues. The universities living labs represent a platform where co-development with users is made possible with their involvement in the generation of ideas that result in the creation of new products, technologies and services through a designed innovation process, which also acknowledges providing better solutions. For instance, Pascu and Vandlieshout (2009), stated that open innovation intensively supports co-development with users that expect to deliver better solutions to customer's needs and requests. The active participation the academia (Universities and Colleges) is the most important and interesting factor of these types of models of engagement that seals the entrepreneurial universities role in innovation activities with the involvement of students and operating staff, and are becoming more and more influenced by the network economy concepts.

Living labs offer two important ways for strategic framing of co-production processes. Firstly, the importance given to stakeholders and users to provide their ideas that are taken into account in the living lab operations allow the strategic planning of relevant projects that can result in the development of marketable product and services, and major solution for sustainability challenges. Secondly, they offer a more coherent basis for practice over time with the reiteration of the iterative process of experimenting and lessons learned year after year. The aforementioned elements are valuable in a university setting, associating government response to sustainability challenges and involving students in specific and applied projects that considerably participate in the innovation of solutions that respond to sustainability issues. The role of the universities in creating living labs e.g. for innovation and sustainability have been a subject explored by specific bodies (Trencher et al., 2015).

RESEARCH METHODOLOGY, DATA COLLECTION AND ANALYSIS

The research method relates the method or approach to conduct the study in which the theory, the hypothesis, the data will be used to support final result. This research is done through the different stages that are described as "the research onion" that includes the research philosophy and approach, the strategies and methodology choices, time horizons, techniques, and procedures (Saunders, Lewis and Thornhill 2009). The research is mainly based on secondary data collected through international journals and reports.

The findings reveal that the living labs also prepare students for the competitive employment market by enabling applied re-search and offering real world experience. Various method including open doors, exhibitions, workshops, fairs etc. are used to attract, involve, and allow the easy expression of users' ideas in the innovation process within the universities. It is identified that the Universities living labs allocate a significant part of its activities in the field of sustainability and address applied problems surrounding green infrastructure and

low carbon emission technologies and built design through knowledge exchange, collaborative experiments that include users and stakeholders as co-generators of new ideas and knowledge. Living labs has integrated, adopted and took advantage of the university favourable research environment and is influencing together large changes beyond the campus boundaries by offering a suitable platform to conduct collaborative research projects with public and private partners by coordinating the requirements for societal transition through users, researchers, government, companies they are putting together in the innovation process. Evans and Karvonen (2013), state that living labs operate in real world setting and represent a mechanism that enable academics from various disciplines whose teaching and research address issues for urban environmental sustainability can engage with real world challenges.

Living lab ambitious vision is to enable innovation, community development and address sustainability issues. Sustainability relates both the responsibility of living lab in the development of the community and the vitality of the concept. Research are conducted based on the objective of each lab that select independently their projects and partners with the aim to provide solutions through the transformation of the ideas and knowledge of the various and heterogeneous participants into theories, methods and models. Indeed, the labs in the ENoll collaborate to facilitate the innovation and creativity, test products and solutions, share knowledge, address problems and apply solutions. Nonetheless, it is crucial that living lab takes responsibility of its economic, social, and environmental effects in line with the general sustainability and environmental trends in society.

It can be argued that there is a need to draw formal methods that facilitate the learning generated from the labs into scientific methods and models for the various type of research and projects. The established partnership and its associated network in the living labs vary according to the labs with an importance given either on public or private organisations, which should explore to have a better understanding on how its affect the viability and the development of a living lab. Universities use progressively living labs and co-development as strategies to handle sustainability challenges, and yet is implicitly linked. As Ko¨nig and Evans (2013) ‘living laboratory type initiatives that use the university and city or parts of them as places to experiment with sustainable forms, technologies and lifestyles have become hugely popular around the world precisely because they have the power to harness the academic capacity of universities to address the challenges of sustainable development’. It is important to understand the role of universities as infrastructure of experiments that take an important place in the urban innovation through living labs (Castan-Broto V and Bulkeley H, 2013).

CONCLUSION

This research has explored the processes that living labs use to involve the user in the innovation process. The major strengths of the living lab concept are that it offers a systematic approach to facilitate users (student, university staff etc.) engagement and influence in the innovation process with applied innovation issues. Ideas generated by users are discussed by academic and non-academic stakeholders within a clearly bound geographical and institutional context. Adopted projects can be coordinated horizontally with one another and vertically from one period (year) to period. The method has the advantage to maximise the benefit of knowledge delivered by non-academic stakeholders. Living labs approach is creating a pipeline of applied projects on campus and facilitates the co-production and co-development of marketable and sustainable innovations that result from the user involvement, and the concept is integrated into some university sustainability policy.

The researcher has explored user innovation and entrepreneurship through the living labs concept within the universities. The constant growth in user involvement in the innovation process has considerably increased the level to which they contribute to the creation and development of new products and services. Universities campus play an important role in living labs operations to involve the user in the innovation process. User influence is increasingly noted in the development of new products and services based on their needs and is enabled by the living labs approach. As a result, user impact on innovation and entrepreneurship is growing continuously as living labs experiment more and more end-user participants in their projects. The processes through which the development of the products and services seal the entrepreneurial innovation activities of the users. Their involvement from the early stage facilitates the collaboration and the real world environment of the campus living labs offer the adequate atmosphere for their expression, indeed the resources and technical assistance provided contribute to the success of their projects.

Universities are suitable places to the Living Lab approach, aiming to play an important role in the innovation activities and contribute to concept design in this area with experiences and accumulated knowledge. Living labs methodology enable user involvement in real-world contexts. However, the research finds out that significant work still needs to be done in order to make the concept being truly user-driven and be in conformity of the vision that operations are being held absolutely in the users' real world contexts throughout the whole innovation process.

In living labs, the whole innovation approach cycle is built on user needs through constant iterations between the different phases of the development cycle. Moreover, the research and learning perspective inherent in universities fit well with the Living Labs characteristic of including many different stakeholders from the public, academic and private organisations all together with users. There an increasing number of innovations projects initiated by a user and many of them have been successfully developed. Indeed, an important number of those innovations have been taken into the market, some in the form of start-up other in the form of

licencing, property right acquisition or the establishment of a strategic partnership with investors who provide the financial resources for the production at market level and the commercialisation of the new products and services. We can support that community users are playing an important role that positions them as the driver of innovation and entrepreneurship particularly through living labs concept.

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COMPARATIVE ANALYSIS OF INNOVATIVE PERFORMANCES OF THE REPUBLIC OF SERBIA COMPARED TO THE SURROUNDING COUNTRIES

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ABSTRACT

Innovativeness is the ability of an organization to transform new ideas gathered by analysing internal and external environment into new products, processes and technologies. Innovations, as a result of the innovation process, are the key driver of the organization's economic growth, but also of the economy as a whole. Lack of innovations sooner or later makes companies lag behind the competition and lose their place in the market game. Economic growth, based on innovativeness, is no longer a privilege of the developed countries. More and more developing countries are adopting policies and strategies that boost innovations because they have realized that without a systematic encouragement of innovation development there is no global competitiveness.

Global innovation index (GII) is an index that measures the achieved level of innovativeness of certain countries based on two sub-indexes: Innovation input sub-index and Innovation output sub-index. Both sub-indexes include certain pillars. Results of the GII are globally accepted and taken as relevant. In the latest GII for 2018, Serbia ended up on the 55th place which is a weaker score than the neighbouring countries, Croatia and Slovenia, have achieved. This paper will provide a comparative analysis with the mentioned countries and, based on that, offer conclusions and recommendations for the promotion of innovativeness in the Republic of Serbia.

Key words: *innovations, global innovation index, research and development*

JEL Classification: *M20*

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INTRODUCTION

In modern economic conditions, innovations are the key factor of a company's competitiveness and the driver of economic development of national economies. Innovativeness implies the development of new, original ideas that can be directed towards the development of new products and services (or the enhancement of the existing ones), new ways of work organization and realization of marketing activities and business processes.

There are several types of innovations in the business practice, and what they all have in common is that their purpose is reflected in determining advantages for the one who is implementing the innovation and for the one whom it is intended for. For example, a certain company implementing an innovation is doing so in order to boost its competitiveness. Aside from the advantage for the company in question, users will also have some benefits (if the innovation is market-oriented) by having the possibility to buy a better quality product that would satisfy their needs.

If companies within one national economy are innovative, the strengthening of their competitiveness through innovations will cumulatively contribute to the progress of the entire economy. It is important to monitor and analyse innovative performances of national economies in order to gain insight into the existing conditions and feedback on whether the strategy for the economic development based on innovations is realized as planned or not. Global innovation index is the system for the evaluation of innovative performances of national economies through the use of an entire set of different criteria. Results published by this index are, in the entire world, acknowledged as valid and relevant.

Further on in this paper, after the theoretical part, data from the latest Global Innovation Index for 2018 for Serbia, Croatia and Slovenia shall be presented here. Croatia and Slovenia were chosen as relevant because they represent leaders in the field of innovations in the region and it is adequate to compare Serbia to them. Based on the comparative analysis, certain conclusion and recommendations for the promotion of innovativeness of Serbian economy shall be made.

INNOVATIONS – DEFINITION AND SIGNIFICANCE

Innovations are the basic source of growth and development of companies and the economy based on knowledge (Ravic, Gavric, 2015, pp. 47-63). In modern economic conditions, knowledge and innovations based on knowledge are the key resource of organizations in their fight to gain competitive advantage. Also, the greatest competition between the developed countries is in the field of development and the application of knowledge and innovations based on knowledge (Djekic, Ravic, 2018). In conditions fierce competitors are producing, organizations strive to differentiate themselves by creating and delivering a unique offer, different than their competitors'. The basic tool for achieving such goal is innovations.

The definition of innovation mostly refers to the development and successful transformation of invention into a useful product (product innovation) or technique (process innovation) which are thought to be worthy of being on the market or being used inside the company (Mosurovic-Ruzicic, 2015, p. 46).

There is no generally accepted definition of innovation in the literature. Some of the definitions often quoted in foreign literature are:

"Innovation is the renewal and enlargement of the assortment of products and services on the market; establishment of new manufacturing methods, procurement and distribution, implementation of changes in management, organization, work conditions and employees' skills" (The European Commission, Green Paper on Innovation, 1995, p. 1).

"Innovation is a successful use of an idea or the directing of an idea towards profitable products, processes, services or business practice. The basic of the innovation concept is in realizing something unique. Innovation comes in several forms, but the two that have gained the greatest attention are new products and processes." (The Global Competitiveness Report, 2006-2007).

According to (Dess, Lumpkin, Eisner, 2007, p. 436), innovativeness is the ability of one economy, company or individual to transform new business ideas into new products, services, technologies and markets. The essence of innovativeness is the development of new products and services in a more efficient way in comparison to the previous practice.

In Serbian literature, different definitions of innovations can be found. One of the definitions that in comprehensive way explains the notion of innovations is provided below:

"Modern innovations are the result of an aimed, conscious and purposeful search for new opportunities and possibilities. As a rule, innovations help us find new markets or new market segments, create new customers and find new purchasing power for customers. Innovation is at the same time conceptual and perceptive, hence the innovation process consists of an unknown number of stages, but there are basically four stages: analysis, synthesis, conclusion and realization". (Perjanovic, Njegova, 2009, p. 74).

Innovations are highly significant because they:

- Are one of the key factors for the enhancement of productivity;
- Can help to promote business through an implementation of a completely new work method;
- Can reduce manufacturing costs through an increase in work efficiency;
- Are the result of a real competitive advantage and more efficient ways to sustain the prosperity of an economic branch and the economy as a whole (Krstic, 2013, p. 17).

The primary task of one company and the economy as a whole is to find something new to satisfy uncovered needs of consumers and in that way gain competitive advantage (Ristic, Vukajlovic and Brzakovic, 2016).

Growth based on innovations is no longer a privilege of rich countries only. More and more developing countries are defining and adopting policies intended

for increasing their innovation capacity. Innovation policies exist in different forms depending on the specific needs of a certain country (Ravic, 2016, p. 51). Innovativeness is one of the most important factors of a company's success, which implies that there is the need for a more permanent discovering of innovative solutions with the aim to, as quickly as possible, adapt to the requests of final consumers and competitive markets (Zecevic, 2014, p. 4).

Great significance of innovations for the economic development and prosperity of the countries has led to the need to evaluate innovations and countries' position on the global market (Jovicic, Mirkovic, 2016, p. 66).

Applied innovations developed by companies (independently or in cooperation with different partners) are especially important for the national economy, as well as for the economy as a whole, because these innovations have a practical application and directly contribute to the advancement of the competitiveness of companies and economies. Therefore, innovativeness of business systems shall be discussed further on.

INNOVATIVENESS OF BUSINESS SYSTEMS

An innovative organization permanently looks for innovative solutions reflected in implementing new or enhancing the existing products and business processes. (Ravic, Karavidic, 2015, p. 8). The aim of a business innovation is to attain benefits for both the company and its consumers, i.e. to satisfy the needs of the consumers and achieve competitive advantage (Ravic, 2016, p. 52). Innovations do not imply only the creation, development and application of new ideas, but also the use of market opportunities. According to (Oregan, Gobadian, Sims, 2006, p. 251), the ability to develop and apply innovations is a matter of company's survival because it enables the creation of products that have market value.

Innovative organization is a business system that permanently looks for innovative solutions that would enable the development of new or the promotion of the existing products and business processes (Ravic, Radic, 2015, p. 365). To gain competitive advantage, innovative strategy uses information technologies and business ways of thinking in the light of a mutual systemic strategy (Holand, Light and Kawalek, 1999, pp. 288-301). Technological innovations lead to structural changes in the manufacturing process which, as a consequence, can have better quality products, wider range of production, reduced time of production, raw material savings, and reduced expenses per unit of a product (Beganovic, 2015, p. 33).

Innovations are the key driver of entrepreneurial development. Development of transitioning economies is closely connected to the entrepreneurial activity. The model of sustainable development should first be based on entrepreneurship, innovations and knowledge and then on the increase of consumption and investments (Sljivic, Siziba, Stefanovic, 2012, p. 24). An important role of entrepreneurship is reflected in initiating economic activity and in creating an

ambience in which survival is directly related to efficiency (Karavidic, Cukanovic-Karavidic, Ivkovic, 2012, p. 82).

There are more criteria for the classification and division of innovations both in theory and in practice, one of them being the division of innovations into products, processes and marketing innovations (OECD and Eurostat, 2005). Areas of use and characteristics of innovations according to this classification are showed in Table 1.

Table 1: Area of use and characteristics of innovations

Innovation type	Area of use	Basic characteristics
Product innovation	Product and service innovations	Important improvements of technical characteristics, parts and materials of the built-in software, manuals or other functional characteristics
Process innovation	Implementation of new or enhancement of the existing manufacturing and delivery methods and of the activities for the support of product use	Important changes in technology, manufacturing equipment and/or technology
Marketing innovation	The use of new marketing methods, including the important design or product package changes	Higher level of consumer needs satisfaction, entering new markets, better product positioning

Source: OECD and Eurostat (2005)

Organizational innovations that often happen in theory and practice can be added to these types of innovations. Organizational innovations increase the efficiency of the company by improving inter-organizational process on one hand and by networking with partners outside of the organization (buyers, suppliers, etc.) on the other hand (Mosurovic-Ruzicic, 2011, pp. 28-29).

By its nature and significance, innovations can be classified into radical and incremental. Radical innovations bring something completely new, a revolutionary discovery, while incremental innovations imply small changes, such as certain changes on an already existing product. Innovations of products and processes represent technological innovations, while marketing and organizational innovations are non-technological innovations.

Aside from numerous challenges on the foreign and domestic market, organizations are today faced with the problem of a growing competition, while the consumers are at the same time becoming increasingly demanding, thus making companies revise their abilities to respond to new challenges (Stamatovic, Vukajlovic and Cvetanovic, 2012, pp. 69-85).

Practice has shown that organizations can hardly achieve significant results of innovative activities without some encouragement from state institutions. Problems of insufficient competitiveness increase the country's pressure to intervene in the field of innovations (Hadjimanoli, Dickson, 2001). Participants involved in the innovation politics need not only the instruments focused on individual organizations or relation between two companies, but also instruments focused on the system level (Smits, Kuhlann, 2004).

The Republic of Serbia still belongs to countries with minimum investments into science. To support this statement, the share of research and development costs in Serbia's gross domestic product is still very low (Radukic and Radovic, 2012). In order to improve its competitiveness, Serbia needs to improve its factor conditions, especially infrastructure and investments, in order to strengthen its competitiveness (Milicevic, Milicevic and Arsic, 2014). It is necessary to face modernization because domestic economy doesn't have a sufficiently developed production and export of high-tech innovations (Zjalic, 2007).

GLOBAL INNOVATION INDEX

Global Innovation Index was started by the INSEAD School (Business School for the World), Canon India and the Confederation of Indian Industry. The goal behind it was to estimate the achieved level of innovativeness of certain countries based on two sub-indexes: Innovation Input Sub-Index and Innovation Output Sub-Index. Both sub-indexes consist of certain pillars (Jovicic, Mirkovic, 2016, pp. 66)

Innovation Input Sub-Index consists of pillars pointing out to potentials for innovative activities of the national economies: institutions, human capital and researching, infrastructure, market sophistication, business sophistication.

Innovation Output Sub-Index consists of pillars pointing out to the actual innovation results: scientific outputs and creative outputs.

Each pillar is further divided into sub-pillars and they all form the Global Innovation Index (Jovicic, Mirkovic, 2016, pp. 66).

The Global Innovation Index for 2018 consists of five crucial statements:

- Innovations have the crucial role in the increase of global demand for energy.
- Energy innovations happen globally while their goals differ by countries.
- New energy innovation systems are needed with invested efforts in all stages including the distribution and warehousing of energy.
- Obstacles in adopting and diffusing energy innovations remain numerous.
- Public politics play the crucial role in the management of energy transition (The Global Innovation Report 2018).

According to the estimates made by the Global Innovation Index, every year the growth of corporate and public expenses necessary for the research and development keeps getting lower in comparison to the period before the global economic crisis. However, there are reasons for optimism. Today, innovations,

research and development represent a serious political ambition in the most developed countries, as well as in the developing countries all over the world. Global expenses necessary for research activities and development continue to grow and reach twice the level in comparison to the period from 20 years ago. Both the states and the companies are investing more and more resources into the research and development of innovations (The Global Innovation Report 2018).

COMPARATIVE ANALYSIS OF INNOVATIVE PERFORMANCES OF SERBIA IN COMPARISON TO CROATIA AND SLOVENIA ACCORDING TO GII 2018

Further on, data from the latest Global Innovation Index for 2018 for Serbia, Croatia and Slovenia are presented here. In order to carry out a comparative analysis with Serbia, Croatia and Slovenia were chosen since they are the leaders in the field of innovations and as such can serve as an example to Serbia. Based on the analysis, it can be noticed in what fields we lag behind them and what we should fix in order to make progress on the list of the most representative innovation index. Data are shown in seven tables that, actually, represent the seven pillars on which the Global Innovation Index is based.

On the latest Global Innovation Index for 2018, Serbia ended up on the 55th place, Croatia on the 41st and Slovenia on the 30th. Switzerland took the 1st place quite convincingly.

Table 2: Data for the pillar "Institutions"

		SERBIA		CROATIA		SLOVENIA	
		Score/value	Rank	Score/value	Rank	Score/value	Rank
1.	**Institutions**	67.2	50	69.2	44	82.3	19
1.1.	Political environment	53.5	61	64.9	43	77.9	23
1.1.1.	Political stability and safety	65.7	63	80.3	34	87.7	15
1.1.2.	Government effectiveness	47.4	67	57.2	45	73	25
1.2.	Regulatory environment	71.6	47	71.9	46	81.5	26
1.2.1.	Regulatory quality	45.5	69	53.2	55	60.5	42
1.2.2.	Rule of law	40.8	69	55.9	47	73.7	27
1.2.3.	Cost of redundancy dismissal, salary weeks	8	1	15.1.	58	10.7	35
1.3.	Business environment	76.5	42	70.8	58	87.6	11
1.3.1.	Ease of starting a business	92.6	29	86.4	70	91.5	40
1.3.2.	Ease of resolving insolvency	60.5	45	55.1	56	83.7	9

Source: Global Innovation Index, 2018

The pillar ***"Institutions"*** includes the analysis of three sub-pillars: *"Political environment", "Regulatory environment" and "Business environment".*

This pillar is extremely important because business, political and regulatory environments form the business ambience and provide preconditions for a specific market economy. Underdevelopment of these types of environments puts all market participants into a very unfavourable position in the fight for survival, growth and development. Organizations doing business in an unstable political environment in which there is an inadequate legal regulative and numerous market deformities (monopoly, corruption, etc.) are found in a mission impossible to survive, not to mention global competitiveness. It all points out to the crucial significance of a permanent enhancement of political, regulatory and business environments that together form the pillar "Institutions" in the Global Innovation Index.

Table 3: Data for the pillar "Human Capital and Research"

		SERBIA		CROATIA		SLOVENIA	
		Score/value	Rank	Score/value	Rank	Score/value	Rank
2.	**Human capital & research**	32.2	58	35.9	48	46.7	28
2.1.	Education	43	80	59.2	22	58.6	24
2.1.1.	Expenditure on education, % GDP	4	78	4.6.	65	5.3	37
2.1.2.	Governm. funding/pupil, secondary, % GDP/cap	11.9	80	n/a	n/a	24.7	26
2.1.3.	School life expectancy, years	14.6	58	15	52	17.2	16
2.1.4.	PISA scales in reading, maths & science	446.6	43	475.4	34	509.3	9
2.1.5.	Pupil-teacher ratio, secondary	8.2	11	7	2	10.2	30
2.2.	Tertiary education	41	34	36.4	47	42.5	32
2.2.1.	Tertiary enrolment, % gross	62.1	39	67.5	26	80	18
2.2.2.	Graduates in science & engineering, %	25.9	26	25.3.	29	25.7	27
2.2.3.	Tertiary inbound mobility, %	4.3	47	0.4	93	2.7	65
2.3.	Research & development (R&D)	12.5	52	12.1.	54	39.1	26
2.3.1.	Researches,FTE/mn pop	2,132.80	38	1,793.1	41	3,899.20	24
2.3.2.	Gross expenditure on R&D, % GDP	0.9	37	0.9	39	2	18
2.3.3.	Global R%D companies, top 3, mn US$	0	40	0	40	51.3	28
2.3.4.	QS university ranking, average score top 3	3.8	73	6.7.	67	10.9	63

Source: Global Innovation Index, 2018

The pillar **"Human Capital and Research"** is based on three sub-pillars. They are: *"Education", "Tertiary Education" and "Research and Development".* Contemporary school of management underlines human resources as the most valuable resources in business, hence we can see the importance of this pillar in GII. If we want good-quality and capable human resources to exist, there has to be good-quality education. For that reason, this pillar analyses state investments into education at all levels, especially higher education. Likewise, this analysis covers investments into research and development, work quality of universities, etc. Aside from evaluating state activities, it also evaluates company activities when it comes to investments into research and development.

Table 4: Data for the pillar "Infrastructure"

		SERBIA		CROATIA		SLOVENIA	
		Score/value	Rank	Score/value	Rank	Score/value	Rank
3.	**Infrastructure**	49.6	48	53.8	34	53.6	35
3.1.	Information & communication technologies	73.1	32	73.3	31	74.6	29
3.1.1.	ICT access	72	48	76	35	79.1	28
3.1.2.	ICT use	55.4	57	64.5	37	61.6	44
3.1.3.	Government's online service	81.9	24	74.6	33	84.8	19
3.1.4.	E-participation	83.1	17	78	25	72.9	37
3.2.	General infrastructure	30.5.	96	35	77	38.7	58
3.2.1.	Electricity output, kWh/cap	5,295.10	28	2,675.7	66	7,830.40	21
3.2.2.	Logistics performance	32.4	76	50.8	50	51.9	49
3.2.3.	Gross capital formation, % GDP	18.5	99	20.6.	81	19.5	94
3.3.	Ecological sustainability	45.3	42	53.2	14	47.5	37
3.3.1.	GDP/unit of energy use	6	95	9.8.	53	8.8	63
3.3.2.	Environmental performance	57.5	73	65.5	37	67.6	33
3.3.3.	ISO 14001 environmental certificates/bb PPP$ GDP	11.2	8	10.3.	9	6.9	14

Source: Global Innovation Index, 2018

The pillar **"Infrastructure"** includes the analysis of three sub-pillars: *"Information and Communication Technologies", General Infrastructure" and "Ecological Sustainability".*

ICT is the most dynamic economic branch with an incredible speed of development, in which a lot of financial resources are invested and which opens a lot of work places. This is why ICT takes such an important place in the Global Innovation Index. A country investing in communication technologies has good chances of success in the run for global competitiveness. We should not forget that a large number of innovations happen in the field of ICT and that those innovations

can, in short time, gain great value on the market. We can freely say that ICT is the occupation of both the present and the future and that it's shaping our society.

The second sub-pillar "General Infrastructure" is also very important because it includes important factors of competitiveness, such as the production of electricity. The third sub-pillar "Ecological Sustainability" is extremely important because the long-term survival of the planet depends on our attitude towards ecology. Global warming has reached alarming levels, and the prognosis for the future is not at all promising. This is why every state, individual and organization needs to give their best in order to save the environment. Every year, GII closely monitors and keeps track of state activities when it comes ecological issues.

Table 5: Data for the pillar „Market sophistication"

		SERBIA		CROATIA		SLOVENIA	
		Score/value	Rank	Score/value	Rank	Score/value	Rank
4.	**Market sophistication**	39.2	101	46.2	66	43.9	78
4.1.	Credit	27.6	96	26.8.	100	31.8	83
4.1.1.	Ease of getting credit	65	49	55	70	45	88
4.1.2.	Domestic credit to private sector, % GDP	43.4	81	61.3	55	46.7	75
4.1.3.	Microfinance gross loans, % GDP	0	63	0	68	n/a	n/a
4.2.	Investment	40.4	67	51.5	32	38.9	76
4.2.1.	Ease of protecting minority investors	56.7	74	68.3	28	70	24
4.2.2.	Market capitalization, % GDP	17.6	66	40.5	37	13.6	75
4.2.3.	Venture capital deals/bn PPP$ GDP	n/a	n/a	n/a	n/a	0	37
4.3.	Trade, competition & market scale	49.8	102	60.3	65	61.1	62
4.3.1.	Applied tarrif rate, weighted mean, %	n/a	n/a	1.6.	19	1.6	19
4.3.2.	Intesity of local competition	58.3	107	61.9	97	73.4	35
4.3.3.	Domestic market scale, bn PPP$	106.6	72	100.2	73	70.4	85

Source: Global Innovation Index, 2018

The fifth pillar within the Global Innovation Index titled **"Market Sophistication"** is based upon three sub-pillars: *"Credit", "Investment" and "Trade, Competition and Market Scale".*

Availability of financial sources and the possibility of a fast and simple collecting of financial resources have got a crucial significance for business development and use of market opportunities. Organization that cannot gather financial resources for investment activities quickly and easily, especially when a market opportunity happens, is forced to use and invest all its available resources by endangering its own liquidity. It is a very risky situation because if the

investment happens to be a failure, the organization will be left with no resources for its business activities. Bank credits are still the main and basic financial sources for a company, but it is very important to have alternative sources, such as business angels, investment funds, etc. An additional problem for entrepreneurs is the fact that banks do not easily decide to credit entrepreneurial endeavours due to high risk and danger of not being able to collect debts. This is why banks ask for solid guarantees, often in the form of a mortgage on immovable property.

The pillar *"Market Sophistication"* also includes and analyses the level of protection of small investors, market capitalization, venture capital, intensity of local competition, etc.

Table 6: "Business sophistication"

		SERBIA		CROATIA		SLOVENIA	
		Score/value	Rank	Score/value	Rank	Score/value	Rank
5	**Business sophistication**	29.2	70	34.6	45	43	29
5.1.	Knowledge workers	35	66	51.5	33	62.8	18
5.1.1.	Knowledge - intensive employment, %	28	50	35.7	36	42.4	20
5.1.2.	Firms offering formal trainings, % firms	37.8	35	49.3	21	41.5	31
5.1.3.	GERD performed by business , % GDP	0.3	45	0.4	41	1.5	13
5.1.4.	GERD financed by business, %	9.2	74	46.6	30	69.2	5
5.1.5.	Females employed w/advanced degrees, %	14	45	16.3	37	21.1	21
5.2	Innovation linkages	24.9	76	21.5	96	29.1	62
5.2.1.	University/industries research collaboration	36.1	90	28.8	107	46.1	43
5.2.2.	State of cluster development	39.5	90	32	115	44.6	72
5.2.3.	GERD financed by abroad, %	13	36	14.5	34	10.6	41
5.2.4.	JV-strategic alliance deals/bn PPP$ GDP	0	69	0	107	0	77
5.2.5.	Patent families 2+ offices/bn PPP$ GDP	0.1	52	0.1	57	1.4	24
5.3.	Knowledge absorption	27.8	77	30.9	60	37.2	37
5.3.1.	Intellectual property payments, % total trade	1	37	1	33	0.7	52
5.3.2.	High-tech net imports, % total trade	5.6	101	9.2	47	6.6	87
5.3.3.	ICT services imports, % total trade	1.8	30	1.5	44	1.7	33
5.3.4.	FDI net inflows, % GDP	5.6	28	3.6	42	3.1	52
5.3.5.	Research talent, % in business enterprise	13.3	61	20.9	52	55.2	18

Source: Global Innovation Index, 2018

The pillar **"Business Sophistication"** includes sub-pillars: *"Knowledge Workers", "Innovation Linkages" and "Knowledge Absorption".* Within the framework of *"Knowledge Workers"* the following factors were analysed: knowledge and employee skills, company's investments into employee training and professional progress, gross expenditure on research and development, employment of women, etc. *"Innovation Linkages"* is a very important pillar since it deals with the cooperation of universities and economy on the development of innovations, patents, etc. The best results in the field of innovation development are achieved with a synergetic effect that is obtained by the cooperation of the economy, universities (including the scientific institutes) and the state. This apparatus is often called "the three-headed Helix". *"Knowledge Absorption"* includes intellectual capital, import of high technologies, ICT services, etc.

Table 7: Data for the pillar „Knowledge & technology outputs"

		SERBIA		CROATIA		SLOVENIA	
		Score/value	Rank	Score/value	Rank	Score/value	Rank
6	**Knowledge & technology outputs**	26.7	50	29.5	46	32.9	34
6.1.	Knowledge creation	21.8	45	20.4	47	32.7	29
6.1.1.	Patents by origin/bn PPP% GDP	1.9	47	2	46	10.2	12
6.1.2.	PCT patents by origin/bn PPP$ GDP	0.2	53	0.3	41	1.4	24
6.1.3.	Utility models by origin/bn PPP$ GDP	0.5	36	0.8	32	0.2	47
6.1.4.	Scientific & technical articles/bn PPP$ GDP	34.4	5	24	20	37.7	3
6.1.5.	Citable documents H index	9.8	69	15.9	45	16.7	42
6.2.	Knowledge impact	37	62	45.3	28	45	29
6.2.1.	Growth rate of PPP$ GDP/worker, %	1.9	103	2.7	24	0.5	67
6.2.2.	New businesses/th pop. 15-64	1.8	53	5	27	3.1	40
6.2.3.	Computer software spending, % GDP	0	104	0.1	97	0.1	91
6.2.4.	ISO 9001 quality certificates/bn PPP$ GDP	29.7	7	27.8	8	27.8	9
6.2.5.	High & medium high-tech manufactures, %	0.3	44	0.3	43	0.4	19
6.3.	Knowledge diffusion	21.3	52	22.7	47	21	56
6.3.1.	Intelectual property receipts, % total trade	0.2	39	0.2	44	0.2	37
6.3.2.	High-tech net exports, % total trade	2	53	5.4	31	5.8	30
6.3.3.	ICT services exports, % total trade	4	21	2.7	42	1.8	55
6.3.4.	FDI net outflows, % GDP	0.8	57	1.1	48	0.7	59

Source: Global Innovation Index, 2018

"Knowledge and Technology Outputs" is the pillar based on the evaluation of three sub-pillars. They are: "Knowledge Creation", "Knowledge Impact" and "Knowledge Diffusion".

As according to the modern point of view, knowledge is the most valuable resource today, and research and development are the basis for the development of innovations which the competitiveness of companies and states is built upon. These are the reasons that support the undisputable significance of this field in GII. A state that recognizes the importance of investing into education and in research and development is on the road to achieve global competitiveness. Otherwise, it will lag behind the developed economies and there will be no imperative for importing innovations that are already obsolete in the developed countries. In time, the gap between the developed and undeveloped countries will grow larger and undeveloped countries will not be able to keep up with the fast technological development of our time.

This pillar deals with the analysis of different factors that refer to knowledge, such as: creation of new knowledge, number of patents, number and quality of scientific journals, development and use of new software, production of high-tech products, knowledge diffusion, intellectual capital, export of ICT services, etc.

Table 8: Data for the pillar „Creative outputs"

		SERBIA		CROATIA		SLOVENIA	
		Score/value	Rank	Score/value	Rank	Score/value	Rank
7	**Creative outputs**	28.1	64	37.6	43	46.7	16
7.1.	Intangible assets	35	92	43.7	58	56.3	20
7.1.1.	Trademarks by origin/bn PPP$ GDP	33.7	70	49.6	52	111.2	9
7.1.2.	Industrial designs by origin/bn PPP$ GDP	1.7	53	6.9	21	6.4	22
7.1.3.	ICTs & business model creation	53.2	92	58.5	68	66.1	43
7.1.4.	ICTs & organizational model creation	49.8	77	53.8	61	61.7	36
7.2.	Creative goods & services	24.4	58	47.9	6	38.2	22
7.2.1.	Cultural & creative services exports, % total trade	0.3	38	1.9	5	0.9	15
7.2.2.	National feature films/mn pop. 15-69	5.4	37	4.6	44	13.4	9
7.2.3.	Entertainment & media market/th pop. 15-69	n/a	n/a	n/a	n/n	n/a	n/a
7.2.4.	Printing & other media, % manufacturing	1.5	28	3	5	1.7	20
7.2.5.	Creative goods exports, % total trade	0.7	52	0.9	45	1.1	43
7.3.	Online creativity	18.1	40	15	47	36	23
7.3.1.	Generic top-level domains (TLDs)/th pop. 15-69	1.4	88	13.9	32	20.8	28
7.3.2.	Country-code TLDs/th pop. 15-69	4.4	55	9.5	39	24.4	25
7.3.3.	Wikipedia edits/mn pop. 15-69	40.2	35	33.2	37	83	12
7.3.4.	Mobile app creation/bn PPP$ GDP	39.5	15	14.2	21	42.8	12

Source: Global Innovation Index, 2018

"Creative Outputs" is the pillar that includes the following sub-pillars: *"Intangible Assets", "Creative Goods and Services"* and *"Online Creativity".*

The task of this pillar is to measure different factors related to product and service creativity within the national economy, such as: percent of the total export of goods and services that fall under the source of "cultural and creative products and services", representation of electronic and printed media, development of mobile apps, etc. Also, this pillar implies the analysis of intangible assets.

DISCUSSION

"Institutions" – By carrying out a comparative analysis of the data presented in Table 1, it can be noticed that Croatia and especially Slovenia are better ranked countries with generally better marks. Slovenia is on a high 19th place amongst 126 countries in regards to this pillar, while Serbia is on the 50th place. If we look at the structure and marks of sub-pillars, it can be seen that for the sub-pillar **"Political Environment"** Serbia got 53.5 points, which puts it on the 61st place, while Croatia is on the 43rd place and Slovenia on a high 23rd place. Within this sub-pillar, factor *Political Stability and Security"* got 65.7 points (63rd place), while Slovenia got 87.7 points (15th place) and here we can see big opportunities for progress. Likewise, Serbia is drastically lagging behind Slovenia when it comes to the *"Rule of Law"* within the sub-pillar ***"Regulatory Environment"*** (40.8 points and 69th place in comparison to 73.3 points and 27th place). It is interesting that Serbia is on the 1st place when it comes to *"Redundancy Costs".* As far as ***"Business Environment"*** is concerned, Serbia is on the 42nd place, Croatia 58th and Slovenia on a high 11th place.

"Human Capital and Research" – For this pillar Serbia got 32.2 points which was enough for the 58th place in the latest GII 2018. A lot better marks went to Slovenia, therefore it reached the 28th place. This pillar is based on three sub-pillars: **"Education", "Tertiary Education" and "Research and Development".** For the sub-pillar **"Education"** Serbia is on the 80th place, Croatia on the 22nd and Slovenia on the 24th. In order to understand causes for Serbia' poor ranking, it is necessary to take a look at the structure of this sub-pillar. According to *"Expenditure on Education, % GDP",* Serbia is on the 78th place amongst 126 countries included in this index, while according to *"Government Funding/Pupil, Secondary, %GDP/cap"* it is on the 80th place. For the mentioned parameters, Slovenia is ranked much better (37th and 26th place). When it comes to the sub-pillar **"Tertiary Education",** Serbia is better ranked than Croatia (41st place compared to 47th place), while Slovenia is better and is on the 32nd place. Within this sub-pillar, Serbia has especially good marks for *"Graduates in Science and Engineering, %"* (26th place). Marks for the sub-pillar **"Research and Development"** took Serbia to the 52nd place, Croatia to 54th and Slovenia to a high 26th. Within this sub-pillar, Serbia got the weakest points for *"QS University Ranking, Average Score Top 3"* (73rd place).

"Infrastructure" – For this pillar Serbia got 49.6 points which puts it on the 48th place. Croatia is on the 34th and Slovenia on the 35th. Within the first sub-pillar **"ICT",** Serbia got the highest marks for *"E-participation"* (83.1 points, 17th place and is better than Croatia – 25th place and Slovenia – 37th place), and the weakest for *"ICT Use"* (55.4 points, 57th place which makes it weaker than Croatia with 64.5 points and the 37th place and Slovenia with 61.6 points and the 44th place). When it comes to the second sub-pillar **"General Infrastructure",** Serbia got the highest marks for *"Electricity Output, kWh/cap"* – 28th place (much better than Croatia – 66th place and little weaker than Slovenia – 21st place). On the other hand, Serbia got the lowest marks for *"Gross Capital Formation, % GDP"* – 99th place which is worse than Croatia – 81st place and Slovenia – 94th place. For the sub-pillar **"Ecological Sustainability",** Serbia got remarkable marks for *"ISO 14001 Environmental Certificates/bPPP$ GDP"* – 8th place which is slightly better than Croatia – 9th place and Slovenia – 14th place. Serbia got the weakest marks for *"GDP/Unit of Energy Use"* – 95th place which is a lot weaker than Croatia – 53rd place and Slovenia – 63rd place.

For the pillar ***"Market Sophistication"*** Serbia got 39.2 points which was enough for the 101st place in GII 2018. Croatia was much better ranked (46.2 points and 66th place), while Slovenia was on the 78th place (43.9 points). In the sub-pillars ranking, Serbia was ranked as follows: **"Credit"** 96th place (Croatia is weaker – 100th place and Slovenia better – 83rd place); **"Investment"** 67th place (Croatia is here a lot better – 32nd place and Slovenia weaker – 76th place); **"Trade, Competition and Market Scale"** 102nd place (Croatia 65th place and Slovenia 62nd). Within this sub-pillar, Serbia got the weakest marks for *"Intensity of Local Competition"* – 107th place, which is the weakest mark for Serbia in the entire "Market Sophistication" pillar.

For the pillar **"Business Sophistication"** Serbia got some really unsatisfactory marks: 29.2 points – 70th place. By looking at the marks within sub-pillars, it can be noticed that Serbia got the lowest marks for *"High-tech Net Imports, % Total Trade"* within the sub-pillar **"Knowledge Absorption"** – 5.6 points and the fat 101st place on the GII 2018. For the sake of comparison, Croatia got 9.2 points which puts it on the 47th place which is a lot better place than Serbia's. Also, Serbia got very low marks within the sub-pillar **"Innovation Linkages"** for *"University/Industries Research Collaboration"* – 90th place (Slovenia – 43rd place) and for *"State of Duster Development"* – also 90th place. Within the sub-pillar **"Knowledge Workers",** Serbia got the weakest marks for *"GERD Financed by Business, %"* – 74th place while Slovenia is on a very high 5th place.

Marks that Serbia got for the pillar **"Knowledge and Technology Outputs"** put her on the 50th place on the GII 2018 which is a slightly weaker ranking when compared to Croatia – 46th place and Slovenia – 34th place. Serbia got high marks for *"Scientific and Technical Articles/bn PPP$ GDP/Worker, %"* – 103rd place (Croatia – 24th place, Slovenia – 67th place) and for *"Computer Software Spending, % GDP"* – 104th place (which is slightly weaker than Croatia – 97th place and Slovenia – 91st place).

For the pillar **"Creative Outputs"**, Serbia got 28.1 points which puts her to the 64th place. That ranking is weaker comparing to Croatia (37.6 points – 43rd place) and especially comparing to Slovenia (46.7 points – 16th place). If we take a look at the sub-pillars, Serbia got very weak marks for the sub-pillar *"Intangible Assets"* – 35 points, 92nd place which is much weaker than Slovenia (56.3 points – 20th place and Croatia, 43.7 points – 58th place). For the final two sub-pillars, Serbia got relatively satisfying marks:"*Creative Goods and Services"* – 24.4 points, 58th place (which is again a lot weaker than Croatia and its 47.9 points and 6th place and Slovenia with 38.2 points and 22nd place); *"Online Creativity"* – 18.1 points and the 40th place (which is better than Croatia with its 15 points and 47th place and weaker than Slovenia – 36 points, 23rd place).

CONCLUSION

Based on the comparative analysis of innovative performances of the Republic of Serbia in comparison to Croatia and Slovenia, it can be concluded that Serbia achieved a lower ranking in each of the seven pillars included in the Global Innovation Index for 2018. Serbia didn't get better marks than Croatia and Slovenia for any of the pillars and it is an alarming data because Croatia and Slovenia are countries in our immediate surroundings, they are smaller than Serbia and as such can serve as a trigger for Serbia.

Recommendations for the improvement of the current state that could result in a better GII ranking are the following:

- Improvement of the political and regulatory environment,
- The strengthening of the business ambiance that should ensure a competitive and market-oriented economy,
- Improvement of the quality of education,
- Greater investments in the research and development of new technologies (primarily ICT),
- Improvement of the cooperation between the state, educational and scientific institutions and the economy in the field of innovation development,
- Dedicating more attention to ecological issues, etc.

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CHANGE MANAGEMENT – RECEIVING OF NEW KNOWLEDGE AND SKILLS

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ABSTRACT

In this paper, we tried to point out that science and education are the main drivers of developmental changes and their values through stimulating knowledge and skills, and that the work (content of work and knowledge) is the pillar of socio-economic development and the source of value.

The key to success is in dealing with solutions rather than problems by stimulating thought processes by promoting one's own potentials, communication, time and stress management and so on.

Our expectations have been confirmed by empirical research, confirming the basic hypothesis: "The success formula lies in managing the change by adopting new knowledge and skills, new, innovative, creative techniques".

Key words: *education, knowledge, skills, changes, development, work*

JEL Classification: *I29, I25, O15, O31, O35*

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INTRODUCTION

The long-standing economic and transition crisis and social problems expressed by structural imbalances and poverty are fueling fresh thoughts and knowledge on the scientific importance of responsible and active adaptation to the processes of global change based on knowledge and skills.

Every change in itself carries equal chances for success and failure – we are a scriptwriter, a film director or the main actor.

In this paper we tried to answer the following question: What distinguishes successful people from those who are unsuccessful? The general answer is multifold. Primarily it is the way people look at life, business, knowledge, time management, stress, etc.

Modern trends generate new knowledge that requires a new way of learning, contemporary formulas of success and new innovative and creative techniques. Knowledge is the main driver of changes and their values. However, success lies primarily in us, in the knowledge of what we are in our own skins. The winners are those who are able to bring in the necessary changes, incite ideas, energy, the passion of creating, innovations, entrepreneurial charges, etc. This is primarily the case nowadays, since many people today spend their time defending what they know, instead of discovering what they do not know.

Young people, in particular, are aware that a so-called global passport can be obtained only by educational innovative staff that think and work differently, breaking down old concepts and offering new innovative ideas, have different motives, value vertices, as well as needs and goals.

As the Serbian learned writer Dositej Obradović said, “We need a school for knowledge about life and people, a functional school for reasonable men, for work and learning which can help to acquire the necessary experience.” Nothing has changed. As a matter of fact, very few people manage to raise themselves up from their comfort zone with a view of the future.

For success, it’s important to have a choice, to let the future happen - big goals are perceived only by big players. According to Sigmund Freud, every great success is the triumph of persistence and knowledge.

Success is a group of values, and the most important thing is for us all to look into ourselves, to know ourselves, our goals, to find our own way of succeeding. It is never too late for a change of direction, and maybe that time is right now!

The greatest friend of truth is time.

In point of fact, we recall the words of Ivo Andrić: “There are many things in life that we were afraid of, but we should not have been, we should have lived instead.”

FORMULA OF SUCCESS – ATTAINING SUCECSS WITH KNOWLEDGE AND SKILLS

In the case of agriculture as a pillar of development of the Republic of Serbia, social stability has an invaluable national importance (a multiple effect on overall economic growth and development).

The increased transient contradictions and interest matrix are the result of the system and structural crisis of agriculture which in effect found itself at a complex crossroads and facing numerous problems in its development. There was a lack of a fundamental relationship with the content and forms of transition in which agrarization, along with the development of entrepreneurship, should have been the key to the economic growth and development of Serbia.

The necessary economic and economic development cannot be achieved with low-brow thinking. For the development of agriculture, what is necessary is the creative power of knowledge and intellectual potential - education as a process of acquiring knowledge, building skills and developing self-importance, adopting a system of values, new technology, business and organizational culture.

The agrarian crisis in Serbia is systemic and structural and requires a change in the institutional basis, creative modernization in the way of production, technology, changes in the organization of labor and management and a strong development of production forces and their applicative ability.

For a crisis breakthrough, a fundamental application of new development potentials is necessary. Knowledge, production and innovation are the most important sources of change and the basis of the construction of a modern business system based on business knowledge and social skills. Numerous research papers show the great importance that knowledge has for long-term economic growth and development.

The roots of poor transition reforms and the lagging behind of economic and economic development are ignorance, a lack of education in the suppression of self-importance and autonomy, disorientation and excessive expectations.

Education in the function of labor or occupation is the dominant need of agriculture. For this reason, we wanted to obtain a full insight into the educational needs for vocational education and training, as well as perceive how the content of agrarian work defines educational needs. Therefore, the appropriate adaptation of the strategy and goals of the creative re-transition of agriculture failed to be achieved by the application of the acquired and new competent knowledge, not by an interest in vocational education and training.

The search for resolving contradictions in agriculture opens up a space for expressing creativity and strengthening development forces through various fields of education, as well as learning and acquiring skills, affirming practice and the various paths of education, and a contemporary formula for the development of agriculture. Knowledge will lead to an application of economic laws, to the strengthening of productive and market rationality and an optimal activation of the

development factors in the agrarian sector. Raising awareness, training and qualifications of employees are a key factor in market competition (Radović Marković et al., 2012).

This will, on one hand, enable the selection and domination of the best, the most competitive, most competent, and on the other lead to greater productivity and efficiency of human labor, and the improvement of production forces by opening the system towards the development forces of the society.

The economy of Serbia is faced with numerous temptations with a variety of social problems, and different orientations in the understanding and expansion of changes. For a crisis breakthrough, fundamental changes such as new developmental philosophies and active creative potential is necessary, as without education, the space for creativity, development and their applicative ability cannot be opened.

The modern world is affected by changes that have significantly changed and altered its structure and dynamics, its being and consciousness, while the decisive influence on these changes was achieved through science and education. Major changes in the way of production, technology, property relations, organization of work and management have been made.

Under the influence of global processes, global social changes have developed from industrial to information society, from national economies to the global economy, from centralized to decentralized, participatory economic systems.

Knowledge, production and innovation of three complementary phenomena that interact with each another are the most important sources of change and the basis of the construction of a modern knowledge-based economy.

Numerous research papers show the great importance for long-term economic growth and development - building the country's ability to create, expand and use knowledge.

Serbia is significantly behind in the development of a knowledge-based economy in regards to the most developed countries. Modern trends in the development of the market economy have shown that science and education are at the very top of priorities of global and national strategies and policies for socio-economic and technological-technological development and progress.

This implies the creative and synergistic use of resources, and above all the competent knowledge that can be applied in different areas: transferable skills and knowledge, a new vision of multidisciplinarity, as well as transdisciplinary competencies through the expression of interest in professional education and training.

Jointly, human and social capital makes up intellectual capital, which creates and uses all other resources with its knowledge, skills and overall behavior (Pejanović, 2013).

On an innovation wave based on a new quality of education, business entities are turning to the future by stimulating competitiveness, flexibility, mobility and diversity, which implies values in line with new global and local conditions and circumstances. The path to a developed society requires "quality education for all."

Thus, education for the 21st century is not just one of the many instruments of development but it is also one of its essential goals and one of its constituent parts (Delor, 1996).

The instructive tracks are equally numerous on the community level and the individual level, through linking education with fundamental social goals and dominant social values and by way of organized training to achieve the basic goals on the level of the community, organizations, groups and individuals.

The knowledge economy is the main tool towards the new model of economic and social growth and development (Pejanović, 2013).

There are convincing arguments in economic literature about the role of education in agriculture. It is undeniable that education significantly raises the level of knowledge and intellectual tendencies, as well as helping people find their personal identities and a choice of life style.

In all the studies we analyzed, the average increase in agrarian production during 4 years of education in traditional conditions was 1.3% compared to a 9.5% increase in modernized, contemporary conditions of agribusiness.

Formal education mostly refers to literacy, computing, and general education in which the basic 'ability to learn' is generated, and is informally of a vital significance in the innovative processes of agrarian development.

Probably as much as we would include literature extracts that mention the input of education, this would be insufficient. But even such a modestly developed insight into literature shows and proves the seriousness of roles and channels in the system through which education affects agrarian development by way of values, abilities, knowledge, habits, competencies, and skills of employees.

Jacques Delors claims the following: "Lifelong education represents the key which opens the door of the 21st century" (Delor,1996).

EMPIRICAL RESEARCH

In line with the theoretical research, our empirical research focused on determining the interdependence of education and the labor content of employees in the agrarian sector.

With an insight into the diversity of needs, especially in the scale of educational impulses, conditions are created for designing education strategies in which all categories of employees in agriculture can seek and use opportunities to accelerate the innovation of their labor activities to stimulate and enrich their labor with new quality methods and techniques and thus significantly enhance the capacity and diversity of employee creativity.

Through empirical research, we tried to determine employee attitudes on the employment of acquired knowledge during their training in the organization in which they work, regarding the contribution of education and knowledge to the economic performance of the agrarian organization, as well as how much

knowledge is in the function of technical and technological development, on the motives to engage in education, etc.

The survey was carried out on a sample of 716 employees from different areas of labor in agrarian organizations.

Respondents were surveyed individually and in smaller groups, mainly in the workplace. The survey was carried out during 2016.

RESEARCH RESULTS AND DISCUSSION

Employee attitudes about the employment of acquired knowledge during their work-based training:

Employment of knowledge acquired during training - Education is an important factor of productivity and economic performance. In responding how acquired knowledge is used, our respondents replied the following: sufficiently (8.2%), a small amount (33.7%), and not at all (58.1%). These results are troubling, but at the same time predictable with respect to the educational structure.

Evaluation of the functionality of knowledge gained during training - The problem of the functionality of knowledge acquired in training is a serious one, since it is certain that neither the economy nor the school are satisfied with the degree of employment of knowledge acquired through education. Direct executors in agriculture fairly negatively estimated the usefulness of knowledge they gained in school: a great deal (1%), modest (23.7%), insufficient (33%) and none (42.3%), which is in correlation with their level of education and the content of their labor. However, there are important differences depending on the labor content of the employees in the agrarian sector, that is, between professional categories. The most positive assessment of the functionality of knowledge gained in training was by researchers (71.4%), while technical and engineering personnel believed in this relatively less (9.9%), along with senior executives and experts (15.2%) and administrative staff (5.1%), etc. And if different interpretations of these results are possible, it seems that greater criticism for this problem is expressed by professional groups that need practical knowledge, which is in fact not provided sufficiently in the Serbian education system, especially in regards to achieving a link between theory and practice.

The gap between the “world of labor” in agriculture and “world education” is huge. There is much criticism towards the current concept of education, i.e. it is believed that educational institutions are inadequate when it comes to the function of labor.

Organizational readiness to use employee knowledge and skills – An indicator of the readiness of the organization to encourage education and acquisition of knowledge and its endeavor to fully employ knowledge and the ability of employees is a significant motivational factor of interest for education and the contribution of knowledge and education in economic success to the growth and

development of the organization. Based on the established statistical indicators, we can conclude that the subjective assessment of the respondents about the readiness of the organization to use the knowledge and abilities of the employees is significantly dependent on the employee labor content. Almost two thirds of the results are grouped around the middle of the scale of the variable - a small amount (67.7%), and according to the negative scale of the variable - not much (15.6%), and sufficiently (16.7%) of the respondents.

The assessment of the respondents how much knowledge is in the function of technical and technological development in agriculture - the remark that the education system does not adequately respond to the requirements of scientific and technical changes is not without foundation, as in our researching the question of how much knowledge is in the function of technical and technological changes, a great number of respondents estimated this to be weak (62.4%), slight (29%), and sufficient (8.6%). The most critical in this were the direct executors in the agrarian sector, who have the least knowledge in the field which definitely affected their assessments, while researchers, technical intelligence and senior executives and experts consider that knowledge in the function of technical and technological changes.

The fact that this result is not accidental is confirmed by the findings of other authors as well as in our research on respondent assessment in regards to their not being familiar with technical and technological changes, almost 2/3 respondents answered thus: insufficiently (59.4%), slightly (32.3%), and enough (8.3%).

The results indicate that the employees did not acquire enough knowledge for technical and technological changes, that is, after finishing school they did not enhance and refresh their knowledge of the profession, especially knowledge in the function of technical and technological development.

Researchers are the only professional category that is fully acquainted with technical-technological changes.

Motives for inclusion in education

The most important place on the list of motives for educating agricultural workers in the largest number of trials was held by a “higher personal income” and “a better job” as was also shown by our research, which follows this logic.

The obtained results are in line with the previous research and confirm that the increase in personal income is the most frequent motive for education and training of agricultural workers (31.7%).

That material benefits are a priority motive for training is confirmed by the fact that a significant number of employees view education as a motive for gaining a better job (21.9%).

This phenomenon of education and learning motives can be explained by the instrumental theory of motivation on the basis of which participation in educational activities is linked to the ability to achieve the most important personal goals - greater personal earnings and a better work position.

The desire for professional development occupies the third place in the ranking of education motives for agricultural workers (17.7%).

This motivation type is often lacking in education organizations, as agriculture staff rely on individual work - reading books and professional journals, on personal contacts with scientists and people who can help them in the development of their expertise.

The desire to develop the education of agricultural workers as a motive for learning shows that employees are interested in expanding their knowledge and culture (12.8%), which is a very positive result. On the other hand, this depicts the desire of employees to get involved in all forms of education.

The possibility of creative work is a significant motive (9.9%). This result is not surprising, inter alia, due to the structure of the sample, in which there is a significant presence of researchers. But also due to the structure of labor in the agrarian sector.

In fact, it can be expected that social position is not particularly important for employee learning in the examined organizations.

It is natural to assume that the content of agrarian labor is a variable, which is significantly related to the choice of motives for education and training. This assumption is fully confirmed by the following hypothesis: The content of labor in the agrarian sector significantly influences the attitude of the employees towards education and the motives for inclusion in education and professional development.

Likewise, we can conclude with high statistical probability that the respondents in terms of content of labor differ in the preferences of the motives for inclusion in education and training.

The choice of educational area

We assumed that position within an occupation is a differential variable on the basis of which the examination of the category of employees in the agrarian sector varies considerably in the selection of the educational area, as evidenced by the results obtained in this research.

Some 366 employees (51.1%) responded to the questionnaire regarding this area, and thus, 48.9% of employees can be considered absolutely disinterested in any form of education and training. It can be concluded that the employees who were interviewed showed a satisfactory level of interest in meeting educational needs in different areas of education and training.

The largest number of employees was interested in vocational education (35.5%), followed by vocational training with 23.2%, while 19.4% decided to re-qualify, and there was interest in education from the socio-economic field (12%) and specialization was the focus of interest in 9.8% of the employees.

Therefore, vocational education represents the dominant desire of the largest number of employees, even more so as professional training for the workplace through the program of retraining and specialization are in the function of vocational education.

FORMULA OF SUCCESS – TIME MANAGEMENT AS A STYLE OF LIFE

Man cannot choose the time when he will be born and the circumstances in which he will live. It does not depend on us, but what does depend on us is an important life decision - whether in life, work, time, we shall be the pilot or the passenger.

The fact is that time waits for no one and successful people are different from the less successful ones in the way they manage time. Success does not mean that we should work more, but rather, more wisely. How do you find the right way in a given timeframe when all the ways look the same? How can we help ourselves? There are too many questions.

Do we all know the answers? Maybe not. Perhaps we are not ready to invest time and effort needed for change. Let's quote Duško Radović: "Could people be better? Indeed, but no one wishes to start first."

Life and time often put us to the test, to face our own unrest, fears, successes and failures. How to overcome your own self when there is only one problem, and that's you. There is no simple answer: each of us sees things from our own perspective, our own angle. Life is short, and the acquisition of knowledge is long, experience is deceptive, and a favorable opportunity is instantaneous.

It is, in fact, impossible to manage time. We can manage ourselves in relation to time. We cannot choose whether we will use it up, but rather how we spend it. The flow of sand in a minute-glass determines the flow of time. Every day is a new tab with 86,400 seconds or 1,440 minutes. Say not that you have no time, as this is something not uttered by Tesla, Pupin, Einstein, Andrić, Puškin, or Picasso.

We cannot turn back time, we cannot purchase it, borrow it, inherit it. Time management behavior can be characterized as a combination of time assessment, goal setting, planning, and monitoring activities. Behavior in time management can be characterized as a combination of time estimation, goal setting, planning, and tracking activities (Hafner, Stock, 2010).

Time management is a way of life, a series of activities, procedures and resources to efficiently and effectively use our time, both in business and private life.

We will never have time for everything, and what can be done at whatever time is never done.

The key to success is dealing with solutions rather than problems through the stimulation of thought processes. The goal is to answer each question with a question which literally forces you to come up with the answer yourself. How? By an insight into your own thinking. Knowledge and skills are necessary for this, as well as the existence of a positive goal and good intent, as we need to know what we want. The truth is usually naked so that everyone can dress it according to their own will. For someone, the reality is the cultivation of cucumbers, and for others it is aircraft production, the conquest of power, and so on.

The real goal is perceived only by the big players.

The formula for obtaining a good solution is “Let’s hear our thoughts.” The formula, therefore, is attitude. Time management is self-management in time and space, or in other words, managing your life. What has passed does not exist anymore, what will be has not happened yet. There is only today. Today is a gift. The present is the future that has begun.

Time waits for no one. In addition to what God has given us, our life is determined by ourselves. It is the result of free choice and the decisions we make. Everything is possible, who wants to find a way does so, who does not want to finds an excuse.

It’s easy to live with your eyes closed, by misinterpreting what you see. By pointing our forefinger towards ourselves, we give meaning to our lives - we fill time with life, not life with years. A new time requires new knowledge and skills - the application of new innovative and creative techniques and coaching models that enable us to become inspirational, to face ourselves. One must be brave in presenting oneself, which allows us to make the most of our time. It is never too late to change the direction towards a reachable goal. It does not matter where the wind blows, but where you’ve set your sails.

The Roman philosopher Seneca lamented that people trifle with time, because time is “an immaterial thing that doesn’t appear to the eyes, and for that reason it’s valued very cheaply” (Aeon, Aguinis, 2017). You will often hear that time is the biggest serial killer. What does it mean when someone says this (a very common phenomenon): “If only my day lasted 26 hours, I would have managed to do everything in time,” or “What did I spend time on today, where was my day?” Tomorrow the same time is repeated, and the excuse for bad time judgment is always the same: “I really don’t have time to work in a normal way. I have no idea what I’m doing any more.” The consequences are bad communication, loss of creativity, lack of a search for good solutions, a lack of determination, an absence of influence, conflicts, little probability of getting what is needed and much, much stress.

A partial answer to the question can also be found in time management surveys: 54% work more than 10 hours a day, 71% regularly work at home, 75% have dream jobs, 75% say they cannot sleep because of worry, 57% postponed their holiday or weekend. Here it is clear that commitments are controlling the workers, not the workers their commitments. Their energy is directed against themselves.

If everything in your life which is urgent becomes imperative, you have failed. People lose their confidence in themselves, doubting the existence of their ‘self’ and are unable to recognize reality, and energy is scattered or has a negative turn, turns into a wander in the dark full of fear and stress. Poor time management is one of the major causes of stress.

People are increasingly disintegrated individuals, their social networks are increasingly more complex and unpredictable, in their essence, egoism and subjectivity, burdened by impressions of themselves, and that what is becoming more and more important (earnings at any price), according to the theory of social Darwinism is becoming “a jungle in which only the fittest survive.”

The most likely consequences of bad time management are manifested in the family situation: family degradation is accelerating, children are increasingly free from parental control, ambitions are fueled by social networks, movies, music, vices (alcohol, drug addiction, prostitution, perversity, etc.) and it's only a matter of time when the concept of "home" also disintegrates.

Let us reiterate that our society will tomorrow depend on what our children are today. Each of them is a personality for himself and needs appropriate time and attention.

Most people have lost clear direction in time and space, no one is happy, no one is calm and quiet.

And finally, let us remember that in Greek mythology, time is personified by Chronos, the son of Uranus (the sky) and Gaia (the Earth), a Greek god who devoured his own children.

However, time will not betray those who know how to use it.

Successful people are different from unsuccessful ones, among other things, by the way they manage time. The awakening of potential implies that you know yourself (priorities, values, goals). It is also an important assumption to know the limit of your options. Good planning implies separating the essential from the irrelevant. Good organization requires time, although disorganization requires a lot more time. The trick to success is not always doing everything, but what is important. We will remind you of Murphy 's Law: "There is never time to do it right, but always time to do it over."

Is it hard to be different? No. It is much more difficult to spend our lives doing something we are not and regret it at the end.

Which is the right way when it seems all ways are the same?

Tomas Edison said once: "I have not failed. I've just found 10,000 ways that won't work." Igor Stravinsky said: "I have no time to rush."

If we stop taking ourselves too seriously, it would be the best decision we make, intuitively or unconsciously.

One should live one's own reality, not seek for it outside of oneself, as life always finds a way. There is a secret order in every disorder.

Time is the greatest ally of truth. Truth is simple – there are no mundane moments. Ask Milorad Čavić what the meaning of a millisecond is. For those who work, the moment of truth is when they have their last coffee at work, at 10 pm.

When it's hardest, you always arrive at yourself. There is nothing harmful to a new truth than an old illusion.

People can use you only if you give them permission. Time thieves are merciless. The most common time thieves are: unclear goals, disorganization, multiple activities at once, long meetings, too much time on telephone conversations, involvement of other parties, Instagram, Facebook, etc.

Many relate with impulsive activities. Internal obstacles or time thieves are also the following: delay, postponement, perfectionism, insufficient motivation, negative emotions, and fatigue. There are many rules for managing time from the Pareto Principle of Time Management to various ways of time planning, but we

will not be dealing with these, but rather some relevant tips for living life: understand the importance of your time and do not let others manage it, organize yourself, set goals and set them up according to priorities and develop a strategy of action, manage yourself by avoiding activities that waste your time, simply say NO, single out at least 10 minutes daily for a conversation with yourself.

In fact, it is very important to single out at least 10 minutes a day for a conversation with yourself whereupon you will free your thoughts, train yourself to feel good, become aware that you can choose how you feel. It is very important that you have a person whom you can talk to and with whom even being silent is enjoyable.

So, do not forget to put some time aside for yourself!

How important it is to manage time is backed up by eastern knowledge and the circulating of vital, life energy in time.

Life energy, according to eastern knowledge, circulates in time through 12 energy meridians which change every 2 hours, so it is not irrelevant what time you work, drink tea, have lunch, undergo therapy.

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In the early morning hours, from 3 am to 5 am, many people may have a problem with the respiratory organs – during this period, the lungs need maximum energy (resulting in coughing, choking, chest discomfort). From 5 am to 7 am, the colon needs maximum energy, and from 7 am to 9 am maximum energy is borne by the stomach – thus, many people are nervous at this time of the morning. From 9 am to 11 am, worry is undesirable, the spleen and pancreas work at their maximum and will be grateful if you offer them some warm lemonade. From 11 am to 1 pm, it is time to relieve any stress because at that time the heart works maximally. It is not by chance that lunch is recommended from 1 pm to 3 pm when nutrients are absorbed the best, while from 3 pm to 5 pm the body's energy is at its peak, and from 5 pm to 7 pm the kidneys bear the maximum energy. From 7 pm to 9 pm the maximum energy is located in the pericardium. The period from 9 pm to 11 pm is important for thermoregulation: meditation, relaxation, and peace are of a special significance. From 1 pm to 1 am the maximum energy is in the bile duct and from 1 am to 3 am it is in the liver. Often people store anger in themselves, not channeling it, and in this part of the night they are aggressive – in fact, alcohol consumption has a particular negative impact.

LEARN TO MANAGE STRESS – LIFE BECOMES MAGICAL WHEN YOU STOP THINKING IT IS PERFECT

In this part of the paper, we tried to point out the fact that the formula of success depends to a great extent on the management of stress as a daily phenomenon and the limiting factor of success. The term stress usually refers to the "physical and psychological tension that an individual feels when confronted with the temptations of extraordinary demands, pressures or opportunities whose outcome is assessed as uncertain and important" (Robbins, Coulter, 2005).

Many questions seek an answer.

Can you say 'no', do you allow others to manage your life? Is your work in the service of a better life or is your life in the service of your work? Do you dedicate at least ten minutes a day talking to yourself? Unfortunately, the answers to these questions are not very optimistic, and there are more and more disoriented, angry, helpless and apathetic people with failed expectations. In fact, they are under constant stress.

What does a wise and successful man do when he experiences a fall? He rises and moves on, aware of the price that he had to pay to gain some key knowledge: that the truth is what we want, that it consciously brings a lot of pain but also joy and success. Therefore, it is necessary to constantly search for the truth in the desire to overcome the need for self-deception. Those who are aware of what they can lose will win. Victory or defeat, success or failure – all this are challenges and chances.

Are there any guarantees? No!

What are the most common symptoms of stress and what do people usually do when they are in this condition?

Stress is a state or feeling when we think we have lost control of events. The most common symptoms of stress are irritability, a feeling of impotence, a feeling of loneliness, depression, general dissatisfaction, feeling like a victim, etc. People in a state of stress do not see opportunities, they retain and fail to solve problems, they are burdened by negative thoughts, and the feeling of guilt becomes painful.

In fact, they all carry a 'full burden' of uncertainty, and by misleading thoughts they 'infect' one another, invoking 'pyromaniacs' in order to dissuade a fire, reminding themselves to return to the past as they cannot see the present clearly. Usually, there is a feeling of helplessness, fear and an internal feeling that nothing can be changed, there is an avoiding of responsibility, and often the choice falls on the lesser of two evils. The tongue is faster than the intellect, and thoughts often drift without control and are hard to turn off.

Today, people live much more stressfully than two or three decades ago.

"Stress and depression are the most prevalent diseases of today," psychiatrists and psychologists claim. It is a consequence of computerization and of laying more emphasis on work than on living (Pajević, 2006).

The catastrophic consequences of war events and sanctions on socio-economic development, transition processes and nouveau riche privatization have not only affected the socio-economic environment, but have already annulled all social values, the economic and legal security of Serbian citizens, while hundreds of thousands of them are émigrés in their own country, without work and living below the poverty line. Therefore, today we have a mass of disoriented, angry, helpless and apathetic people with disenchanted expectations that are under constant stress. Young, educated people have no chance to succeed in this age when former substandard students are seeking 'revenge,' etc.

Many people have an acquired so-called mental mechanism in order to reproduce what their consciousness has been conditioned for, not ashamed of their (mal)functioning in the moral garbage dumps. Shame is a legacy of human civilization and should not be discarded in everyday life.

In the virtual reality in which we live, perceptions about ourselves are easily changed, everyone has their own vision, their perception of reality, their expectations and personal desires. We are surrounded by 'lightweight solutions,' and technology and parallel information have created a new front of deception. It is a habit to conceal distorted notions of human beings as ready-made truths, lying and manipulation are everyday occurrences, shouting occurs where everyone else whispers, the reaction to pressure is even greater pressure, many important things are done from incompetence, inclination towards excess self-esteem and lack of knowledge, and furthermore, many people defend what they know instead of discovering what they do not know.

So, we do everything disproportionately: we rejoice, we hate, we grieve.

Our mind is just an automatic organ that responds to all this and produces much, much stress. The mind is very powerful and it can create 'work from hell' but also 'hell from work.'

Can stress management be learned?

Everything in life can be learned, and thus also stress management.

We need to learn the following:

- to discover the limit of our possibilities by getting to know ourselves;
- to feel good, aware that you can choose how you feel;
- to free your thoughts from all past difficulties, not focusing on the mistakes which you made, as this is not your direction, and in fact, this is fear of the future;
- dealing with difficult subject matter rationally.We indeed are a part of the problem, but also a very relevant part of the solution. If we cannot solve some problem, then it is no longer our problem.

We must learn to say NO and not allow others to manage our lives.

A healthy way to relax and relieve stress is to spend as much time with your family as possible, go for a walk, work in the garden, sweat out tension with sports training, play with pets, apply relaxation massage, listen to music, relax with a good book, etc.

In the end, most importantly, all the prayers of this world, in fact, are in the service of seeking love. As Dante said, love is driven by the sun and by time. The future belongs to those who believe in the beauty of their souls, thoughts, and dreams.

Therefore, we should be happy in advance, happiness does not work backwards. Happiness is a matter of our decision, our choice. We have to support life energy and nurture it, because it leads us forwards, not backwards. It is an angle of looking ahead into the future and accepting oneself that gives healthy energy and motives to adopt and strengthen rational patterns of behavior that make us happy in advance. When you are in a low vibrations, obdurate old thoughts are activated, which is looking backwards.

Decide what matters to you: to be right with your convictions or to be happy, because these two do not go together.

What prevents people from being happy?

Many people, in fact, seek permission from others to feel good and happy. Humans are happy as much as their thoughts permit them to be happy. You will often hear somebody say that they are 'only being realistic,' which is merely an excuse for pessimism. Energy comes when attention is focused. The truth is simple but there are no simple moments. Fill years with life, not life with years. Let's go back to the center of God's harmony: the soul, the mind, the body are connected with the beauty of nature and exchange the most beautiful energy with water, air, sun, neighbors and loved ones. Let's open ourselves to absolute values: truth, hope, faith, love. Open your heart, you may like what is inside.

CONCLUSION

Through theoretical and empirical research, we have confirmed the importance of education, knowledge and social skills on institutional bases, and creative modernization of agriculture which, by changes in the global economy, growing transitional contradictions and interest matrices, have found themselves in a complex crossroads and are facing numerous problems in their development.

Science and education are the main drivers of economic development and its values, and labor (labor content and education) is what connects many economic activities and represents the whole value of social development - the route and course of its development, the source of value. This is because the world is going through a new technological revolution, as social networks, applications and virtual currencies are changing the global economy.

Education and learning can accelerate changes in labor content and work, stimulate and accelerate the enrichment of work with new methods and techniques and greatly contribute to the improvement of man's creativity and the art of living - the desire for success and satisfaction.

We are aware of the complexity of the problem, the difficulties in organizing education and labor work and its elements as a formula of success. Therefore, our

theoretical and empirical research should be understood as an attempt to partially find the essence of the interdependence of socio-economic development, and labor content and education in order to determine the positive indicators of these relations and to resolve the contradictions and doubts so far noted. In this, we find a certain significance and value of our research work, which, hopefully, will initiate new research and discussions on this important problem.

However much we ask for justification and excuses in the environment and given circumstances, it depends on us how we will feel at any given time.

In fact, it is never too late to change the course toward realistic and achievable goals by applying this motto: It must be better than this.

Perhaps the time for this is right now.

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KEY SUCCESS FACTORS OF NEW TECHNOLOGY BASED FIRMS IN IRAN(NTBFS):CASE OF IRANIAN NTBFS

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ABSTRACT

New technology based firms play a critical role in the economy of regions, especially in emerging economies. However, their success is highly dependent on several issues such as their management, firm levels issues or the like. This study tries to elaborate these factors and find out if these factors are effective in an emerging economy such as Iran. Then, in this paper, after a review of the literature, a multiple case study research design is considered to propose a framework by studying 11 cases. Then, a questionnaire was prepared and distributed among the owners of 312 new technology based firms. The results showed that there are several factors which affect their success, which are: (i) Launch readiness, (ii) Technology readiness, (iii) Management characteristics, (iv) Firm level competencies, (v) Marketing issues, (vi) Project related issues, and (vii) Market maturity. Finally some directions for future research are proposed.

Key words: *new technology based firm (NTBF), success factors, Iran, startups, knowledge based firms*

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INTRODUCTION

New technology based firms (NTBFs) are growing around the globe and their impact on the socio-economic development of the regions is evident (Jensen & Clausen, 2017). These companies are generally shaped around a knowledge based core of prominent scholars and their students (Hagedoorn et al., 2018). Mostly born from universities, academic settings, and research institutions, these entities try to get far from their academic position and open new windows to emerging markets (Qureshi et al., 2017). These entities are agile, knowledge based, and work at the cutting edge of technologies to use their competitive advantages, in mostly emerging and old markets (Bruneel et al., 2017). In emerging markets, they have to compete with new competitors, while in old markets they have to face traditional competitors who mostly do not want to accept the changes rooted from technologic trends (Brinckmann et al., 2011; Löfsten, 2016). Although these entities constitute a small segment of economies, their impact is mostly exponential and thus, academics and policy makers pay a great deal of attention to these firms (Onetti et al., 2012).

There are too many benefits associated with new technology based firms. For instance, in such firms, (i) technological knowledge is generally transferred to the new products or services, (ii) new employment is created, and (iii) survival rates are often higher than the knowledge based firms (Aldeano & Magdaleno, 2007). As mentioned by some scholars, new technology based firms are very often created through a spin-off process, having two typical specific components: (i) These are often small firms, with a small number of employees, that produce high value added products and/or services, and (ii) Origin, development and updating of their technologies are performed through relationships between the firm and Universities and/or Research Centers.

At the same time, the success of these entities is highly dependent on different issues which must be taken into account. In order to highlight their success stories and key success factors, this study attempts to consider the relevant issues. It should be noted that this filed is marginally investigated in the existing literature on new technology based firms (see, Proksch, 2014; Pinkwart et al, 2015). Moreover, investigating this concept in an emerging market such as Iran makes this research more interesting (Kanani & Goodarzi, 2017). To do so, first the authors review the literature on new technology based firms and categorize the existing trends in this field. Then, research methodology is discussed. Consequently, a survey is conducted. Afterwards, the authors present the finding and finally the paper concludes with some remarks and directions for future research.

LITERATURE REVIEW

New technology-based firms are defined as new firms that develop and commercialize new products or services based on a new wave of technologies (Bollinger et al., 1983; Colombo & Grilli, 2005). These entities work as independent firms that are at maximum ten years of age, and are not controlled by another firm (Fontes & Coombs, 2001; Siegel et al., 2003). These are considered as innovative and progressive early stage ventures that base themselves on inventions of their academic-scholar staffs, core technologies, and innovative solutions, and are more prone to engage in exporting business models and international activities than other SMEs and small firms, since their products are technology based and solve a technological problem (Mian, 1996; Brinckmann et al., 2011; Onetti et al., 2012; Jensen & Clausen, 2017).

New technology based firms are a critical component of any typical economy, especially in developing countries (Chamanski & Waag, 2017). These firms generate new jobs and a significant number of these firms experience considerable growth during their first years of activity (Salamzadeh et al., 2017; Bruneel et al., 2017). Some of these firms have the potential to become the leading firms of tomorrow and consequently these are a significant fraction of any business community (Rydehell et al., 2018). Furthermore, new technology based firms develop new technologies and as a result are an important source for innovations and technological development (Cahen et al., 2017).

The following table shows the thematic overview of the new technology based firms' literature of the last ten years. To identify the present themes on new technology based firms' research the Proksch (2014) first performed a systematical literature review analysis and included papers which were published between years 2004 to 2014. He examined the papers containing new technology based firms or synonymous phrases such as high-tech entrepreneurial firms, high-tech startups, or high tech entrepreneurship in the title of his research. He investigated in the twelve journals listed as entrepreneurship journals and identified sixty-three articles having new technology based firms as the major focus of his study. Then, six research themes were identified by him, as follows:

- influence of the external environment on new technology based firms (e.g. see, Löfsten, 2016),
- incubation of new technology based firms (Pinkwart et al, 2015),
- innovation within new technology based firms (Mian et al., 2016),
- internationalization of new technology based firms (Somsuk & Laosirihongthong, 2014),
- networks of new technology based firms (Sternberg, 2014),
- and the resource-based view on new technology based firms (Patton, 2014).

As it is shown in the table, less attention has been paid to the success factors of new technology based firms.

Table 1: Thematic overview of the NTBF literature of the last 10 years

Research avenue/theme	Research focus	References
External Environment	The influence of the environment on the development of new technology based firms	Koga, 2005; Maine, Shapiro, & Vining, 2010; Bertoni, Colmbo, & Grille, 2013
Incubation	The effect of incubation on the creation and the success of new technology based firms	Cooper, & John, 2008; Colombo, Piva, & Rentocchini, 2011; Kitagwa, & Robertson, 2012
Innovation	The innovation generation and process within new technology based firms	Parida, Westerberg, & Frishammar, 2012; Algere, Sgupta, & Lapiedra 2013; Oakey, 2013
Internationalization	The internationalization process of new technology based firms	Coeurderoy, Cowling, Licht, Murray 2010; Piva, Rossi-Lamastra, & De Massis, 2013; Odorici, & Presutti, 2013
Networks	Network building and the influence of networks for new technology based firms	Clarysse, Konackaert, & Locket, 2007; Zhang, & Wong, 2008; Haeussler, Patzelt, & Zahra, 2012
Resource-based view	The impact of the resources on the development and success of new technology based firms	Shrader, & Siegel, 2007; Brinckmann, Saloma, & Gemueden, 2011; Colombo, & Grilli, 2011

Source: Proksch, 2014; Pinkwart et al., 2015

The success of these new technology based firms mostly depends on close relationships with medium and large firms in order to secure access to financial, managerial, technical and marketing resources (Storey & Tether, 1998; Brinckmann, 2008; Ganotakis, 2012). Otherwise, these newly established firms might fail to compete with such companies and would not be able to survive (Keeley & Roure, 1990; Heydebreck et al., 2000; Brinckmann & Hoegl, 2011).

Based on the existing literature, there are several competencies that are known as being critical to the success of these firms (Yang et al., 2009). For instance, their success falls heavily on the success of new innovations in products or services due to the increasing market competitions, as well as their capabilities and human capital (Etzkowitz & Klofsten, 2005; Hagedoorn et al., 2018). To some scholars there are two important influential effects: (i) external and (ii) internal factors, which affect through promoting research in high technology which may create opportunities for innovation by small firms which have a high potential for national and international economies (Qureshi et al., 2017).

As it is possible to use performance indices in order to measure the success of new technology based firms, some authors have pointed out three indices such as:

- direct financial gain,
- (market share, and
- alignment with company strategy (Belderbos et al., 2015).

Some other scholars also pointed out other indices, but they replaced the latest with technical objective (Hobbs et al., 2017). Some other indices are:

- sales,
- production cost,
- market share and
- profit (Mosey et al., 2017).

Another stream of authors enumerated another issues from other perspectives, which were:

- single index and multi-item index,
- subjective and objective measurement,
- reporting to top management and project leader, and
- measurement time elapsed after launch of the business (Lee et al., 2016).

RESEARCH METHOD

This study is mixed in nature and applied in terms of goal. In order to find the factors affecting the success of new technology based firms in Iran, we selected 11 new technology based firms form the list of knowledge based companies of Iran, which is prepared by the Vice-Presidency for Science and Technology of Iran. Purposeful sampling method was used and sampling was continued until reaching data saturation. The criteria was as follows:

- being registered in the database of the Vice-Presidency for Science and Technology of Iran,
- being established in the last three years,
- becoming profitable- reached the breakeven point.

This paper defines success of new technology based firms based on their accumulated profits over their last three years of activities (Sternberg, 2014; Pinkwart et al., 2015; Lautenschläger, 2015). This period was considered since commercialization activities generally takes time and then in this manuscript three years was used. Then, a multiple case study research was conducted. To do so, the authors firstly proposed an initial framework and then after the cross case and within case analysis stages, the framework was revised. Validity of the interview protocol was checked through experts (i.e. expert validity), and reliability was checked by creating a research protocol as well as a database for data gathering (Yin, 2017). In the next phase, a questionnaire was designed and distributed among 312 managers of new technology based firms. Simple random sampling was used in this phase, and reliability of the questionnaire were confirmed by Cronbach's alpha (α=0.78). Moreover, expert validity was used to validate the questionnaire.

FINDINGS

Initial framework of this study was proposed based on the extant literature, especially the framework proposed by Kim & Ko (2014), which included the following factors.

Launch readiness: Launch readiness is an important element in success or failure of new technology based firms. It is a way from conception to birth and grow up (Huamaní et al., 2017). Then, new technology based firms must be more focused on several issues such as product technology and production technology. Product technology is mainly focused on the value proposition, while production technology is a key activity in their business models of such firms (Colombo et al., 2016).

Technology: Technology itself is important in the success or failure of new technology based firms, as it is the heart of these firms (Vásquez-Urriago et al., 2016). Then, innovations and innovativeness, complexity, and compatibility of their products and activities are of paramount importance (Löfsten, 2016; Cahen et al., 2016).

CEO: There are several managerial characteristics which could pave the way for new technology based firms in order to succeed (Presse & Terzidis, 2018). For instance, managers' technical experience and their market understanding will highly affect the success of new technology based firms. Moreover, new streams such as technological entrepreneurship will be useful (Soleimani Dahaj et al., 2018).

Firm: Firm level success factors have a range of varieties. These elements range from technical manpower, networking, financial ability, and organization to marketing issues as they typically learn their business in the early stages of their life cycle (Evangelista Silva et al., 2018).

Market: Marketing issues are shaped around three main pillars among which competition, and type of market are of the most importance in the success of new technology based firms, especially in emerging markets (Alyani, 2018).

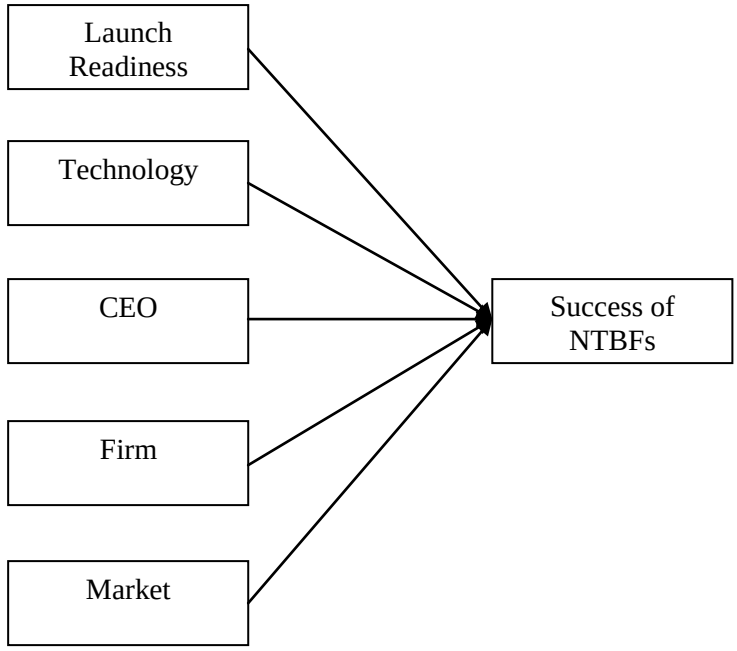

Figure 1: Basic Framework

Source: Kim, Ko (2014).

Then, the above mentioned framework (Kim & Ko, 2014) is considered as the basic framework in this research (Figure 1). However, the authors believe that contextual elements are also important in the success or failure of new technology based firms (Delapierre et al., 1998; Ramírez-Alesón & Fernández-Olmos, 2018). As in within-case analysis phase, data were useful also in cross-case analysis in order to facilitate the search for patterns across cases. Within-case analysis was done in order to highlight the areas of familiarity and distinction among the cases, while in Pattern Matching was done; i.e. comparing cases against an *ideal model* (Yin, 2017) which was the model proposed by Kim & Ko (2014), and finally overall findings and conclusions were elaborated. Based on the findings, the following model is proposed.

According to Figure 2, there are several issues which affect success or event failure of new technology based firms. These issues could be categorized in two groups: internal, and/or external factors (Brinckmann et al., 2011; Onetti et al., 2012; Jensen & Clausen, 2017). However, the proposed framework did not provide such a categorization. Instead, in this study, the main factors are recognized apart from their origin. Moreover, contextual elements are also taken into account. Then, the following hypotheses are proposed.

H_1: Launch readiness affects the success of new technology based firms, considering the mediating role of contextual elements.

H_2: Technology readiness affects the success of new technology based firms, considering the mediating role of contextual elements.

H_3: Management characteristics affect the success of new technology based firms, considering the mediating role of contextual elements.

H_4: Firm level competencies affect the success of new technology based firms, considering the mediating role of contextual elements.

H_5: Marketing issues affect the success of new technology based firms, considering the mediating role of contextual elements.

H_6: Project related issues affect the success of new technology based firms, considering the mediating role of contextual elements.

H_7: Market maturity affects the success of new technology based firms, considering the mediating role of contextual elements.

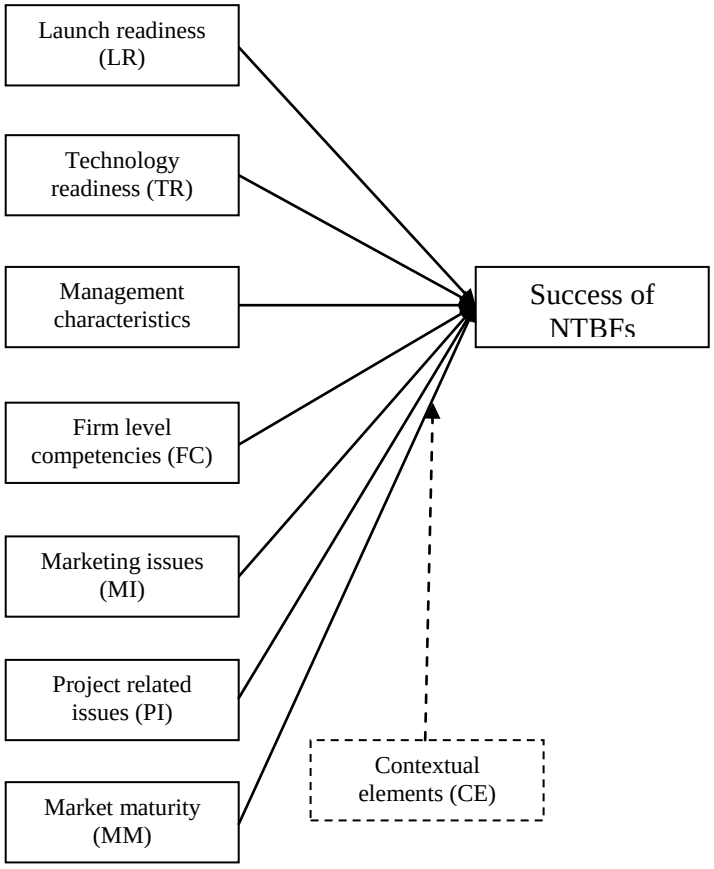

Figure 2: Proposed framework (source: self elaborated based on the findings)

The following charts show the demographic information of respondents and their firms. As it is shown, most of the respondents were male, and most of them had ten to fifteen years of experience. In terms of education, most of the respondents had Bachelor's degree.

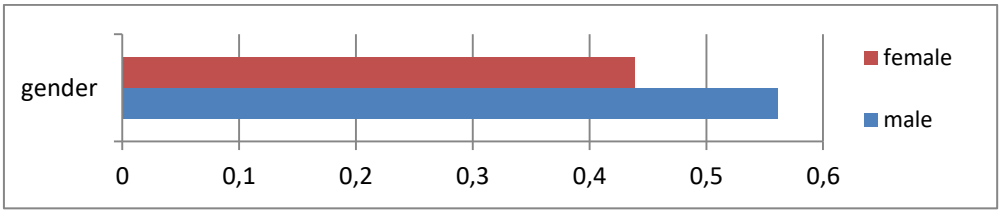

Chart 1: Gender of respondents

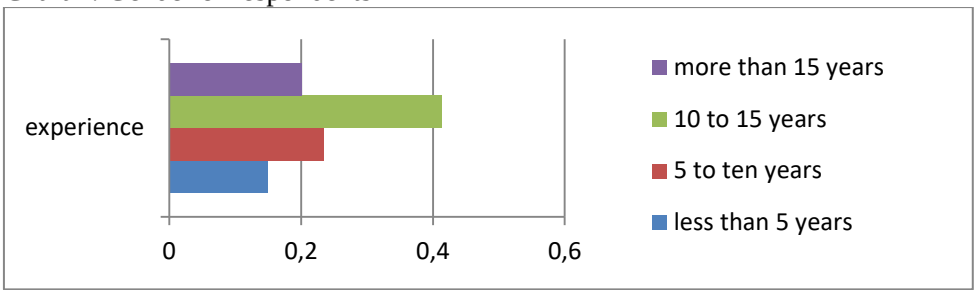

Chart 2: Experience of respondents (year)

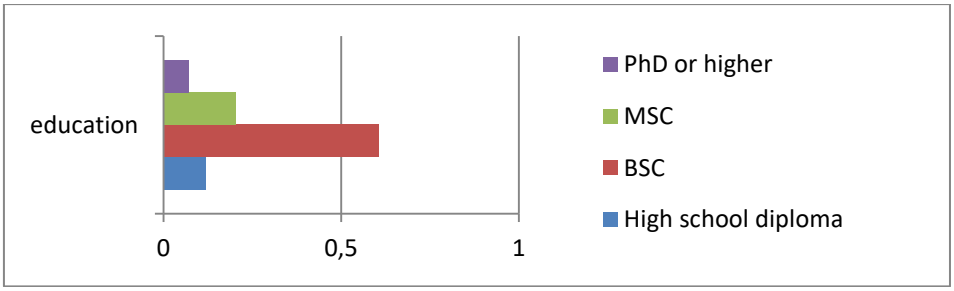

Chart 3: Education of respondents

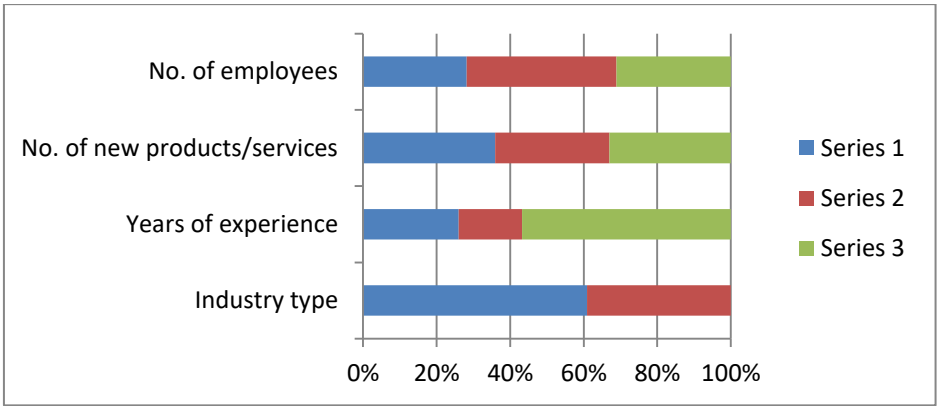

Chart 4: Demographic information of the firms

Legend: Industry type: Series 1: Manufacturing; Series 2: Service provider II
Years of experience: Series 1: 3 to 5 years; Series 2: 5 to 10 years; Series 3: more

than 10 years II Number of new services/products: Series 1: Less than 5; Series 2: 5 to 10; Series 3: more than 10 II Number of employees: Series 1: Less than 50; Series 2: 50 to 100; Series 3: more than 100

The following table shows the test results of the above mentioned hypotheses. As it is shown in the table, all the hypotheses are supported by the gathered data.

Table 2: Test Results

#	Hypothesis	S.E.	C.R.	Sig	Result
H1	Launch readiness affects the success of new technology based firms, considering the mediating role of contextual elements	0.739	1.97	0.000	Accepted
H2	Technology readiness affects the success of new technology based firms, considering the mediating role of contextual elements	0.412	1.96	0.003	Accepted
H3	Management characteristics affect the success of new technology based firms, considering the mediating role of contextual elements	0.324	2.21	0.000	Accepted
H4	Firm level competencies affect the success of new technology based firms, considering the mediating role of contextual elements	0.725	1.98	0.007	Accepted
H5	Marketing issues affect the success of new technology based firms, considering the mediating role of contextual elements	0.776	2.22	0.001	Accepted
H6	Project related issues affect the success of new technology based firms, considering the mediating role of contextual elements	0.378	2.01	0.000	Accepted
H7	Market maturity affects the success of new technology based firms, considering the mediating role of contextual elements	0.675	1.98	0.000	Accepted

CONCLUSION

This research was done to investigate the factors affecting the success of new technology based firms in an emerging market, i.e. Iran. To do so, the factors affecting their success was reviewed in the literature and then investigated through a multiple case study approach. Consequently, a questionnaire was designed and distributed among the owners of those firms. The results showed that there are several factors which affect their success, which are: (i) Launch readiness

(Huamaní et al., 2017), (ii) Technology readiness (Vásquez-Urriago et al., 2016; Löfsten, 2016; Cahen et al., 2016), (iii) Management characteristics (Presse & Terzidis, 2018; Soleimani Dahaj et al., 2018), (iv) Firm level competencies (Evangelista Silva et al., 2018), (v) Marketing issues (Alyani, 2018), (vi) Project related issues, and (vii) Market maturity. Among these finding, two last ones are contributions of this research. Moreover, more specific aspects were considered in defining the concepts and then, it is another aspect of our contribution. Last but not the least is considering these factors in an emerging market such as Iran, which was not previously studied. The authors suggest that future authors would focus on contextual elements in more details and test the hypotheses in other similar populations. It is noteworthy that all of the studied firms were listed by the Vice-Presidency for Science and Technology of Iran, and this might affect the findings; since there are some support measures offered to those companies- especially at the early stages (Salamzadeh & Kawamorita Kesim, 2017; Kanani & Goodarzi, 2017). Moreover, it is suggested that future researchers compare the success of these companies with those companies which were not supported by the Vice-Presidency for Science and Technology of Iran or any other entities. Finally, it should be mentioned that policy makers could take advantage of this study to pave the way for the success of new technology based firms in Iran.

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CULTURE AND MANAGERIAL INNOVATION OF ALGERIAN WOMEN ENTREPRENEURS

Boufeldja Ghiat[13]

ABSTRACT

Women paid work in Algeria has long been ignored in the past. After the accession to political sovereignty, Algeria has experienced profound socio-cultural, economic and educational changes, which contributed relatively in the improvement of women's status. Thus, more girls were able to follow up their higher education and to integrate the working life. The difficulties and complexities of socio-cultural environment were unfavourable for the entrepreneurship spirit, then discouraged women's initiatives. Nowadays, women have to face challenges and diverse socio-cultural constraints. The women entrepreneurs and their employees are strongly influenced by local traditions that put obstacles on their professional activities (the work of women out of the matrimonial home; questioning of female authority by male's subordinates, unbalanced hierarchical relationships men / women in society and at work). A questionnaire was developed and administred on a sample of 30 women entrepreneurs from Oran region, in order to study the impact of socio-cultural factors on the performance and managerial innovation of women entrepreneurs in Algeria. The results show that women entrepreneurs have a positive psychological profile that reflects their initiative spirit and their managerial innovation abilities.

Key words: *women entrepreneurs, entrepreneurial culture, managerial innovation, work in Algeria*

JEL Classification: l26

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After the reign of socialism since its independence in 1962, Algera had experienced an economic upheaval, with the fall of the Berlin Wall and the disintegration of the Soviet Union. Algeria opted for capitalist development strategies, opening up to the market of economy and encouraging young people to invest in the creation of micro and small businesses.

Entrepreneurial culture has flourished successfully in countries of Europe, North America and Asia. Despite the efforts of the Algerian state, it could not get the same results, because of the business environment which was often detrimental to the company (especially private). Mercure et al. Concluded that in Algeria, (1997, p 24). "The singular sociocultural reality of Algeria combined with economic pitfalls and difficulties that currently companies to restructure their management methods, pose acute problem of complex relationships between management and culture in this country."

Social environment affects organizational culture, since organizations are open systems (Negandhi and Robey, 1977), as well as cultural systems (Smircich 1983). Developing societies are more affected by traditional culture, that is "a social heritage that the group values and wishes to bequeath "(Doron and Parot, 2011, p. 176). The socio-cultural environment significantly influences the creation and development of enterprises. In the context of the Arab-Muslim societies, women are much more affected than men in the creation and management of entreprises.

The gradual increase in the number of women entrepreneurs in Algeria has been effective in recent years, albeit slow and difficult, as noted Metaiche Tahir (2013, p. 4): "The official figures for the numbers of women entrepreneurs are sketchy. Then the conceptual confusion exists between the contractor and other economic actors. Finally, Algerian academic literature relating to the subject of women entrepreneurs is very poor. "

According to the statistics of the National Trade Register Centre (NRC), the percentage of women entrepreneurs in Algeria is still very low: about 2% (TahirMetaiche, 2013, p. 5). This rate confirms what was found by Souad Addou, referring to NRC statistical results at 31 December 2012. These show that 109,771 Algerian women are holders of a trade register, against 1,447,777 males (Medjadji, 2013).

Entrepreneurship in Algerian society is hampered by complex financial, cultural and bureaucratic difficulties. These obstacles are real challenges, especially for young entrepreneurs, despite the progress observed in youth employment policy in Algeria.

Our contribution was mainly aimed at analyzing the socio-cultural environment in Algeria; to study the managerial practices of Algerian women entrepreneurs; to elucidate their innovative strategies in a hostile male environment. The text is structured in three parts that have successively the conceptual and theoretical framework of the research, methodology, main results and their discussion.

CONCEPTUAL AND THEORETICAL FRAMEWORK

This first part will address the following issues: culture and female entrepreneurship in the Algerian context, culture and managerial behavior of women entrepreneurs, cultural constraints and managerial innovation.

CULTURE AND FEMALE ENTREPRENEURSHIP IN ALGERIA

Hofstede (1980, p. 385), considers culture as the "collective programming of the mind which distinguishes the members of one class of people against another." This definition has caused much controversy in relation to its instrumental content of culture.

The importance of culture and its impact on behavior is recognized by researchers in anthropology and humanities. In 1871, Taylor defined culture as "that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society." (Diggs and Berger, 2004, p. 94). Ferraro for his part, stressed that "Culture refers to shared values, beliefs, expectations, and standards established in the countries, regions, social groups, businesses, and even departments within a company "(Mockler, 2002, p. 256). The Algerian woman entrepreneur can not remain indifferent to her surroundings and her cultural environment.

For Julien and Marchesnay (1997, p 26), entrepreneurship is based on three major pillars: the entrepreneur, entrepreneurship and business creation. Fayolle and Filion (2006, p 254) offer a much more detailed definition, stating that: "Entrepreneurship is the process by which people realize that owning their own business is an option or a viable solution. These people think they might create enterprises, become aware of the steps to follow to become an entrepreneur, and embark on creating and starting a business. "

The analysis of management practices in organisations requires a better understanding of the environment in which entrepreneurs and individuals operate. Social culture influences individual and collective behavior. Algeria is experiencing a high level of unemployment. According to the National Statistics Office (NSO), "the inactive population aged 15 and over is estimated at 15,714,000, of which 11,458,000 women. Housewives represent more than half of this population (52.8%) "(ONS, 2013, p. 25). The "housewife" is a form to hide the high rate of unemployment among Algerian women.

The Algerian education system does not encourage young people to invest in entrepreneurial activity. The University plays a key role in enabling students "to develop their creativity, their autonomy and enthusiasm and gain confidence by taking initiatives and teamwork to confront opinions "(Leger-Jarniou, 2008 p. 166).

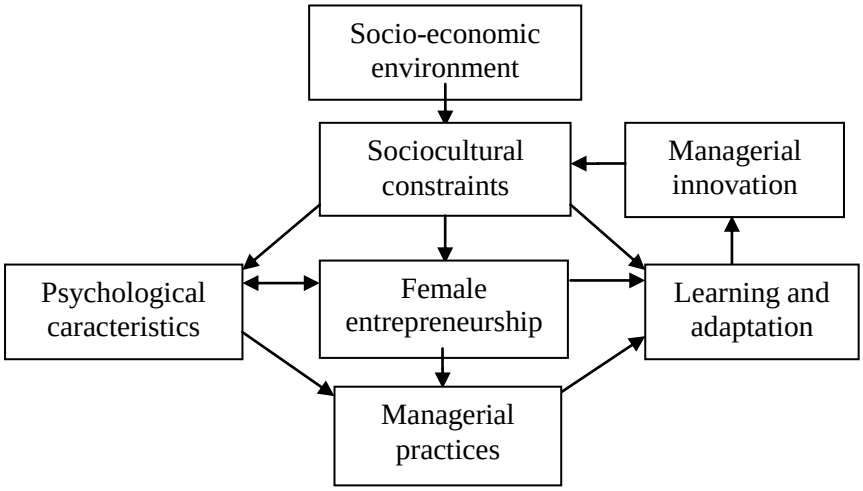
Despite the focus on the operation of encouraging young graduates to start their own businesses, the Algerian university does not meet the labor market needs and the need to prepare students to become future entrepreneurs and job creators. This can be seen in the lack of entrepreneurship training programs, or even teaching units (modules) to educate students and provide them with the necessary skills for the creation of their company. In a study on entrepreneurial intention, conducted in the region of Oran on a sample of 237 students, it was concluded that about 50% of students expressed their inability to make a business project plan (Ghiat, 2013).

This situation is even more worrying for women whose social status is greatly affected by multiple cultural and religious constraints. Algerians are linked to the local culture and traditions, despite the changes the country knows. Among the visible signs it was found that the majority of students, as well as women executives and entrepreneurs wear headscarves. This has an effect on their behavior and their relationships with men. Sometimes the headscarf and dress that covers the whole body according to Muslim tradition are put as a condition by the father or husband to give them permission to work.

The Arab-Muslim culture is very present in Algeria and in the Maghreb countries. According to Tounes and Assala, "the emergence of entrepreneurs is tinted by the cultural influence peculiar to the Algerian context" (Tounes and Assala, 2007, p. 1). This is confirmed by Grey and Finley-Hervey, that "in Moroccan society, traditional values such as solidarity, honor, obedience, and respect for mutual aid are still present" (Grey and Finley-Hervey, 2005). The same cultural influences on women entrepreneurs are met in Algeria. Thus Metaiche Tahir (2013, p. 4) emphasizes that "women entrepreneurs experience discrimination in gender relations and meet more difficulties in the creation or development of a company compared to their male counterparts". These cultural factors may adversely affect the managerial innovation of women entrepreneurs. But according to Rachdi, "most of these constraints are not insurmountable" (Rachdi, 2006, p.25)

To better understand the entrepreneurial environment and the factors affecting women entrepreneurs in particular, a scheme was developed, which shows the relationships between the psychological characteristics, management practices and socio-cultural constraints. What drives entrepreneurs towards learning, adaptation and managerial innovation. They give an overview of the influence of the sociocultural environment on women's entrepreneurship and managerial practices; as shown in the figure below.

Figure 1: Socio-cultural constraints and managerial innovation of women entrepreneurs



The enterprise as an organization operates in a global environment in which the entrepreneurial culture is built. The socio-economic and socio-cultural environments influence the behavior of individuals. In the Algerian environment, women are obliged to develop innovative strategies to success in the exercise of entrepreneurial activity. As Berreziga and Meziane (2012, p. 8) analysed entrepreneurship as a multidimensional phenomenon: "it is not an economic and social phenomenon but also socio-cultural one. The entrepreneurial action can not be conceived outside the society in which the entrepreneur belongs." In order to success in performing their entrepreneurial jobs, Algerian women had to engage in a tough fighting against prejudice and cultural stereotypes.

CULTURE AND MANAGERIAL BEHAVIOR OF WOMEN ENTREPRENEURS

In their study on the cultural influences on managerial behavior, Tounes and Assala (2007, p. 23) concluded that "The impact of the cultural impact on behavior, and ultimately on managerial practices is manifested at different levels of the company,, particularly in the management of human resources, management of Information and entrepreneurial vision."

There is a clear link between the psychological characteristics of the entrepreneur and the entrepreneurial activity requirements, as pointed out by Léger-Jarniou (2008, p. 164) who emphasized that entrepreneurial culture "valorizes the personal characteristics associated with entrepreneurship: individualism, marginality, the need for personal achievement, risk-taking, self-confidence and social skills; that valorize the personal success while forgiving

failure; that promote diversity and not uniformity, that encourages change and not stability. "

According to Say, taken up by tounes (2003, p. 6), managing and organizing on one hand; taking risks, on the other hand, are the two most characteristic traits of the entrepreneur's activity. Being an entrepreneur requires managerial skills wich are summarized by Laviolette and Rent (2006) as leadership skills, communication and people management. These skills cover the following aspects:

- "Leadership: establish oneself as a leader, build support and involvement of his employees and / or partners;

- Communicate: circulate information internally and externally using the right media; keep a clear, coherent discourse against a person or group of persons;

- People's management: plan the work of others; delegate and empower others; monitor and control the proper achievement of objectives; evaluate the results obtained in the form of a balance sheet "(Laviolette and Loue, 2006, p. 9).

The lack of management training and the lack of women entrepreneurship experience in Algeria, was forcing them to mobilize their psychological characteristics and personal creativity to face obstacles in their binding and unstable environment. These sociocultural obstacles affect the performance of women entrepreneurs.

Furthermore, the socialization of the Algerian woman produces obstacles to the development of female entrepreneurship, as recalled Rachdi (2006, p.2.): "The socialization of girls does not help to develop their confidence, their autonomy, their sense of risk and taste of innovation: the skills which are necessary in any individual who wants to develop and manage his own business".

Our research is focused more on the perception of psychological variables, leadership styles, communication and their impact on innovative business practices in the Algerian context.

CULTURAL CONSTRAINTS AND MANAGERIAL INNOVATION

The concept of innovation has become central, especially in companies experiencing difficulties and sometimes fierce competition. Lemoine and Fraccola (. 2008, p. 102) attract more attention to the global nature of innovation that is not limited only to the technological dimension, "It is necessary not only take care of technical innovation but also of interest to management and working conditions. This is a sign that the human resources, that is to say, people skills, collaborators of all levels are essential to the smooth running of the business. "The managerial innovation can be used as a means for changing attitudes and behaviors. It can be defined as "any intentional introduction of unprogramme, policy, practice or system, newly designed, to influence or adapted attitudes and behaviors, and create new abilities and skills "(Som and Bouchikhi, 2003, p. 3).

Innovation is an essential requirement for the success of the company, especially in a highly competitive environment. According to Aliouat (2005, p. 31), it should be managed by "effective men and teams with multiple skills, able to develop precisely these organizational architectures and strategies that accompany or influence innovation." The process Innovation is described by Schumpeter (1934) as a deviation from routine behavior, deviation that causes a permanent renewal of the economic system through a series of cycles of "creative destruction" (quoted by Aliouat, 2005, p. 29). For his part, Bergeron (2000, p. 489) describes innovation as "the process by which a new idea is used, in order to convert it to a single product or to perform work in a different way."

It is not a choice to innovate but is a requirement, as Abderrazak (2008, p 113) recalls: "The enterprise that does not innovate to make changes dictated by a turbulent and uncertain environment and constant change may perish."Innovation and creation are related to entrepreneurial action, according to Toulouse (1988, p.21-22) who sees entrepreneurship as" a creative response, ability to perceive new perspectives, to make new things, to make existing things differently. "

Thus, the ability to overcome cultural barriers in the business requires managerial innovation. Abderrazak (2008, p. 117) made this reminder: "If innovation requires access to information and ideas exchanges with colleagues and others, it requires from creators a power of persuasion to accept his ideas and convince the leader of his originality and the economic interest it presents. "But in Algeria, as in most developing countries, entrepreneurship serves more to combat unemployment and poverty. That is why they do not integrate sufficient innovation and sustainable development, as is the case in industrialized countries.

Innovation and creativity can be mobilized in daily behavior, to deal with different obstacles. Tunes (2003, p. 14) concluded that, in a hostile environment, "the entrepreneur is not a hero that brings major innovations that will revolutionize society. Innovation in the Algerian entrepreneurship can be perceived in the fact that "first creates own job. It is very close to its local environment, its customers, its suppliers, its financial and other partners. It is part of a complex network of companies where he finds his inspiration and sources of innovation "(Tounes, 2003, p 14).

Many managers and workers innovate without knowing it. In a study by Melbouci (2008, p. 5) on social capital and innovative behavior of the Algerian entrepreneur, she concluded that in Algeria, "The innovative concept has not been used by the interviewees Algerian entrepreneurs. They talk about working, producing and think differently from what was usual. "

Women entrepreneurs in Algeria realize innovations successfully in developing psychological skills enabling them to face the challenges and constraints of their socio-cultural environment. They fit well, without realizing it, in the Schumpeterian tradition according to which "an entrepreneur is a person who wants and is able to turn an idea into a successful innovation "(Schumpeter, 1974, p. 479). The ongoing clash of different problems and challenges of the environment led the Algerian women entrepreneurs to be innovative, by adopting new ways of working. This is the case of women who are successful in the creation and

management of their businesses and managing the daily obstacles in an unhealthy environment.

The complexity of the Algerian cultural environment requires women entrepreneurs owning skills, physical and psychological qualities. They must be stronger than their male colleagues, as they are engaged in a process that appears to be a natural selection of people able to survive in an environment politically, socially and culturally hostile to the development of female entrepreneurship. The academic level of the majority of women entrepreneurs in Algeria allows them to innovate and adapt to the demands of such an environment. It is in these conditions that is conducted the slow and difficult emergence of female entrepreneurship.

The previous analyses lead us to formulate some pertinent questions for our research on women's entrepreneurship in Algeria.

- Do personal characteristics of women entrepreneurs promote managerial innovation?

- Do leadership style adopted by women entrepreneurs make managerial innovation?

- Do communication practices of women entrepreneurs facilitate managerial innovation?

- Do managerial practices adopted by women entrepreneurs facilitate managerial innovation?

RESEARCH METHODOLOGY

A questionnaire was prepared to study the skills and managerial innovations observed in women entrepreneurs in Algeria, their ways of managing male / female relationships, perceptions of the relationship between the Algerian local culture and innovative management practices.

Interviews with women entrepreneurs have worn mainly on their psychological characteristics, their managerial qualities (leadership and communication), their adaptation and innovation strategies. The aim was to cover in depth the aspects of objectives of our investigation.

Questionnaire and data collection procedure

Data collection was done in two approaches: qualitative (interviews with women entrepreneurs) and quantitative (using a questionnaire). The latter, entitled "Indices cultural and managerial practices of women entrepreneurs" was discussed to ensure its validity and reliability. Discussion sessions were held with researchers and lecturers in research methodology from Oran University (Algeria); as well as women entrepreneurs interested in research. Their comments and criticisms have helped to reformulate the final questionnaire whose content is focused around the following themes:

- Personal information;
- Information about the company;
- Socio-cultural difficulties;

- Managerial practices;
- Psychological qualities and managerial innovation.

The questionnaires were given directly to women entrepreneurs who were offered three possible answers: "Yes", "No", "Sometimes". The survey was conducted in the period between October 2012 and June 2013 in the region of Oran, Algeria's second largest city. The SPSS statistical package was used to calculate the numbers and percentages.

Sample of the research

(30) Questionnaires were filled in by women entrepreneurs in the region of Oran. 17 of them are married with children and 17 have a university educational level.

Table 1: Sample distribution according to age.

Ages		
20 - 30 years	06	20.0%
31-40 years	13	43.3%
41-50 years	06	20.0%
51 years and more	05	16.7%
Total	30	100%

The age of the majority of interviewed women varied between 20 and 40 years (63.30%).

Table 2: Sample distribution according to martial status

Marital status		
Single	10	33.33%
Married	17	56.70%
Divorced	01	3.30%
Widow	02	6.70%
Total	30	100%

The sample consists mainly of married women (56.70%).

Table 3: Sample distribution according to the level of training

	Primary	**Secondary**	**University**	**Total**
Level of instruction	02	11	17	30
Percentage	6.7%	36.70%	56.70%	100 %

The majority of surveyed women entrepreneurs have a higher educational leve (56.70%).

Table 4: Sample distribution according to the sector of activity

Sector of activity	Fréquency	Percent
Services	14	46.7
Crafts	07	23.3
Industry	05	16.7

Public Works	04	13.3
Total	30	100

Table 4 shows that the majority of companies covered by our survey are active in the service sectors, followed by crafts, industrial and public works activities.

RESULTS AND DISCUSSIONS

The main results are presented in the various following tables.

Table 5: Psychological characteristics of women entrepreneurs

1. Psychological characteristics		Yes	%	Some-times	%	No	%
1	Persuasion capacity of clients and partners.	24	80.00	05	16.70	01	03.30
2	Spirit of initiative	22	73.30	08	26.70	00	00.00
3	Preference executing the work on my way	19	63.30	07	23.30	04	13.30
4	Keep cool and avoid being angry	16	53.30	11	36.70	03	10.00
5	Absence of anxiety while working	11	36.70	11	36.70	08	26.70

This table shows that the main features of interviewed women entrepreneurs were the persuasive ability of clients and partners and the spirit of initiative.

Table 6: Leadership Quality

	2. Leadership Quality	**yes**	**%**	Some-times	**%**	**No**	**%**
6	Preference of following up the works by myself.	25	83.00	03	10.00	02	06.70
7	Employees are receptive to my instructions.	19	63.30	07	23.30	04	13.30
8	I consult my employees before making important decisions	19	63.30	07	23.30	04	13.30
9	I Manage my enterprise by rigor to show my position of strength	16	53.30	08	26.70	06	20.00
10	All my instructions are executed by my subordinates.	15	50.00	11	36.70	04	13.30

Among the leadership qualities of surveyed women entrepreneurs, there is the preference of monitoring the work in person and the responsiveness of employees with the instructions of women entrepreneurs.

Table 7: Ease of communication

	3. Ease of communication	**yes**	**%**	**Some-times**	**%**	**No**	**%**
11	Mastery of negotiating with interlocutors.	26	86.70	04	13.30	00	00.00
12	Sympathy with workers and taking account of their concerns.	22	73.30	08	36.00	00	00.00
13	Ease of communication with subordinates and women.	19	63.30	07	23.30	04	13.30
14	Ease of communication with men subordinates	17	56.70	10	33.30	03	10.00
15	Acception workers to be headed by women	15	50.00	10	33.30	05	16.70

This table shows that surveyed women entrepreneurs have communication capabilities that find themselves in control of the negotiation with stakeholders, sympathy with workers and taking into account the concerns of these.

Table 8: managerial practice and innovation

	4. Innovation and Management Practices	**yes**	**%**	**Some-times**	**%**	**No**	**%**
16	Capacity of innovation and creation of new working and production methods.	19	63.30	08	26.7	03	10.00
17	Disponibility for learning and accept my observation for the sake of improving company management.	18	60.00	08	26.70	04	13.30
18	Time control and management.	13	43.30	15	50	02	06.70
19	Delegation of responsibilities to certain employees or collaborators	15	50.00	11	36.70	04	13.30
20	Ease of decision making	14	46.70	08	26.70	08	26.70

Interviewed women entrepreneurs adopt innovative management practices that can be found in the adoption of new working methods and production (63.30%), lifelong learning and accepting advice from their staff to improve the management of their company (60.00%).

DISCUSSIONS

The success of women entrepreneurs in the Arab-Muslim countries requires psychological characteristics such as intelligence, creativity and patience. It also requires useful skills in the management of their businesses. Managerial skills are summarized by Laviolette and Loue, in terms of leadership activities, communication and people management.

Psychological qualities of women entrepreneurs

Being an entrepreneur requires a strong personality, ability to manage the behaviors and attitudes of individuals in a complex and often hostile sociocultural environment. This requires psychological qualities such as patience; perseverance; ease of communication; the ability to take decisions; the resolution of administrative, human, technical and materials problems, as well as adapting to changes and unforeseen situations. The results of this study show that women entrepreneurs surveyed have psychological qualities which are necessary for the proper management of their business; allowing them to innovate in the daily management of the latter.

Among the psychological qualities, we find the ability to persuade customers and partners (80.00%); the initiative spirit (73.30%); preference executing the work on their ways (68.30%); keep cool and avoiding to be angry (53.30%); the absence of anxiety at work (36.70%). These results confirm the findings of Abderrazak (2008) on the psychological characteristics of creators in general and women entrepreneurs in particular.

Leadership qualities

To successfully manage their employees, women entrepreneurs must assume their leadership. Laviolette and Rent (2006) define leadership as the ability to win support for employees and partenaires.Dans the case of Algerian women entrepreneurs, the results show that they prefer Work monitoring their work in person (83.30 %). It is possible to assert that their success is necessary, since according to their answers (63.70%), employees are receptive to women entrepreneurs guidelines. They consult their employees / collaborators before making important decisions (63.30%). They manage their businesses rigorously to show their strong positions (53.30%). They want to establish themselves as women entrepreneurs, because they don’t want to be despised and do not to be considered as weak characters.

The results show a slight majority of subordinates (50.00%) carry out the instructions of their superior women; against 13.30% indirectly refuse to execute and 36.70% who do so only occasionally. These results reflect the strong negative influence of cultural traditions on the exercise of women's leadership in Algeria.

Ease of communication

Despite the socio-cultural constraints that Algerian women entrepreneurs face in the field of communication, we find that interviewed women entrepreneurs master the trading skills with stakeholders (86.70%). The majority of them express their sympathy with the workers and take into account their concerns (73.30%).

One of the critical problems of human resource management is the communication between men and women. This problem is acute for men especially when headed by women. Questioned on this subject, women entrepreneurs have

mostly responded: “they have no difficulties communicating with their male subordinate” (56.70%). They found fewer difficulties in communicating with their female subordinates (63.30%), and 50.00% answered that men readily accept being directed by a woman.

In response to an open question about the secret of good relations with employees, the answers were like: "Be smiling, making conversation with people, being diplomate and frank." These responses are justified by the fact that women entrepreneurs recognize having communication skills that help them to receive, circulate and communicate the information necessary for the proper functioning of their business.

Successfully managing a business in Algeria requires the mobilization of human relations, especially at the informal level. In communication standard practices, include expressions that reflect the consideration that one has for his interlocutor: "if you wound"; "if it does not bother you "; "If you can do me a favor," I do this and God bless you." Algerian managers mobilize many informal relationships in their professional relationships, which raise major problems in behavior within companies and administrations, supposedly organized and operate according to formal rules.

Managerial practice and innovation

In addition to leadership and communication skills, the results of research have shown the usefulness of managerial methods to overcome cultural constraints in gender relations management. Among the managerial innovations observed in women entrepreneurs their ability to develop new working and production methods (63.30%). The fact that the majority of women entrepreneurs interviewed lacks training and experience, motivates them more to learn continually by courageously facing the problems and obstacles they encounter on a daily basis.

Women entrepreneurs surveyed are moderately satisfied concerning the management and control of their time (43.30%) and ease of decision-making (46.70%). Regarding cultural barriers to managerial innovation,

Regarding cultural barriers to managerial innovation, a woman entrepreneur replied: "view that we are Arabs, our society does not accept that a woman can be an entrepreneur, and it creates problems for women entrepreneurs. "The behavior of women entrepreneurs, according to one of them, is characterized by calmness, perseverance, love of others, optimism, willingness, courage, confidence and faith in God." These qualities often allow women to innovate in order to achieve their goals.

Psychological characteristics play a determining role in the behavior of female entrepreneurs, despite the realities of a hostile environment towards female entrepreneurship in Algeria. These characteristics can be summarized in a few sentences:

- Have courage and character to venture into entrepreneurial fields;
- Have human and managerial skills to see her orders executed;
- To convince men to work under the orders of a woman;

- Be able to successfully start a business in a demanding environment;
- To establish herself in a male environment;
- Have a financial gain, or at least an accounting balance that allows the company's survival in a generally uncertain economic environment.

Interviews carried out with women entrepreneurs confirm results of Melbouci (2008) who notes that Algerian women entrepreneurs innovate without knowing. The fact of creating and managing successfully an enterprise is an innovation in itself; especially in a context that is not always conducive to the development of an entrepreneurial culture (Tounes, 2003). Therefore, the Algerian women entrepreneurs are carriers of innovation; by their ability to take risks in this context, to transform their ideas into successful projects.

CONCLUSION

The entrepreneurial business in Algeria has always been a man's job. The first women entrepreneurs in the country have faced constraints and resistances mainly from their family environment and dominant value systems in a strongly marked by the Arab-Muslim culture society.

The results of our research show a gradual change, whatever slow, the image and status of women in Algerian society. This change is noticeable, among others, through the progressive involvement of women in entrepreneurial activities. The observation of daily practices of Algerian women entrepreneurs demonstrates their ability to innovate in the creation and management of their businesses. The first source of innovation, in their case, is taking and assuming risks of starting-up a business in a politically uncertain environment, bureaucratized economically and socially dominated by a traditional culture.

These resulting obstacles from environmental and socio-cultural constraints have delayed the emergence of female entrepreneurship in Algeria. But they also enabled Algerian women to become aware of their social situation, to begin developing and implementing strategies for change. Creation and company management can therefore be regarded as one of the dimensions of this strategy which aim is to successfully meet the challenge of female entrepreneurship.

In this field of research, women's entrepreneurship to the test of traditional culture or female entrepreneurship as a driver of innovation in the Maghreb in general and Algeria in particular, is still insufficiently explored. Progress could be envisaged through the identification and analysis of performance factors of enterprises created and led by women. As part of these future research, particular emphasis could be placed on the personal characteristics of successful women in the exercise of the profession of entrepreuneur (origin and family education, training, marital status, religious practices, political engagement, union or associations, etc.).

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Appendix

Psychological traits and managerial practices of women entrepreneurs

As part of a research on women entrepreneurs in Algeria, we present to you, Madam, questions about the psychological characteristics and management practices related to women's entrepreneurship in Algerian society. We ask you to answer the questions by putting an (x) in the appropriate boxes, according to your opinion and your management practices.

1. Personal Information:

Age: 20-30 ☐ 31-40 ☐ 41-50 ☐ 51 and up ☐

Marital Status: Single ☐ married ☐ divorced ☐ widow ☐

Level of study: primary ☐ Middle ☐ Secondary ☐ University ☐

Study speciality, if any.....☐.....☐.....

-Have you received professional training? Yes No

-if yes, which training?..... Duration:.....☐.....☐.....

....

-Does the training have a relationship with your current activity? Yes No

2. Company Information:

-Sector of activity: handicrafts services ☐ industry ☐ Building ☐

-Nature of work:.....

-Years in activity: less than 5 years 5 -10 ☐ 11-15 ☐ more than 15 years ☐

-Number of workers in your company:

Men…….... Women..... Total:…….....

3. Management practices and constraints:

In your relationship with your company's employees:

Nr	Questions	Answers		
		Yes	No	S/times
1	I have the ability to convince my clients and interlocutors.			
2	I have the spirit of initiative.			
3	I prefer to run the work in my own way?			
4	I keep my composure when I am angry.			
5	I feel anxious during my work.			
6	I prefer to follow my work in person?			
7	I feel that my workers are receptive to my instructions.			
8	I consult my employees before making any important decisions.			
9	I manage my business rigorously so they don't say I am weak.			
10	My subordinates execute all my instructions.			
11	I can control the negotiation with my interlocutors			
12	I sympathize with my subordonees by taking into account their concerns.			
13	I find it difficult to communicate with my female subordinates.			
14	I find it difficult to communicate with my men subordinates.			
15	My workers agree to be ordered by a woman.			

16	I innovate by creating new methods of work and production methods.			
17	I seek advice from other people in managing my company?			
18	I manage the control of time.			
19	I delegate responsibilities to my collaborators.			
20	It is easy for me to make decisions.			

- Other observations on the socio-cultural difficulties of women entrepreneurs:

.....
.....
.....

Thank you for your help

THE IMPORTANCE OF WOMEN'S ENTREPRENEURSHIP FOR THE ECONOMIC DEVELOPMENT

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ABSTRACT

According to data of the World Bank (2015) there has been global increase of female entrepreneurship and in its impact on the economic development of national economics. However, the potential of female entrepreneurship is largely underutilized and women still face a number of constraints that affect their ability to further develop and improve their business. Therefore this research will explore the specific characteristics and challenges, as well as various aspects of encouraging and developing female entrepreneurship. Paper will be based on the analysis of the official statistical data, the data from international statistics and the results of local researches. In order to identify the essential characteristics of the socio-economic and institutional context, as well as to position Republic of Serbia in the international context, a comparative analysis has been conducted on the one hand between female entrepreneurship and male entrepreneurship in Serbia, and, on the other hand, female entrepreneurship in the region and EU.

Key words: *entrepreneurship, female entrepreneurship, unemployment, economic development.*

JEL Classification: *M13,E240*

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INTRODUCTION

One of the main prerequisite for economic development is social equality and stability, which is based on a policy of equal opportunities, solidarity, social inclusion and social justice. Therefore balanced economic development is not possible without the proper use of women's human resources, and is therefore essential that the special measures encourage women's greater inclusion in a market economy (National Strategy for the Advancement of Women and Gender Equality, 015/2009).

Developed Countries and countries that strive to develop are abandoning resource-based economy and trying to develop economy and society that is based on knowledge with formal education and concept of lifelong learning as a prerequisite (Jovancai, Tosovic Stevanovic, 2013, pp.84).

Given that the entrepreneurship is widely recognized as an engine of economic development of each economy, we can define it (Timmons, Spinelli, 2008), as the ability to create and generate vision virtually out of nothing, as a creative act of initiating and building a business or organization. There has been many analysis of the entrepreneurs' propensity, behavior and leadership style as well as the significance of the entrepreneurship for the macroeconomic indicators. There is an increasing trend in promoting entrepreneurship and raising awareness about its benefits. Unfortunately, many countries in the world are facing very high rate of unemployment especially among young and middle aged population and one of the solutions for this problem is raising awareness about benefits of entrepreneurship and offering support for such activities. Almost all the governments and educational institutions in the world are trying to evolve entrepreneurial spirit that might be a good driver for the economic development. However, women's entrepreneurship is significantly less widespread than entrepreneurship among men, both in developing countries and in developed countries. Also, they tend to start and run less competitive business usually in the service sector which doesn't-t allow them to generate high revenue and further expand their endeavor. It is therefore essential to address this issue and establish basic socio-economic characteristics of the country, in order to understand the opportunities and challenges faced by women in starting their own business.

In European Union (EU), women make up only a third of self-employed and face more difficulties than men, mainly in access to finance, lack of ownership of real estate, due to certain social norms, etc. And as the motives for which women to decide to start their own businesses are usually listed as necessity, unemployment, insufficient income, but much less frequently cited reasons such as recognizing a good business opportunity or inheriting family business.

For financial independence, paid work is necessary, and after World economic crisis, unemployment of women, but also men's soared. Therefore, the problem of unemployment is cited as one of the key questions of every modern economy and

is one of the most important indicators of the efficiency of an economy. In Europe in 2013, the male employment was below 75%, while the employment rate of women increased slightly for the third year in a row and reached 63%.

Reducing gender inequalities, unfavorable preconditions and unsupportive factors for women's entrepreneurship, is reflected in the reduction of the difference in unemployment rates between men and women, which has a great influence on the increase in gross domestic product (GDP), which is of a great importance for economic growth and development of the country. This is corroborated by the fact that in 2007, Goldman Sachs reported that different countries and regions in the world could dramatically increase their GDP by reducing differences in unemployment rates between men and women: the Eurozone its GDP could increase by 13%, Japan 16% and the US by 9% (UN Women, 2010). Also, the report of the International Labor Organization and the Asian Development Bank in 2011 indicated that the gender gap in employment rates of women compared to men cost Asia $ 47 billion a year - as much as 45% of women are not working compared to 19% men (UN Women, 2010).

The challenges that women identify in starting a business include discouraging social and cultural attitudes, lower levels of entrepreneurship skills, greater difficulty in accessing start-up financing, smaller and less effective entrepreneurial networks and policy frameworks that discourage women’s entrepreneurship. Traditional instruments such as training and grants are used to address these barriers but these approaches need to be expanded because they have not had a full reach into the population. (European Comission, OECD, 2016)

Gender-sensitive statistics includes not only the classification and presentation of existing data by gender, but also taking into account differences in the problems and challenges that face women and men in all spheres of life (Statistical Office of the Republic of Serbia, 2014). For this reason, for the purposes of this study, we analyzed the different methodologies that contribute to a better understanding of women's entrepreneurship in certain countries. Indicators of certain international organizations, such as the World Bank, the World Economic Forum, the Institute for Global Entrepreneurship and Development and the Organization for Economic Cooperation and Development, enabling analysis of the factors that best represent the performance of the economy and the competitive strength of the analyzed countries.

ANALYSIS OF DIFFERENT INTERNATIONAL INDICATORS AND METHODOLOGYS OF WOMEN'S ENTREPRENEURSHIP IN THE WORLD

World Bank

According to the World Bank (2015) an increase of female entrepreneurship in the world is observed, but there is also a large number of constraints to the development and advancement of women in running their own business.

The analysis conducted by the World Bank under the name "The Female Entrepreneurship Resource Point" addresses the needs and constraints faced by women entrepreneurs, in order to provide practical guidance and recommendations in running their own business. Also, they engage in research and data collection on women entrepreneurship, which is of great importance for this area.

The importance of female entrepreneurship is extremely high both for economic development and for reducing poverty in the world, which is confirmed by the fact recorded in the US, where it is recorded twice as many women-owned enterprises compared to other companies, with contributions from almost 3 trillion and 23 million jobs. In developing countries, women's entrepreneurship is also on the rise, with the number of 8-10 million small and medium enterprises owned by women. However, although the number of entrepreneurs in the world increases, women continue to face barriers in terms of lack of capital, strict social norms, lack of knowledge and skills.

Around the world, at least 30 percent of women perform its activity within the non-agricultural sector and the informal sector (in Africa up to 63%). Also, women entrepreneurs are trying to be operating from home and perform much of the work to establish (and to meet the conflicting demands) balance between housework and child care with work commitments.

The World Bank has conducted a comparative analysis of the limitations relating to entrepreneurship and gender-specific constraints, in several categories: human capital, access to information, access to finance, institutional factors, social and cultural norms... Although a large number of women who run their own businesses are educated (a high school senior or college), they do not have enough professional and technical skills, as well as work experience for the development of highly productive enterprises.

Access to finance is often cited as a major impediment to growth and development of women's entrepreneurship. According to a survey of the World Bank (2015) in developing countries are shown significant differences in access to financial resources for men and women who have their own enterprise. As a result, many female entrepreneurs for starting up their own businesses rely on their own savings, loans from family or friends, or short-term loans. However, insufficient amounts of financial assets and short-term loan maturity, do not allow female entrepreneurs funds for long-term investments in their own business.

Disproportionately high legal and regulatory barriers may also have a significant impact on the ability to manage and maintain operations. In only 38 out of the 141 countries analyzed (WB, 2015), women have equal rights as men in key areas of business such as opening a bank account, getting a job without the permission of her husband, as well as possession and asset management. Therefore, it is emphasized that the institutional and legal environment is essential for the growth of female entrepreneurship.

While the number of women who run their business globally increase, research shows that comparing the level of development of the country, different factors affect this. In developed countries, the opportunities and possibilities that are realized through own job are the main drivers for entrepreneurship, while in developing countries, for entrepreneurship people decide mainly out of necessity or need for the provision of basic or extra income for the household, where self-employment is the only viable option.

As part of the Global Entrepreneurship and Development Institute an index of global entrepreneurship and development (GEDI) is developed, whose mission is to provide detailed insight into the entrepreneurial predispositions and characteristics of the nation. This index includes individual and institutional data of the analyzed countries, on the basis of which the entrepreneurial strengths and weaknesses of countries are better understood, allowing the implementation of the economic policy that encourages the further development of entrepreneurship.

In cooperation with the Global Entrepreneurship and Development Institute, a Global Entrepreneurship Index (GEI) is developed, which analyzes the economic potential of a country and the possibilities for their most effective utilization. Also, in cooperation with DELL, GEDI's women's entrepreneurship index was developed, as a pilot project, which measures the development of women's entrepreneurship and its potential in the world. The methodological approach of GEDI's index of women's entrepreneurship (GEDI, 2013), is based on a comparison of 30 individual and 30 institutional levels, which are further divided into three main sub-indices: an entrepreneurial environment, entrepreneurial eco-system and entrepreneurial aspirations (in terms of analyzing entrepreneurial opportunities and possibilities, entrepreneurial abilities and skills, education, access to finance, human resources, innovation, IT sector ...). The data analyzed were taken from reports by well-known international organizations such as the World Economic Forum (WEF), Global Entrepreneurship Monitor (GEM), the World Bank, UNESCO, the International Labor organization and others.

GEDI analysis include the results relating to higher education of entrepreneurs, which is of great importance for the growth and development of their business, as evidenced by the chart 1 (formed on the basis of data from the GEM and UNESCO). However, in some countries, although the lower the rate of highly educated women entrepreneurs, it has not affected their relationship and attitude towards entrepreneurship as a career choice. For example, in France, most of the female population believes that entrepreneurship is a good career choice and that women entrepreneurs enjoy high status in society, although the percentage of highly educated women entrepreneurs is less than 45%. In contrast, in Japan, 64%

of entrepreneurs are highly educated, but only 39% of the female population believes that entrepreneurship is a good career choice and that women entrepreneurs enjoy high status in society.

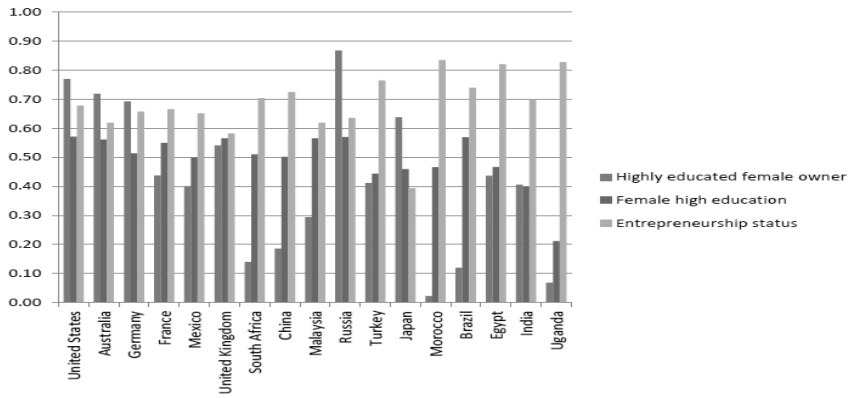

Figure 1: Education and Entrepreneurial Status.

Source: Gender-GEDI, 2013.

After the significant results obtained from the Gender-GEDI report, within the Global Entrepreneurship and Development Institute, Female Entrepreneurship Index (FEI) is developed, which analyzes many more countries in relation to Gender-GEDI report, as many as 77 countries (2015), which is why their results will be presented in the comparative analysis in the sequel of the paper.

THE WORLD ECONOMIC FORUM

Since 2006 the World Economic Forum engages in the state of global gender equality, as part of Global Gender Gap Report (GGGR), which analyzes 142 countries based on four critical factors: the economy, politics, education and health. In order to create effective measures to reduce gender differences, the global index of gender equality monitors and analyzes the gender gap between a country and its competitive position in the world, because women make up one half of the potential talent database of the country, and the country's competitiveness depends on how they are educated and used (WEF, 2015).

According to the report of the global gender equality from 2014, in the first place is the Island the sixth year in a row, and this is for several reasons (GGGR, 2014): a very high position in terms of economic participation and opportunities that are provided to women entrepreneurs, their education and their political engagement. Island is among the top ten countries in terms of position of women hired as state officials and managers, and is also one of the countries with the lowest difference in the number of male and female graduates, as well as the country with the highest percentage of male and female internet users, which in the 21st century is of great importance for any line of business.

In second place was Finland, followed by Norway, Sweden and Germany. At the last place is Yemen. Regarding the Serbian neighboring countries, this year Slovenia occupies 23rd place, Croatia 55th, Macedonia 70th, Montenegro 74th and Hungary 93rd.

Serbia is part of the report of the global gender equality since 2012, when it was on the 50th place, followed in 2013 at the 43rd place, but in the last report from 2014 was on the 54th place. The report states that 53 percent of women in Serbia work, compared to 69 percent of men, and they earn on average 66 per cent of male earnings. As for education and health care are concerned, the situation is much better, where, when it comes to education, 97% of women in Serbia are educated compared to 99% of men, and in terms of health care 67% of women, compared to 63% of men. When it comes to politics, the situation is a lot worse. The parliament has 34% women in Serbia, compared to 66% of men, with only 9% of women in ministerial positions, compared to 91% of men.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Organisation for Economic Co-operation and Development (OECD) in its report, entitled Social Institutions and Gender Index (SIGI), points out that discrimination against women and girls carries a high price of development. The OECD report assesses the extent of gender discrimination is measured through institutions, social norms, practices and laws in 160 countries. SIGI introduces the 14 indicators for social services, and they consist of five categories (SIGI, 2014): discriminatory family law, limited physical integrity, male child preference, limited property rights and limited civil liberties.

Results of this study showed that gender inequality, discrimination against women and restrictions regarding their freedom has a great influence on the development of society, which directly affects the country's economic development.

The top five countries under analysis SIGI-a (2014) Belgium, France, Slovenia, Spain and Serbia, and the last five are Chad, Mali, Gambia, Sudan and Yemen. Serbia as a fifth-placed country in a group of countries with very low levels of discrimination, especially in the part referring to the limited physical integrity, limited property rights and limited civil liberties.

COMPARATIVE ANALYSIS OF SERBIA WITH THE NEIGHBORING COUNTRIES

Based on data obtained from analysis carried out in the framework of the World Economic Forum, the Organization for Economic Cooperation and Development and the Institute for Global Economy and Development, the comparative analysis of Serbia and it's neighboring countries conducted in 2014, to closer determine its position on the international level in terms of encouraging and developing women's entrepreneurship in Serbia. Data were processed by the statistical software package SPSS.

Table 1: Comparative analysis of Serbia with neighboring countries.

Country	*WEF – GGGR*	*OECD - SIGI*	*GEDI*	*GEI**	*FEI**	*Average rank*	*Standard deviation*
Serbia	54	5	68	78	/	5	32,36639203
Bulgaria	22	19	36	44	/	2	11,78629147
Montenegro	74	/	52	54	37	6	15,19594244
Macedonia	70	45	62	58	42	7	11,73882447
Bosnia and Herzegovina	/	11	91	83	59	8	36
Croatia	55	/	49	51	31	4	10,63014581
Slovenia	23	3	22	29	21	1	9,787747443
Romania	72	29	40	42	33	3	16,93221781
Albania	83	74	71	76	/	9	5,099019514

*GEI (2015)

*FEI (2015)

Source: World Economic Forum, Organisation for Economic Co-operation and Development, Global Entrepreneurship and Development Institute.

In the analysis presented in Table 1 which compares Serbia's ranks and selected countries in the region according to various studies, among the best ranking countries we distinguish Slovenia, Bulgaria and Romania. In comparison to them Macedonia, Bosnia and Herzegovina and Albania are the worst positioned.

Based on the standard deviation we can see that the greatest differences appear among Bosnia and Herzegovina, Serbia, Romania and Montenegro, mostly in relation to the studies of OECD and FEI compared to the WEF survey, GEDI and GEI- a. In the Serbian review, we see a very large discrepancy OECD survey (5th place) in relation to other institutions, where Serbia is positioned very high (54, 68 and 78 of the city), which is also recorded very large misalignment of standard deviation.

ANALYSIS IN SERBIA AND EU

The importance of women for economic development in Serbia, as well as in other countries in transition, is opposing the standard view that men are carriers of economic change, and that women are passive or excluded from these flows (http://www.rpkpancevo.com/zensko-preduzetnistvo).

What is the situation in Serbia on the basis of the analysis conducted by local research centers or agencies in relation to the EU, will be presented in the sequel.

Based on research conducted by the Union of Employers of Serbia (2013) we can conclude that the economic potential of women in Serbia is not used enough, nor as a business owner, nor in the workforce. In a survey conducted from 2007 to 2011. (Union of Employers of Serbia, 2013), among women aged 18-64 years, there were only 7.9% entrepreneurs, however, in the next conducted from 2009 to 2012, there was an increase in the number of women entrepreneurs, where there were 14.9% of self-employed women aged 15-64 years.

Also, this research highlights that it is still pronounced polarization of the "male and female occupations", and the choice of occupation is often based on the inherited stereotypes according to which women are not in a position to deal with matters of technical profession, but are, more than men, directed to social sciences. This tendency is reflected on the participation of women in entrepreneurship, considering that women opt out for the service area, shops, providing care and education, then, let us say, for the field of construction, transport or techniques (Union of Employers of Serbia, 2013).

This is confirmed by the data of the Statistical Office of the Republic of Serbia, as shown in the Labour Force Survey, on the figure 2.

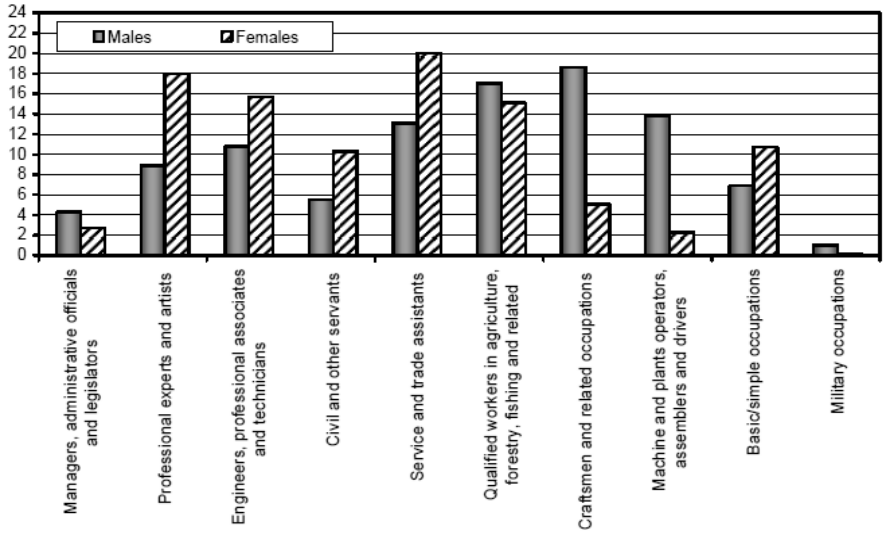

Figure 2: Structure of employed working-age population, by occupations, 2013.
Source: Statistical Office of the Republic of Serbia, 2014.

For fast and sustainable economic growth and development, it is essential to consider both social and economic benefits, but also identify shortcomings and weaknesses (Tosovic Stevanovic, Ristanovic, 2016). Primarily, one of the most serious problems is the fact that according to statistics from the European Commission, the division of different jobs for men and women is also very present throughout Europe. Only 16% of all employees work in "mixed" occupations, which is why it is considered that segregation also facilitates the underestimation of women's work, as well as their skills and competencies.

As for the employment rate in Republic of Serbia, for people of working age 15-64 years, 53.2% were women and 70.1% of men, and Figure 3 shows the structure of the population aged 15 and over by activity and gender (Statistical Office of the Republic of Serbia, 2014).

When this data is compared with the situation in the EU, according to European Commission (2014), over the past decade, a greater number of women is present in the labor market with full-time, and an even larger number of part-time (Graph 3). However, the percentage of women in employment in 2014 (63.5%) is still 11.5% lower compared to men (75%), according to the data defined in the context of Europe 2020. In addition, the representation of women that are working part-time is still four times higher than the employed men (chart 4), but at the same time, there are more and more families that depend on the labor of women (the majority of mothers, 61%, are also family breadwinner, which represents women's contribution to the growth of family income).

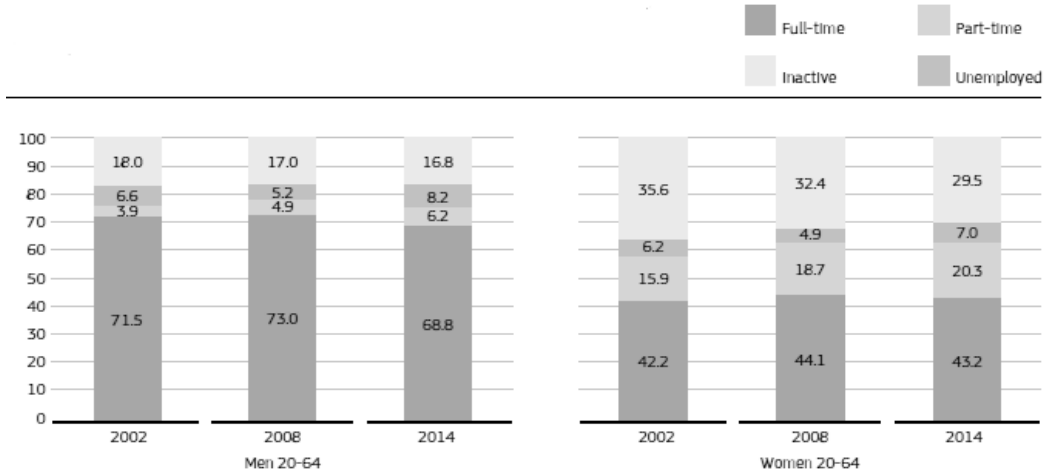

Figure 3: EU-28 men and women aged 20-64 by activity status in 2014 (%)

Source: Eurostat, Labor Force Survey, 2014.

Regarding the situation in Serbia, employed persons by working hours, age and gender, are shown in Table 2. Most employed women are the ones between 45 and 54 years of age (29.4%), while most working men are the ones aged between 35 and 44 years (25.5%).

Table 2: Structure of employed persons by working hours, age and gender 2013. (%).

Age	15+		15-64		15-24		25-54		55+	
Work hours	**Females (F)**	**Males (M)**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**
Full-time job	88	90	90	91	80	81	92	93	75	82
Part-time job	12	10	10	9	20	19	8	7	25	18

Source: Statistical Office of the Republic of Serbia, 2014.

According to the socio-demographic profile of women entrepreneurs, survey research is called The Baseline Study on Women's Entrepreneurship in Serbia, conducted on a sample of 455 active entrepreneurs (Babović, 2012), suggests that entrepreneurs are mostly middle-aged women (average age is 41.9 years), with secondary education (completed high school, 66% of entrepreneurs), married women (79%) who have children (85%). Data on the entrepreneurial profile of women in this sample indicate that this is primarily the micro-entrepreneurship, which represents business in the service sector, mostly first generation entrepreneurs in the family and are usually entered into entrepreneurship not because of good business ideas and business opportunities identified, but the economic emergency, or because otherwise they could not provide any or adequate employment (68%).

Therefore there are, in Serbia, with the aim of economic empowerment of women, promotion of employment and gender equality, forming strategies which are aimed at the development of women's entrepreneurship: *National Strategy for the Advancement of Women and Gender Equality, National Action Plan to improve the status of women and promoting gender equality for the period from 2010 to 2015, the National employment strategy for the period from 2011 to 2020.*

CONCLUSION AND RECOMENDATIONS

In the modern and turbulent world, every country aims to achieve high quality and stable economic growth (Tosovic Stevanovic, Pavlovic, Dajic, 2018). One of the obstacles for faster growth and development of the economy of the country, is the lack of utilization of the female labor force, as an important resource for economic development of the economy, and it is a unique conclusion of all the institutions analyzed in the paper, dealing with issues of equality between women and men. For this reason, in the last 20 years we have seen great progress in terms of equality between women and men in the EU. Women are increasingly present in the labor market, which largely influenced the economic growth and competitiveness of the EU. The changes did not happen automatically, but are a result of strategic policies and initiatives at European, national and local level.

Through analysis of international institutions which are dealing with the development and improvement of women's entrepreneurship, we can draw several conclusions, which are very important for understanding the factors that promote and obstacles that women face in starting their own business. In many countries, education in the field of entrepreneurship is of great importance for the improvement of business operations, since the economic status is strongly correlated with education (women with no schooling are mostly housewives who do not want to look for a job). The economic development of a country is not sufficient incentive and does not provide for a higher percentage of female entrepreneurs, although in developed countries, women find it easier to engage in running their own job. What is common to all countries is a necessity for an easier access to capital, lack of ownership of real estate, business freedom, ie. remove legal and regulatory barriers to development, lack of confidence and support, as well as social norms that are often hidden barriers to promote women's entrepreneurship.

With regards that the access to capital, generally and in Serbia, is listed as one of the main obstacles for women in starting their own business, as part of the National Strategy for the Advancement of Women and Gender Equality, it is point out that a substantial contribution to the implementation of equal opportunities policy in Serbia would be modifying the method of allocation of resources and public spending, because the distribution has different effects on men and women, which is why it is necessary to restructure and focus the allocation of public expenditure so as to improve the economic opportunities of women and their equal access to resources. On the other hand support from private sector should not be undermined. The concept of business angels-an individuals who are ready to financially support an idea should be promoted.

As women make up only one-third of self-employed in the EU and are faced with more difficulties than men in the Action Plan for Entrepreneurship 2020 (European Commission, 2012), the formation and implementation of on-line mentoring across Europe is proposed as a platform for advisory, educational and business networking, by promoting the exchange of best practices between countries in support of women entrepreneurship at national and regional level. It is applied also in Serbia, where the employment rate for women is significantly lower than in EU countries, but also lover than the rate of female employment in neighboring countries.

Another important prerequisite for successful entrepreneurial activity is start-up skills. These skills could be develop through an education process or as professional training. The concept of business incubators, a companies that help new companies to grow and succeed by offering needed support and accelerators is accepted and introduced worldwide mainly in higher education institutions. There is a constant need for further development and enhancement of university-industry relationship, and every organization puts entrepreneurial skills high on their list. The constant communication should provide universities inputs from the industry and help them develop education for future entrepreneurs. Further, higher level of international cooperation is required. Like we were able to see in some of the

previous mentioned reports some of the countries in the region (Slovenia) have more success in development and implementation of women's entrepreneurship. This is the reason why countries in the region should share best practices and learn from each other.

And maybe one of the most important decisions should come from the Governament itself. The Government should try to develop entrepreneurial environment by constantly developing entrepreneurship possibilities. Infrastructure and adequate level of technology that should be condition for establishing start-up companies and other form of businesses needs to be developed by the government. This needs to be followed with simulative fiscal and monetary policy that would provide more sustainable development.

In order to better understand the differences in the problems and challenges that women and men face in the business, all results of those mentioned international institutions point, but also undertake the necessity to identify problems, analyze and try to find solutions, in order to implement and adopt them, to promote the economic empowerment of women. There should be strong governmental and cultural support towards a woman who decided to start their own business and the overall opinion that they have equal chances to succeed as men do. Also, certain ranking help the economic policy makers to formulate and evaluate national results in terms of improving women's employment, gender equality and entrepreneurial potential of women, which is directly aimed at the economic development of the country.

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BUSINESS MODELS IN SERBIA: INNOVATIVE APPROACH IN CREATING A BUSINESS PLAN FOR START-UP ENTERPRISES

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ABSTRACT

The key question posed today to all companies, regardless of their size, is survival in the face of ubiquitous globalization and turbulent changes in the environment. The answer could be in the continuous strengthening of our own innovative power. In order for an enterprise to achieve innovation, it is necessary to have a clear picture for the future of its competitive situation and reliable innovative processes.

Since a business plan represents a plan of organizing a future enterprise, its value cannot be disputed. What can be disputed is the creation that takes place in an isolated space and for a longer period of time where the unappreciated idea goes to paper. By concluding that many business plans from the period of creation of the company to the beginning of business do not suffer timely correction, it is necessary to introduce an additional process, business modeling or business model.

Key word: *innovation, business plan, business model, modeling, SMEs*

JEL Classification: *039*

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INTRODUCTION

A business plan is a summary of a business idea with elements of a financial character that aims to study the justification for opening a new business. The business plan is characterized as a very powerful tool in the hands of entrepreneurs when applying for the necessary financial resources (Stankov, Roganović & Marjanski, 2015, pp. 80-96).

The business plan often refers to a complex and comprehensive document that contains information on different segments of future and actual business operations such as: financial indicators, human resources, available technological and other infrastructure resources, products and services of a company, marketing strategies, consumer behavior, and target markets. Regardless of whether future perspectives or current state of business elements of business are discussed, this document plays a very important role in acquainting entrepreneurs with sources of financing and mediates in establishing their mutual communication (Stankov, Stojakovic & Vapa, 2016).

Various authors have given their definition of a business plan, and some of them are: "A business plan is a document describing the current activities of an enterprise, determining its goals and objectives and how to achieve them in a given period of time." "Entrepreneurial project or business plan is a document that elaborates in detail all aspects of entrepreneurial ideas and business opportunities, and on the basis of which the final decision on an entrepreneurial project is actually a systematically structured study from which you can read the relevant answers to all questions related to planning, initiating, , organization, administration, development and control of entrepreneurial ventures throughout their lives, (Kuvačić, 2005).

A business plan can be defined as an important document whose content deals with smaller entrepreneurial ventures, contains a complete and detailed investment work for beginners, but also for those who expand the business. Provides an assessment of the expected effects and models for troubleshooting in the future. This document hides a document that analyzes all project factors.

The business plan is a key instrument for entrepreneurs to plan, start, finance, organize, manage, develop and control entrepreneurial ventures throughout its entire duration. It is primarily intended for existing entrepreneurs and beginners, people who are ready to face the challenges of a changing market environment. The business plan can help investors and financial institutions to implement a well-thought-out business idea in practice.

A business plan allows collecting all the necessary information for market analysis; preventing any unreasonable business mistakes that may arise from doing business on the market, increases the level of self-confidence of potential and existing entrepreneurs; helps creators in determining the necessary material, human resources, and financial resources;

By looking at existing entrepreneurs, a business plan can be an important tool for continuously monitoring and improving the overall business process. The

business plan can present the business activity to potential investors and financial institutions in a very efficient manner and in this way provide financial means or achieve cooperation that would result in the realization of a business partnership (Kastratović & Marinković, 2007, pp. 7-45).

Business planning and development of a business plan, as part of the final outcome of the process of forming the company's business strategy, are very important activities that form part of the concept of successful corporate governance. Often the business plan expires as a means of establishing initial communication between entrepreneurs and sources of funding and their initial introduction.

Business plan is developed in conditions when:

- expand existing capacities,
- increase or decrease the number of workers,
- launches new business,
- introduces a new production line,
- broader product range and more.

Each of these activities usually initiates a new investment, whether it is a financial asset from your own or other sources, so it is understandable why it is necessary to compile a business plan in all of these situations. The need for a business plan especially occurs in the situation of establishing a new company and applying for obtaining the necessary financial resources from a particular investor (Stankov, Roganović & Marjanski-Lazić, 2015, pp. 80-96).

When asking for money from banks, funds, NES, etc. it is necessary to attach an elaborated Business Plan.

The process of developing a business plan is different in the case of companies that start their business existence in relation to existing enterprises. Writing a business plan for entrepreneurs is also the first step towards strategic planning. Therefore, the business plan often covers a longer period of one year. Usually it covers business activities of three or five years, and even ten years. The time period covered by these plans is very often conditioned by the time of repayment of the loan requested from the credit institutions to which the business plan is referred for consideration.

With the existing companies that are approaching the development of a business plan where the main purpose is not attracting external sources of financing, the assumption for developing a business plan is the existence of a strategic plan for the company.

The company's strategic plan includes the vision and mission of the company, its goals, as well as the basic strategic directions that the company will follow in the realization of the set goals. In this case, the plan is the most common annual agenda, that is, the annual business plan that is consistent with the strategic plan. As such, it consists of short-term goals and strategies with associated plans that the company formulates in five main areas: marketing, production, research and development, organization and management and finance. Thus structured, the business plan is the basis for precise programming of the activities of certain functions that are necessary for the realization of the described strategies in the business plan.

Most potential financiers want to see the business plan as the first step in deciding whether to invest or not. However, most literature on how to write a business plan does not emphasize that different types of financiers look at business plans from different perspectives (Mason & Stark, 2004, pp. 227-248).

A business plan is a road map or plan that allows the company to analyze its current record and trends in industry, look into the future, allocate resources, focus on key points and prepare for challenges and opportunities that a company can face in the future.

Business plans are not just "documents for getting finances" but more than that. They are vital to running a business, regardless of whether or not businesses need an investment. The business plan helps you to think carefully so you can mitigate any risks that you will expect in the future. Companies need plans to optimize growth and development according to priorities.

The structure of the business plan should vary depending on what it is intended for. A business plan designed to raise funds should emphasize more detailed coverage of your current strengths and achievements, which may not be necessary for internal planning. Make your business plan fit your purpose. It is very important to think about your idea enough before you turn to the investor. The first draft business summary helps you to think through the idea well before you actually talk to someone else.

Some of the things to cover include - firmly defining the problem that you want to solve, who your client is, how you will earn money, why your client will pay and make a quick budget. Be sure you thought about the idea well. (Finch, 2013, pp. 16-157).

BUSINESS MODEL

Business models are gaining increasing attention from scientists and business people interested in explaining the value of firms, performance and competitive advantage. Business models can be seen as a supplement or an improved version of a business plan that is characterized by flexibility and agility. By looking at the business model through the process approach, we come to the conclusion that the business idea is an entry into the decomposition process that contains various elements, which will be more word later.

During the examination of the business idea, the business model allows the continuous testing of each component with the possibility of feedback such as Deming's PDCA cycle. Business models also enable entrepreneurs to test business ideas before any financial investment.

" The main characteristic of the business model is the possibility of evolution".

Business models as a topic become relevant at the time of today because today they are outdated much more quickly than they were 30 years ago.

" It can be said that the forerunner of business model is the business plan ".

The basic lack of a business plan is its inflexibility and linearity. Time spent on creating a business plan is great and requires knowledge from multiple areas, which is often a problem for young entrepreneurs. A business plan, as a documented business idea, has a line of linearity characterized by too much detailing about an unspoken business idea.

Business strategy and business model are often referred to in literature in a common context. It can be said that the business model of an enterprise is a draft business strategy. A practical business model tells us how to realize our business. The strategy indicates where we want to go and the business model how to get there.

Elements of the business model are:

I. Strategy - the determinants of market segmentation, strategic differentiation and business mission.

II. Strategic resources - the determinants of which include key competencies (knowhow), key processes and strategic assets. Key competences represent the intellectual capital of an enterprise and it includes intellectual property and unique skills. Strategic assets represent primarily the material assets of the company, but it can also be intangible as patents, brands, customer relationship management, and everything else that is rare and valuable for the business of the company. Key processes relate to the methodology and routine used in transforming the inputs into outputs.

III. Customer Interaction - consists of four elements:

- Customer support,
- understanding feedback,
- dynamics of customer relationships
- And billing modality.

IV. Value network - represents a set of company relationships with all key business partners (Moric, Srhoj & Krišto, 2016).

It is very rare to find an innovative business model in large companies and the largest number of innovative business models come from new start up firms (Markides, 2013, pp. 1-163), so research in this paper focuses on start-up businesses.

BUSINESS MODEL CANVAS

" *It's impossible to plan! But it's possible to model*" Alexander Osterwalder

A business model canvas was developed by Alexandar Osterwalder in his dissertation "Ontology of business models", which is based on the creation of a business model that would suit entrepreneurs who want to work in the ICT sector. Shortly after his doctorate, he designed the Business Model Canvas, which represents a tool for a tool for examining the "Business Ideas". On the other side it

be used as tool for researching business models in already established companies / industries and monitoring their competitiveness.

Canvas business model consists of nine basic components:

- value proposition,
- customer segments,
- channels,
- customers relationships,
- cost structure,
- key resources,
- Key activities,
- Key Partnerships and
- Revenue streams.

Additionally, business model components were analyzed using the Business Model Evaluation Framework (Business Model Canvas). Fundamentally carried out analyzes, it is possible to draw conclusions about the business model of small enterprises in the ICT industry in determining what the observed companies build their competitive advantage (Koprivnjak, 2017, pp.20-55).

In order to keep up with new technologies and globalization, new procedures for creating and testing business models have emerged. One of these newspapers is Payne for generating a business model, or a canvas business model, proposed by Ostervalder and Pigneur. A pay-per-view business model is a conceptual instrument that helps make the right decisions at the right time to develop a business model. In a simplified schema, it contains objects, concepts and relationships, expressing the logic behind the business. In this way it is possible to estimate how business is based on value added, customer relationships, creation process and financial aspects.

To facilitate understanding and analysis of all business pillars, nine components (blocks) can be grouped by area of ontology, using a similar criterion used in Balanced Scorecard. These nine components are located in four main areas: product, consumer, infrastructure and finance (Trimi & Berbegal, 2012, pp. 449-465).

PRESENCE OF BUSINESS MODELS IN SERBIA

In the Republic of Serbia, companies with a long tradition of business tend to strive towards business models based on quality and maintaining a competitive position. It is very difficult to determine the direction of the company with the constant changes in the market that are expected in the country in transition for many years. Young businesses primarily move towards profit and sustainability, and then they are based on elements such as quality, environmental protection and local communities, and in most cases sequentially.

After analyzing the problem, a review of literature and selection of methodology of research followed.

The survey was conducted using the questionnaire which contains general information about the company: size of the enterprise, business model orientation and subjective risk and impact assessment and level of variables:

- HRM - Human Resource Management,
- BPM - Business Process Management,
- IM - Management innovations,
- BP - Business Performance.

For the purpose of this paper we were based on the orientation to the business model.

This survey includes 257 small and medium enterprises, mainly from the territory of Central Sumadija. The researcher is the Center for Quality, located at the Faculty of Engineering, University of Kragujevac.

The purpose of this extensive research is to "fit" the company / company into specific categories of business according to their orientation in order to compare and diversify by business model.

The size of small and medium-sized enterprises in many cases has an impact on business performance through management and organization, the effectiveness of resource utilization, etc. Depending on the type of industry, the size of the company also varies. For example, bakeries belong to micro companies.

In this research, we divided companies into six sectors:

- Manufacturing
- Food processing
- Wood processing
- Construction
- Electro
- Other sub-sectors

Diversification of industry sectors on the territory of the Republic of Serbia in the tested sample is shown graphically in *figure 1*.

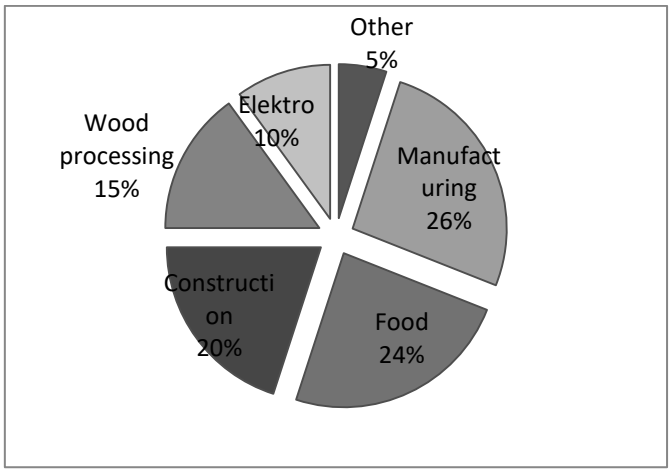

Figure 1. Diversification of of industry sectors
Source: Own research

In this survey, companies are divided into six categories according to the number of employees:

- 1-5
- 5-25
- 25-50
- 50-125
- 125-250
- over 250.

Diversification of enterprises by size on the territory of the Republic of Serbia in the sample tested is shown graphically in *figure 2*.

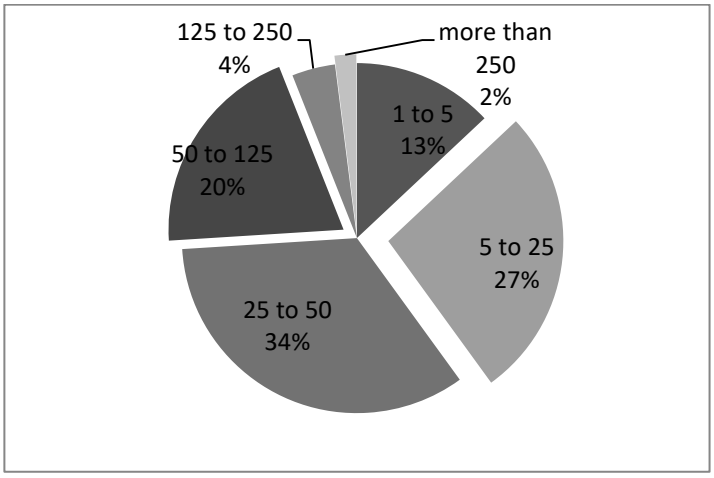

Figure 2. Diversification of enterprises by size
Source: Own research

Respondents in the dissemination of the questionnaire were asked to indicate the orientation of their company according to a business model based on:

- Material resource based,
- Quality Based,
- Supply Chain Based,
- Innovation Based,
- HR Based,
- Just In Time Based,
- Environmental protection/Sustainability Based,
- Financial Resource Based,
- Close to Market/Consumer Based,
- Price/Cost Based,
- Customer Value Based, and
- Key Processes Based.

After the obtained results and their processing through statistical analysis (*table 1*), we came to the conclusion that the most common business model is based on quality, then on human resources, consumers, innovations, etc. While the smallest frequencies of impressions have models based on Key processes and Just in time. This result tells us that quality on the territory of the Republic of Serbia still has a certain level of importance. QMS, standardization of the quality system as well as certification bring some benefits and are recognized on the market. Business models focus on quality fostering business approach and quality principles.

Table 1. Frequency and percentage of business models in the sample

	Frequency	Percent	Valid Percent	Cumulative Percent
1. Material resource based	7	2.7 %	2.7	2.7
2. Quality based	53	20.8 %	20.8	23.5
3. Supply Chain based	27	10.6 %	10.6	34.1
4. Innovation based	28	11.0 %	11.0	45.1
5. HR based	40	15.7 %	15.7	60.8
6. Just In Time based	6	2.4 %	2.4	63.1
7. Environmental protection/ Sustainablity based	11	4.3 %	4.3	67.5
8. Financial Resource based	7	2.7 %	2.7	70.2
9. Close to Market/Consumer based	22	8.6 %	8.6	78.8
10. Price/Cost Based	11	4.3 %	4.3	83.1
11. Customer Value based	39	15.3 %	15.3	98.4
12. Key Processes based	6	1.6 %	1.6	100.0
Total	257	100.0	100.0	

Source: Own research

With this data we can proceed to further consideration of the research problem. As can be seen from the attached most of the business models are oriented towards the quality that has been a key to success for decades and is widespread. Speaking of models based on human resources and customer satisfaction with the quality model, we can conclude that companies of all sizes from the territory of the Republic of Serbia are „walking on familiar and safe paths“.

The need for innovation has long been appearing but insufficient funds are usually difficult bridging obstacle. Speaking of financing the business, we come to the business plan which represents a necessary mean for applying for any kind of funds from banks and other financial institutions.

INNOVATIVE APPROACH IN CREATING A BUSINESS PLAN

In previous chapters, we have come to the conclusion that for the needs of obtaining external financing, a "well-written" Business Plan is needed. Since a business plan can be seen as plan of an organization of a future enterprise, its value cannot be disputed. What can be disputed is the creation that takes place in an isolated space and for a longer period of time where the unappreciated idea goes to paper. By concluding that many business plans from the period of creation of the company to the beginning of business do not suffer timely correction and are not agile or flexible to market changes, it is necessary to introduce an additional process, business modeling or business model.

For the purpose of introducing the business model, we selected "business model canvas" with a combination of the "Proposition of values" model. The idea itself is based on the introduction of an additional mapping process and modeling of the business idea before creating the Business Plan. By mapping, we visualize a business idea while modeling through several verification iterations to the final business idea. Only the canvas of the business model can be used as an entry into the Business Plan.

By having a strategic approach and examining a business idea before its "placing" on paper, we have the opportunity to examine it. Through several iterations we check the validity of the business idea, and in the case of partnership, we consensus, which reduces the risk.

The canvas business model was developed by Alexander Osterwalder in his dissertation "Ontology of business models" (Osterwalder, 2004, pp. 11-156). The canvas business model consists of 9 elements and is shown in *figure 3.*

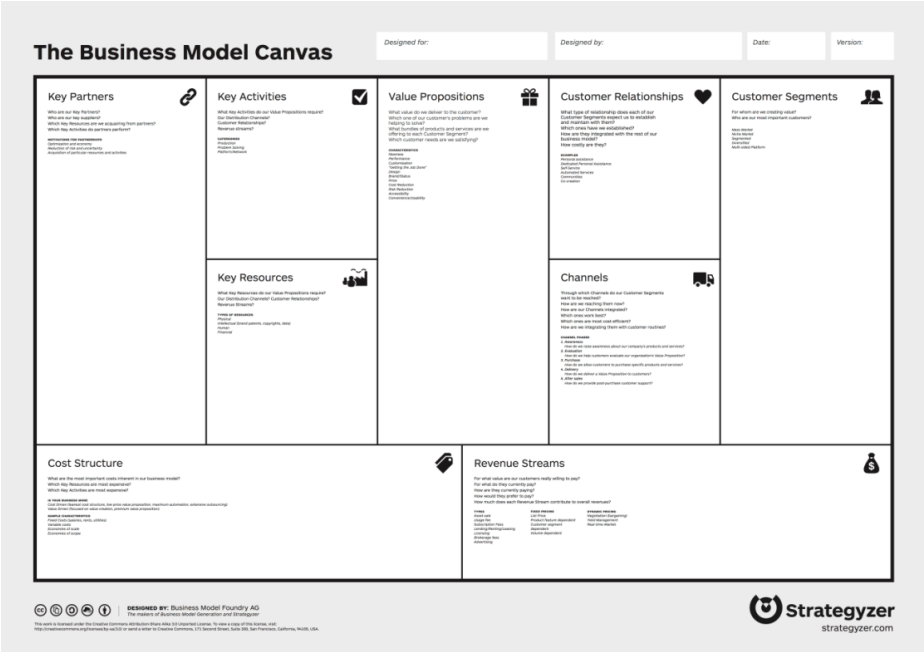

Figure 3: Business Model Canvas
Source: Strategyzer official web page

The Business plan functions through mapping the business idea in order to look at all the opportunities, advantages and disadvantages.

By mapping, we get a visual experience of the elements of our idea. Since it is written on paper, it rarely coincides with the reality of things in reality, then you can use your model to define hypotheses, which you can test later. In line with the values obtained, you will also modify your model.

For the purposes of mapping, the so-called "Building Blocks" or stickers are used. You need to look at the business idea through all the elements and paste the stickers with comments / calculations for each element. Through several iterations, an idea develops that can be transferred into the Business Plan at its final stage.

CONCLUSION

In order for an enterprise to achieve innovation, it is necessary to have a clear picture for the future of its competitive situation and reliable innovative processes. The company will build a clear picture of its competitive situation in the future if it considers the key aspects of its environment concerning the development of society, resources, culture of thinking and technology, and that develop independently of the company's contribution to future development.

Writing the Business Plan itself presents in many situations a difficult venture for young entrepreneurs who plan their own business and are confronted with many unknowns.

A business plan if it is used only for the purpose of obtaining financial resources and has not been previously tested, that is, the business idea itself has not reached the target consumers, then this business plan does not represent a viable strategy and is only a short-term plan on a piece of paper that has been doomed to failure.

This has been seen as problem that lies behind the idea of introducing innovation and a new step in writing the Business Plan. By having a strategic approach and examining a business idea before its "placing" on paper, we have the possibility of testing it through the business model frameworks.

The aim of this paper is to point out the importance of innovation that has been used in developed countries for years and gives excellent results.

Further research can be applied in the field of software solutions designed to quickly examine the financial viability of a particular product or service with complete financial budgets.

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RESEARCH OF RISK IN THE ENTREPRENEURIAL PROCESS

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Milan Krstić[19]

ABSTRACT

One of the answers in conditions of fast changes on the global plan is the development of entrepreneurship, which sets economic activities in motion, which influence opening of new working positions, improve national competitiveness and directly contribute to social development. Entrepreneurship is a part of economic activity which is conducted through a series of activities: perceiving business opportunities from the environment, generating business ideas based on them, the choice of the business idea with the biggest potential for success, providing necessary resources for its realization, taking over the risk by starting up an entrepreneurial venture, and persistence on its sustainability. It is evident from the stated that taking risks is one of the key elements of entrepreneurship, so it can be concluded from the previous two assumptions that the development of society is connected to undertaking a risk. The risk is an unavoidable follower of every entrepreneurial venture, and one of preconditions for successful start-up and/or leading business is the development of an ability (skill) which enables recognition, control and managing the risk. Since the risk consists of two components: possibility of occurrence of an unwanted event, as well as a negative consequence if the unwanted event occurs, and that is the reason why it is significant for the risk in entrepreneurial process to be versatilely studied and get the treatment it deserves. Studying the risk in an entrepreneurial venture is carried out by the method of the Analysis of risk. This paper deals with the research of risk from the two points of view. The risk is first researched in more details from the theoretical and later on from the practical point of view. Within the theoretical part of the research the results are briefly presented of a desktop research carried out on the subject of risk. Within the practical part of the research, the shortened results are presented of an empirical research of evaluation of the importance of entrepreneurial risk from an individual point of view as well as the risk, according to relevant business functions of an organization, conducted in micro, small and big enterprises as well as with the entrepreneurs in several districts in the Republic of Serbia.

Key words: *entrepreneurship, risk, analysis, research*

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***JEL Classification**: L26*

INTRODUCTION

Entrepreneurship represents the ability of organizing resources in order to use new business opportunities, and is undoubtedly one of the key factors of the economic growth.

The term entrepreneurship is used in various ways and in various contexts. The two domineering contexts of entrepreneurship are: (1) creation and development of new and small enterprises; (2) basic business characteristics which signify readiness to take risks, innovations and initiatives so that business opportunities would be used in the best way. It seems that bigger attention has been paid so far to the context (1) which is mostly used, since almost all governments tend to stimulate the beginning, growth and survival of small enterprises through a wide spectrum of measures of support, while much less attention has been paid to the context (2). (Skuras D., Stathopoulou S., 2000).

The first component of the context (2) is especially unjustifiably neglected here, which is about the readiness to take risks, i.e. entrepreneurial risk.

The situation in business environment is according to (Karadjova, Miladinoski, Minkov, 2012)" In contemporary conditions of fast, dynamic and turbulent changes in the national, regional and wider environment, uncertainty as the basic component which is common for the nearer and distant future, becomes greater, and as such is in direct correlation with the category of risk."

Since risk is an unavoidable follower of every entrepreneurial venture, and one of preconditions for successful start-up and/or leading business is the development of an ability (skill) which enables recognition, control and managing the risk, and is worth of a more detailed research.

The research starts from the assumption that entrepreneurial risk is a significant element in decision-making of a person in terms of possible future entrepreneurial orientation, both from the individual as well as the organizational point of view.

That is why this paper does the research in more details first from the theoretical, and then from the practical point of view.

ENTREPRENEURSHIP

The concept of entrepreneurship

Theories of entrepreneurship

A universal, consistent theory still has not been made in entrepreneurship, we could rather say that it consists of different scientific approaches to the interpretation of entrepreneurship as a phenomenon. Furthermore, a common theoretical frame for synthesis of different aspects of entrepreneurship has still not been established. That is why today many different theories for the description of entrepreneurship as a phenomenon are used, such as (Skuras D., Stathopoulou S., 2000) Functional theory, Sociological theory, Anthropological theory, Theory of ecologic population, Fuzzy theory and others, depending on what the advantage is given to or what the given theory supports.

Today many various theories are used for the interpretation of different aspects of entrepreneurship, individually or in combination depending on the focus on a certain context, i.e. the relevancy of the theory for the context, figure 1.

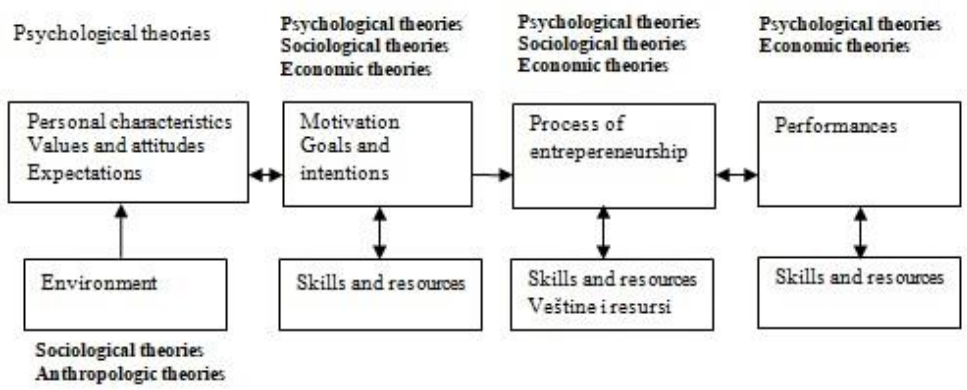

Figure 1: Different theories in explaining entrepreneurship

Source: Skuras, Stathopoulou(2000)

From the point of view of this paper, the following elements of entrepreneurship are significant and they are:

1. entrepreneurial process and 2. entrepreneurial behaviour in terms of risk.

In further text the mentioned elements of entrepreneurship will be discussed in more details.

Entrepreneurial process

Entrepreneurial process is a specific process which integrates the entrepreneur and entrepreneurial behaviour in time, where the main entrepreneurial abilities and characteristics of an entrepreneur are shown to their full extent. The model of entrepreneurial process is shown in figure 2.

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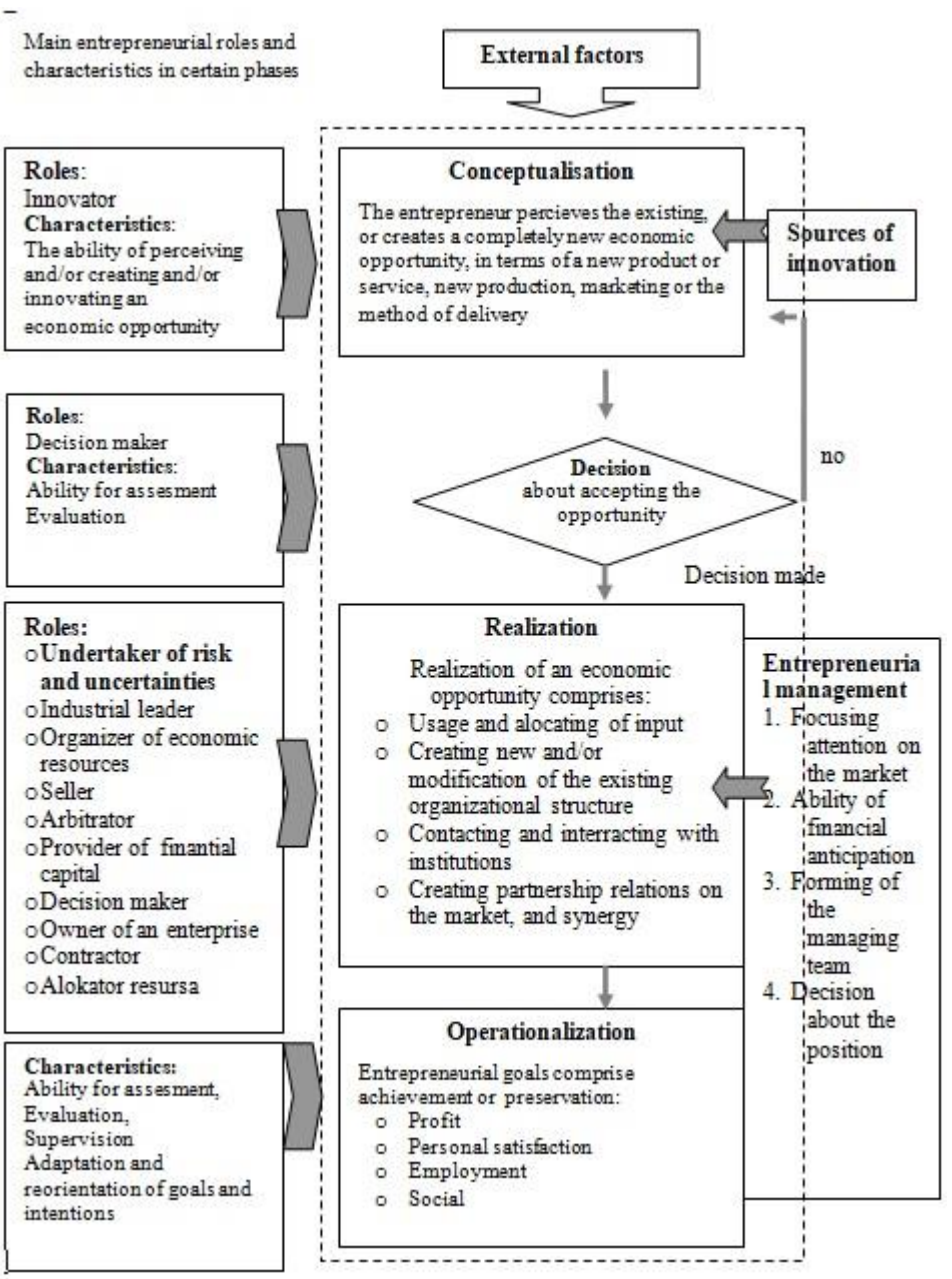

Figure 2: Model of entrepreneurial process

Source: Krstić (2006)

Entrepreneurial process, figure 3, comprises more phases, and they are: conceptualization, decision-making about accepting a certain economic opportunity, realization of the entrepreneurial process and operationalization.

Conceptualization is a phase in which, based on his own sources, an entrepreneur perceives the existing, or creates a completely new economic opportunity, in terms of a new business model (a product or a service, production, marketing or a method of delivery, and other). Innovative abilities of an entrepreneur come to its full extent, which are characterized by an ability of perception or creating a new economic opportunity. Creating of new opportunities can repeat several times until the entrepreneur chooses the right one.

Decision making about accepting a certain economic opportunity is a phase where the entrepreneur finds himself in the position of a decision-maker. Thus he must possess the ability of assessment and evaluation of economic opportunities.

Realization of the entrepreneurial process is a phase where intensive usage and allocation of input begins, organizational structure of an enterprise is created and established (or the existing one is modified), intensive activities of interaction are carried out with authorized institutions and partnership relations are gradually built on the market, all in order to accomplish synergetic effect. In this phase, the entrepreneur performs different roles, first he takes the risk, then the role of and industrial leader, organizer of economic resources, employer, arbitrator within the relations between the employed, etc. Entrepreneurial management is shown to its full extent as well, which can be seen in the fact that the entrepreneur focuses his attention more and more on the market, financial anticipation, forming of the managing team.

Operationalization is a phase where the enterprise functions further on, where entrepreneurial goals must be clearly pointed out, which, by rule, consist of achievement of (or preservation of the achieved) profit, the level of employment as well as wider social goals, or the personal satisfaction of the entrepreneur. Here the abilities of assessment and evaluation, supervision and monitoring come to their full extent.

Entrepreneurial risk

Since entrepreneurship stands for use of innovation, and the innovation means a novelty, its realization is always linked to a certain risk. When certain investment is needed, and that is just the case with the innovation, the risk inevitably occurs. That is why it can be said that the risk is an unavoidable follower of every innovation, or furthermore, that the risk is a characteristic of every innovation. In this respect, from the economic point of view, the innovation represents two types of uncertainty, and they are (Krstić M, 2012):

technological uncertainty, and

market uncertainty.

From the point of view of technological uncertainty, a question can be posed whether the innovation will satisfy the function given to it (will it work?).

From the point of view of market uncertainty a question can be posed of the sale of the planned product, the competition response to the new technology, return of invested means in the planned period of time, and other (if it will be sold, how

fast it will be sold, and if the competitors will soon introduce their version of the innovation object if it proves to be successful?).

So, what economists agree on is the fact that risk is an unavoidable follower of entrepreneurship. It is almost impossible to find a paper on entrepreneurship which does not in a way emphasise the issue of risk. In this respect (Pejanovic, Tomas-Simin, Glavas, 2013) point to the following: "Entrepreneurship is actually a very significant factor in contemporary economics and economies, which is followed by a high level of risk, especially in conditions of instability and crisis cycles which characterize the contemporary society."

At the same time the presence of risk in entrepreneurship can be talked about from the individual and organizational point of view.

Risk from an individual point of view implies the risk of the entrepreneur.

Risk from an organizational point of view implies the risks which influence the very structure and business of the enterprise, which puts the destiny of the whole entrepreneurial venture in question.

In this paper the risk in entrepreneurship will be considered from both mentioned points of view, firstly from the theoretical, and then from the empirical point of view.

RISK

The concept of risk

The notion of risk

When we say that there is a risk in a certain situation, we are implying that there is uncertainty in the given situation when it comes to the outcome, which might be unfavourable.

Uncertainty is reflected in the fact that there have to be at least two possible outcomes. In that respect, uncertainty is characterized by doubt, based on the lack of knowledge of what is going to happen, or what is not going to happen in the future and therefore represents psychologic reaction to the absence of knowledge about future.

There is no risk when we know for certain that there is only one outcome, for example loss.

Risk occurs when there is uncertainty and at least one of the possible outcomes is unfavourable. It is manifested by being a possible loss of something, or less than possible profit.

According to (Vaughan, Vaughan, 2008) risk can be defined as "a state of real world where there is a possibility of negative aberration from the outcome we want and expect or the outcome we hope for".

By the state of real world we imply a set of circumstances in external surroundings.

By the possibility of negative aberration, we imply that an event is possible, as well as that the possibility of its outcome has to be between zero and one.

Risk and uncertainty

As we cited in the previous text, uncertainty is an unavoidable follower of risk.

Uncertainty is, according to (Mladenović, 2015) defined as "a lack of information, knowledge or misunderstanding of the result of an activity, decision or event".

It is evident from the quoted definition that uncertainty depends on information, knowledge and understanding, so it can be interpreted by the following mathematic relation:

$$U = F(i, k, u) \quad (1)$$

where:

i – is information (more precisely, lack of information), that is, misunderstanding;
k – is knowledge; and
r – is understanding

From that point of view risk actually is the measure of the quantity of existing uncertainty, Picture 3.

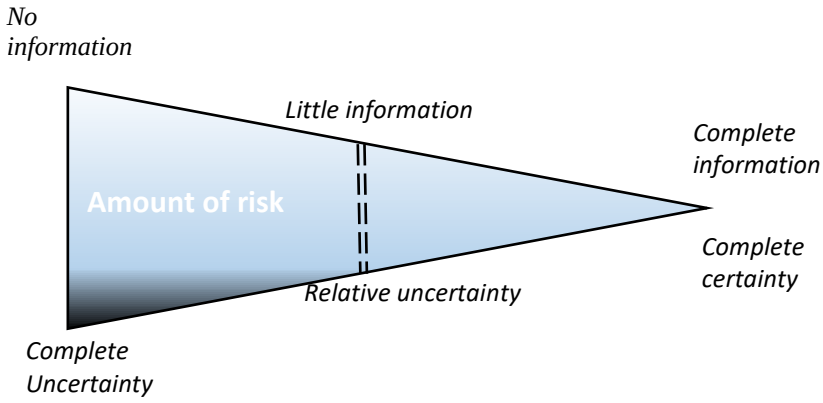

Figure 3: Risk and uncertainty
Source: Mladenović (2015)

Risk vs danger (hazard)

Risk is related to danger (hazard). Although the terms of risk and danger (hazard) are often used alternately, their connotations are often different.

Danger (hazard) is something (device, agent) with a potential to cause harmful effect. For example, thunder always represents (potential) danger to people, installations, buildings, tree trunks, etc.

Risk is the unit which expresses the possibility that the danger (hazard) will cause a harmful effect. For example, risk is to stand under a tree trunk during a storm. (EFSA, 2016)

Another thing implying danger (hazard) is gambling, since it is a state which can create or increase the chance of losing which ensues from a certain danger.

Hazard is a result of interaction of technology, society and environment and it is a much broader concept (when compared to risk) and includes the possibility of occurrence of an event, the influence and the strength of the event on the society and environment, as well as socio-political context of a situation.

Hazard represents real, but non-quantified danger for people and things people value. However, it is operationalized into a concrete risk only when manifested and materialized.

Risk is a measurement of possibility of danger (hazard) occurrence in a situation. It represents analytic concept which we use so as to determine the degree of danger (hazard). In that sense, risk is quantified, measured and becomes a measurement standard which defines borders, as well as the amount of toleration.

Both hazard and risk represent potential danger, but hazard is a general, whereas risk is a specific (more measurable) danger. We can say that risk is a subset of hazard; therefore all hazards are not risks at the same time, but all the risks are hazards. (Čaldarović, 1994)

Model of risk

According to (Mladenović, 2015), risk can be expressed by the following relation:

$$R = \varphi(R_e, P_e, C_e) \quad (2)$$

where:

Re – is a risky event, related to concrete future happening, activities, decisions, and so on.

Pe – is possibility of occurrence of a risky event, used to express the level of risk and its value is in the interval from 0 to 1.

Ce – are consequences (influence) of the event, they are a result of realization of a risky event, and they can be either positive or negative. Positive consequence is usually referred to as a feasibility, opportunity, or chance, whereas negative consequence is danger or threat.

In this way, a risk is an uncertain event or situation occurrence of which produces effect (positive or negative) on at least one goal set in advance, for example, profit, income, quality, deadline…

Classification of danger (hazard) and risk

Dangers (hazards) and risks defined in the chapter 3.1 can be classified to several bases, as well as in different ways. Table 1 shows a usual risk classification.

Table 1: Classification of hazard (danger)

Category	Description	Example
Hazard (danger)		
Physical	Set of physical characteristics which increase the chance of loss	A type of building construction which can increase the possibility of loss from fire
Moral	Increases in losses which are insurance covered in terms of frequency and severity	Neglect of individuals towards loss prevention with insured objects, or when a doctor provides services more expensive than necessary
Legal	Increases in losses which ensue from legal doctrine in terms of frequency and severity	A building which does not fulfill legal demands requires additional costs in reconstruction
Risk		
Static	Risks that occur from physical dangers, dishonesty or failure	Destruction of physical property due to earthquake because of poor construction
Dynamic	Risks that ensue from economic changes	Changes in the level of the price, consumers' taste, income, production, technology and so on
Basic	Group risks, caused mostly by economic, social and political phenomena, as physical processes	Economic crisis, unemployment, war, inflation, earthquakes and floods
Special	Risks from an individual ensuing from single events	Fire, robbery, entrepreneurial enterprise
Moral	Risk from increased possibility of a loss which is the result of dishonest actions	A loss intentionally caused or higher amount of loss in trying to obtain insurance payment
Speculative	Risk from a situation where there is a possibility of both gain and loss	Games of chance, entrepreneurial enterprise
Clean	Risk which only includes a chance of losing or no loss	The case of buying a car and the possibility of its damaging

Source: according to (Vaughan, Vaughan, 2008.

Entrepreneurial risk

Entrepreneurial risk can, according to its character and based on classification presented in Table 1, be classified into category of speculative risk. Speculative risk describes a situation in which there is a possibility of both gain and loss. In search of profit, an entrepreneur faces speculative risk, which reflects in the fact that everything they invest can be lost if the market does not adopt the product (service) at the price which enables at least covering the expenses. However, reward for the risk undertaken is the possibility of gain (Vaughan E., Vaughan T, 2008).

*Entrepreneurial risk (*Re) is a function of investment, uncertainty and goals. It can be represented by the following relation:

$$Re = F (I, N, C) \quad (3)$$

where

I – is Investment,

U – is Uncertainty, defined by relation (1),

G – are Goals, presumed to be SMART, which is an acronym for: Specific, Measurable, Attainable, Realistic and Timely.

Entrepreneurial risk from an individual point of view

Risk largely influences entrepreneurship and is its constant follower, because entrepreneurs have been facing the risk of failure ever since entrepreneurial activity came into existence, starting from the choosing a goal up to its realization. The bigger the goal was, the bigger the risk.

In the entrepreneurial venture, an entrepreneur mostly faces the following kinds of risk: financial, family, social and psychological, as well as the career risk.

That is why the competences for entrepreneurship are of big significance. Competences for entrepreneurship can be acquired (learned), developed further and perfected. One of the important elements of competence for entrepreneurship is the sense for taking entrepreneurial risk, which is basically individual, because it differs from a person to person. Previous experiences and new discoveries may strengthen the sense of risk because they broaden the horizons which can help the entrepreneur to perceive the expected risks in an entrepreneurial venture more realistically. (Smoljic M., 2012).

In order to perceive the sense for taking entrepreneurial risk, the theory of preference can come useful, which, depending on the relation of an individual towards risk, identifies three basic categories of people, i.e. (Pavličić D, 1997):

- the ones who have an aversive attitude towards risk,
- the ones prone to risk, and
- the ones indifferent to risk.

In picture 4 the function of usefulness is presented. The attitude of an individual person towards risk is predetermined by his character, and it is manifested by the suitable shape of the curve on the function of usefulness, picture 4. With the function of usefulness, whose authors are John von Neumann and Oskar Morgenstern, the vertical axis is the axis of preference which takes the value from 0 to 1, and the horizontal axis is the criterion axis, i.e. the values of certain outcomes are added on it, for example, in currency units. Each of the mentioned categories of people is suited to another function of usefulness.

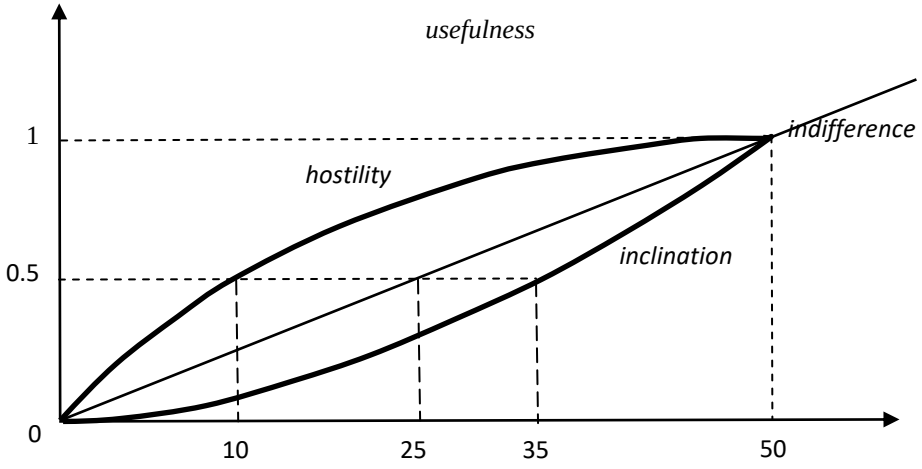

Figure 4: The function of usefulness
Source: Pavličić (1997)

The function of usefulness is a very subjective expression of attitudes of the decision-maker. It can help a person to check his/her own attitudes in terms of taking risks (Hammond III J. S. , 1967).

People who have an aversive attitude towards risk are also called *conservatives*, because in investments they expect a positive premium for the risk, for all kinds of gambling in the range covered by the curve of *hostility*, picture 4. People who show various levels of aversion towards risk are types of people most often met.

People who are indifferent towards risk are also called *players of the average*, because in investments they do not expect a positive premium for the risk at all, for all kinds of gambling covered by the curve indifference, picture 4, which in this case has a character of a straight line. People who belong to this category, for example, make a decision whose consequences are small compared to the total property position of the company, which is a common case with big corporations.

People who are prone to risk are also called the *gamblers*, because they allow even a negative premium for the risk with investments, for all kinds of gambling in the range covered by the curve *inclination*, picture 4, and that is because of the "thrill" that gambling brings, or for other reasons. People who belong to this category are the least present.

Entrepreneurs are people with a high need for achievement, they are characterized with the following (Skuras , Stathopoulou ., 2000):

Moderate taking of the risk. A successful entrepreneur prefers the risk which gives a reasonable and challenging chance for success and the situation whose outcome can be under the influence of one's own abilities and effort as well as a coincidence. This characteristic is important because it has significant implications on the way they make decisions, and at the same time on the success of an entrepreneurial venture.

An internal locus of control. It is the attitude that the determinant of success or failure implies taking personal responsibility for acts and their consequences, i.e. it

depends on the personality (of the entrepreneur), and that it is linked to motivation of the entrepreneur for achievement and preference for moderate taking of the risk.

Entrepreneurial risk from the organizational point of view

Entrepreneurial risk from the organizational point of view is about the readiness of the company to accept the given opportunity for a new venture, especially in the case when it is not known whether it will be successful, i.e. to seem courageous no matter the possible consequences. The successfulness of a corporative entrepreneurship often imposes the need for abandoning methods and products which were successful in the past. In this respect, managers of the enterprise which follow corporative entrepreneurship face the following kinds of entrepreneurial risk (Dess, Lumpkin, Eisner, 2007):

Overtaking entrepreneurial risk, which implies dealing with the unknown without an insufficiently clear idea about the possible (failure) success, which is linked to, for example, coming out to a still unexamined market or application of a technology insufficiently explored.

Overtaking financial risk, which implies the risk related to the return of investment – ROI, for example the risk in terms of overtaking important financial loans or significant engagement of one's own resources.

Overtaking personal risk, which implies making a decision by the key manager, especially in cases he/she takes attitudes in terms of the choice of a suitable strategy, whose outcome may dictate their future career.

As one of the consequences of omnipresent globalization is dynamizing of the total business on the global level, which leads to netting, i.e. creating of multiple connections between companies from various geographic regions of the world. In that, highly technologically dependant business environment conditions of business abruptly change, and the level of risk and uncertainty in business constantly increases. The enterprises which do not anticipate nor respond to the mentioned challenges on time, can not be competitive, and they can hardly deal with competition in the right way.

In such conditions of the environment, when enterprises are in question, there are several kinds of risk which appear and which they deal with, and out of them the following can be singled out as the most important (Alex, 2018):

Financial risk, as the most common and probably the most important risk of enterprises.

Foreign currency risk, especially present in enterprises which do business on the stock market, with abroad or on the global market.

Commercial risk, concerning prices, possibilities and results of sale.

Supply risk, which is characteristic of the enterprises in the chain of supply, such as, for example, noncompliance of freight forwarders or crises on the market.

Project risk, which is characteristic for industries, i.e. for enterprises which function on a project system.

Technological risk, especially in industries which depend on technological progress.

The risk of information systems, especially in industries, i.e. industries whose work is based on the internet.

The security and safety risk, which includes the consequences of occurrence of risky external events on the enterprise.

The risk of nonconformity, i.e. discordance of practice in terms of business of the enterprise with applicable laws and/or standards.

The real strategy for the response to mentioned challenges of enterprises is analysis and managing business risks.

Analysis and managing risk in the entrepreneurial venture

In order for an enterprise to efficiently reduce the risk of failure, it is necessary to apply the following:

- the risk analysis
- managing risk.

The risk analysis which comprises the following (MTa, 2018):

- identifying of possible threats, and
- evaluation of possibility of materialized threats.

Identifying of possible threats implies determining of all kinds of possible threats. In purpose of identification of threats, managerial tools can be used such as *SWOT analysis* and *Failure Mode and Effects Analysis,* and in purpose of research of possible threats, i.e. various kinds of future, the *scenario analysis* can be used.

The evaluation of possibility of materialized threats implies calculating the possibility for the threats to become realized, as well as the evaluation of their possible influence. In that respect the value of risk can be evaluated as a product of possibility and costs of event, i.e.:

The value of risk = possibility of the event x costs of event (4)

For evaluation of possibility the diagram - The influence of risk-possibility, figure 5 can be applied.

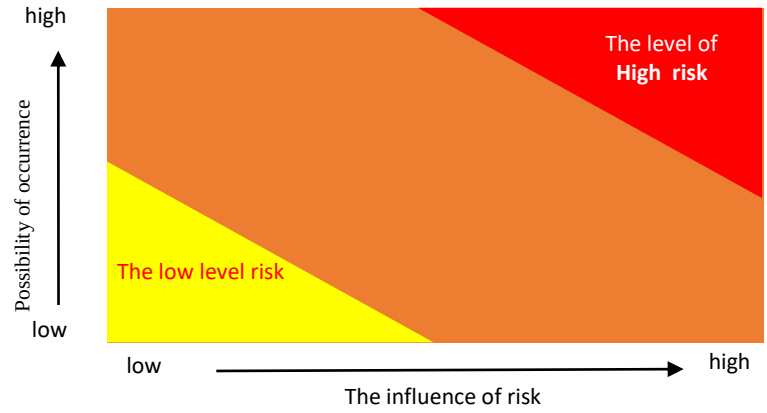

Figure 5: The diagram The Influence of risk – possibility
Source: MTa, (2018)

In this step it is most important to collect as much information in order to evaluate as precisely as possible the possibility of occurrence of events and related costs.

Managing risk implies the following activities and they are (MTa, 2018):

- Research of costs of eliminating risk.
- Making a decision about risk.
- Risk control.

Research of costs eliminating risk. One should be rational here, it is not reasonable for the costs of eliminating risk to be bigger than the costs the occurrence of events might cause. In this respect the evaluation is very important whether it is better to accept the risk of enormous costs of resources for eliminating risk.

Making a decision about risk. This activity implies, depending on the situation, the choice of one of possible options related to risk: avoiding risk, division of risk, accepting risk.

- *Avoiding risk* is an option in cases when the risk does not bring advantage to the enterprise or when the costs of risk are not worth of possible effects, it is the best to avoid risk in general, which implies that it is not even included in the business venture. In order not to miss a possibly favourable opportunity by this activity, it is useful to conduct a "What if?" analysis.
- *Division of risk* is an option in cases when the division of risk is rational, as well as the division of potential profit with other people, teams, enterprises or third party. For example, the division of risk with third party - an insurance company with the insurance of a business building and its inventory, or the division of risk with the enterprise – a partner on the joint development of a product.
- *Accepting risk* is a rational option when nothing can be done in order to prevent or reduce risk, when the potential loss is smaller than insurance costs from the risk, or when potential profit is worth taking the risk. For

example, the risk of delay of a new product development project can be accepted if potential sale still covers its expenses. Before making the decision about accepting risk, it is useful to do the analysis of influence in order to perceive the consequences of risk and prepare the plan for unforeseen situations on time.

Risk control. In case of the decision of accepting risk, the way in which its unfavourable influence can be reduced is important. The following can be used in that purpose:

- *Business experiments* which implies overtaking high risk activities, but in a small scale and in a controlled way. It includes testing of possible ways of reducing risk through four phases: the situation analysis, creating and testing of the solution, checking how well it functioned and the solution implementation.
- *PDCA* (Plan-Do-Check-Act) the way of control of the influence of risky situation based on Deming-Shewart management tools.

EMPIRICAL RESEARCH OF ENTREPERENEURIAL RISK

Empirical research of entrepreneurial risk from an individual point of view

The survey of the World Bank related to entrepreneurship shows that in Serbia 46% of respondents want to be entrepreneurs, but only 8% are really ready to engage in it, because even 85% of the respondents think that entrepreneurship is a risk, and they state unstimulating business environment as main obstacles, which, among other things, was the reason to start the empirical research by the name of "*The Research of Opinion of the Existing and Potential Young Entrepreneurs*", (P&P, 2016).

The research was carried out on the sample of 739 young entrepreneurs in the Republic of Serbia, aged from 15 to 35, of educational structure (1% of primary, 34% of high school, 65% of higher education), which, among other things gave the following results in terms of entrepreneurial risk:

To the *question* "What does private business represent for young entrepreneurs?" the *answers* of respondents were: for 45% pleasure and fulfilment; for 43% a challenge; for 10% risk and uncertainty, for 2% a necessity because of lack of work.

To the *question* "What are the biggest fears/problems of young entrepreneurs in Serbia today? The *answers* of the respondents were: for 30% placement and market; for 22% inability to charge demand; for 19% fear of Tax administration fines because of not being familiar with regulations; for 20% not giving real support by public institutions to entrepreneurial efforts; 5% other reason; 4% not having information who to ask for help.

Empirical research of entrepreneurial risk from the organizational point of view

For the purposes of this paper the authors have conducted an empirical research of entrepreneurial risk from the organizational point of view. The starting point of the research was the assumption that crises are potential risks in terms of their influence on business results of companies. In this respect the research was conducted on a sample of 56 entrepreneurial companies in a few districts in the Republic of Serbia, where 24 entrepreneurs, 24 limited liability companies, 5 joint-stock companies and 3 public utility companies were included. The possibility of occurrence of crisis was evaluated in the comprised companies, with a scale of mark 0 (none) to 9 (to a large degree), in key processes of doing business of companies (production and/or realization of services, maintenance, development, marketing, sale, supply, finances, personnel, information system, logistics and management).

The results of measuring of crises' anticipation in processes of surveyed companies are presented in Table 2, and in figure 6.

Table 2: Average marks by processes of companies where problems (crises) in business are expected

Rb	Business processes of companies	Possibility of the occurrence of crisis–the average mark of companies	The zone of risk
1.	Finances	**4,12**	High
2.	Sale	**3,76**	High
3.	Production and/or realization of services	**3,66**	High
4.	Maintenance	**3,63**	High
5.	Marketing	**3,27**	Moderate
6.	Personnel	**3,24**	Moderate
7.	Supply	**3,22**	Moderate
8.	Development	**3,12**	Moderate
9.	Management	**2,98**	Low
10	Logistics	**2,82**	Low
11.	Information system	**2,72**	Low

Source: authors

In figure 6 the results of conducted research in surveyed companies are graphically interpreted about anticipation of crises in processes of companies.

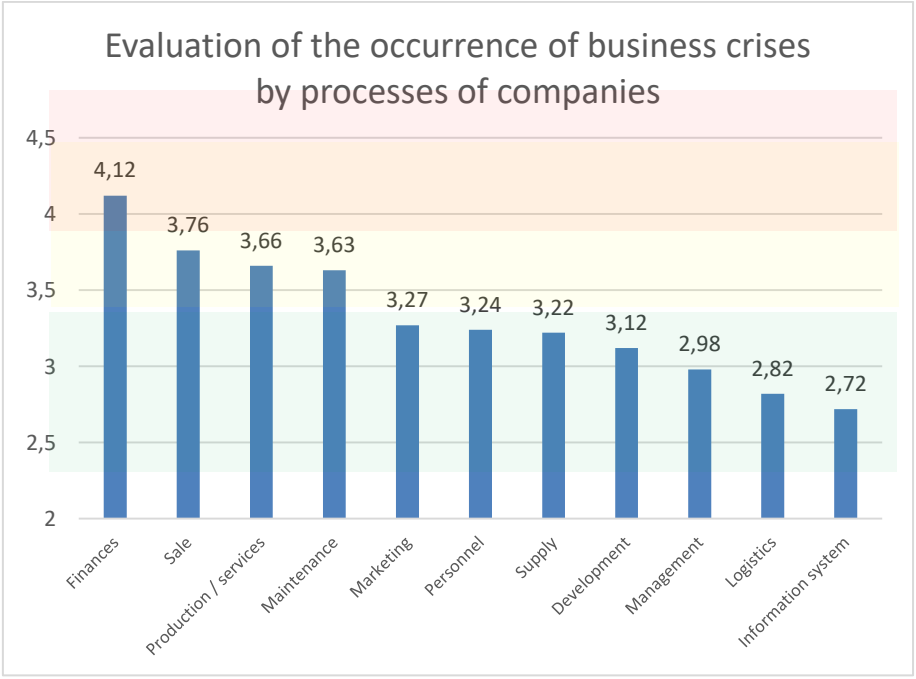

Figure 6: The graphic of evaluation of the occurrence of business' crises by processes of companies

Source: authors

The results received of the conducted research show that in the companies included in terms of crises' outbreak the processes of finances, sale, production (and/or realization of services) and maintenance belong to the *high risk zone*, where the processes of marketing, personnel, supply and development belong to the *zone of moderate risk* while the processes of management, logistics and information system belong to the *low risk zone.*

Summary indexing of problems (crises), as a composite indicator of crises' anticipation by functions in conducting business for the considered sample amounts to 36,89%.

THE DISCUSSION OF THE SOLUTION

The conducted theoretical and empirical research has confirmed the introduced assumptions that entrepreneurial risk represents a significant element in decision-making in terms of future entrepreneurial orientation both from an individual and organizational point of view.

Theoretical research has also pointed out the importance of individual preference on entrepreneurial orientation.

The research has also established that entrepreneurial risk can be characterized as speculative risk, as well as that entrepreneurs (as individuals) prefer moderate risk. It can be concluded from here that entrepreneurs belong to the category of people which is somewhere between players of the average sort and gamblers.

When it comes to entrepreneurial risk from the *individual point of view*, it is interesting that (young) respondents, based on data presented in chapter 4.1 of this paper, evaluate entrepreneurial risk relatively low (10%), but they attribute very big importance to dangers (30+22+20=72%) which come out of entrepreneurial venture. It is a contradiction, which points out to a certain misunderstanding, and that it would be suitable for the research of this kind of entrepreneurial risk to be further widened.

When it comes to entrepreneurial risk from the *organizational point of view*, the key entrepreneurial risks have been identified (business, financial or personal risk of the manager), as well as other kinds of entrepreneurial risk of enterprises.

From the point of view the empirical research, it has been established that the summary index of problems (crises) indicates that the enterprises give significant importance (36,89%) to potential crises by processes where the processes of finances, sale, production (and/or realization of services) and maintenance belong to the *high risk zone*, processes of marketing, personnel, supply and development in *moderate risk zone*, where processes of management, logistics and information systems belong to *low risk zone*.

By the conducted research, presented in this paper, the main areas of entrepreneurial risk have been identified (Table 2). The mentioned areas of risk can serve as a base for defining methodologies for further empirical research of entrepreneurial risk.

CONCLUSION

In this paper a very important characteristic of entrepreneurship was considered - entrepreneurial risk.

Entrepreneurial risk from the theoretical point of view has been researched through a concept of entrepreneurship (theories of entrepreneurship, entrepreneurial process) and through the concept of risk, and then it is further analysed in more details from both individual and organizational point of view, and also managing risk in entrepreneurial venture is analysed.

Entrepreneurial risk from an individual point of view was empirically researched through the results of the research of young entrepreneurs in the Republic of Serbia in 2016.

Entrepreneurial risk from the organizational point of view was empirically researched through the results of the research of occurrence of crises in companies in the Republic of Serbia in 2018, by the authors.

The research results from an individual and organizational point of view have confirmed the importance of risk in the entrepreneurial process and pointed out to directions of further research on this plan.

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CORRELATING ENTREPRENEURIAL ACTIVITIES, POVERTY ALLEVIATION AND ECONOMIC GROWTH IN THE NIGERIA CONTEXT

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ABSTRACT

This paper seeks to determine the impact Entrepreneurial activities on economic growth and poverty alleviation. This paper focuses on the role of entrepreneurship as a strategy to reduce poverty and accelerate economic transformation in Nigeria. The Nigerian government, particularly since the structural adjustment programme of the mid 1980s, has put in place policies and programmes aimed at entrepreneurship development, as a means of employment generation, poverty alleviation and rapid economic development. However, it appears that previous strategies have proved ineffective. Data was collected through questionnaires with multiple informants in twenty (220) entrepreneurship firms in order to investigate the impact of entrepreneurship on poverty and economic growth. The study employs a stratified sampling technique. Employers and employees of two subsectors of social entrepreneurship organizations in Nigeria are surveyed using multivariate analysis and descriptive methods (frequencies, percentages, cross tabulations and multiple regression) are used for data analysis. The findings suggest that Entrepreneurship is useful for the part it plays in the process of capital accumulation, innovation, employment creation and poverty reduction. This research has been able to establish that entrepreneurs will act as more of a proxy for poverty alleviation and economic development in Nigeria.

Keywords: Entrepreneurial activities, Entrepreneurship, Poverty Alleviation, Economic growth

JEL Classification: L26

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1.0 INTRODUCTION: POVERTY AND ECONOMIC GROWTH

Recent reports suggest that poverty incidences in Nigeria are on the increase (World Bank, 2014; Ahiuma, 2016). The term poverty connotes a situation where the majority of the populations are living below the poverty line and they do not earn enough to meet their daily needs (Adesina, 2013). Similarly, the available resources cannot meet the needs of the population (Akinmulegun, 2014). There are arguments to suggest that as a result, poverty could lead to corruption, hunger, environmental degradation, sickness and death (Adesina et al., 2013). As a mechanism to minimize the impact of such factors, poverty alleviation is urgently needed. Poverty alleviation is one of the major priorities of the Millennium Development Goals (MDGs) - the need to reduce poverty in most developing countries, including Nigeria, has become a great concern to the heads of nations and the international community as a result of the consequences of poverty (Akinmulegun, 2014). The Millennium Development Goals are a set of eight point goals that were set by the leaders of 189 countries in the year 2000 at the United Nations Millennium Summit to improve the lives of the world's poorest people and reduce poverty. One of the mechanisms of such poverty alleviation is through the collaboration of social enterprises.

The main objective of this paper is, therefore, to study the correlating entrepreneurial activities, poverty alleviation and economic growth. Through this, we are able to establish the link between poverty and local economic growth initiatives, of which entrepreneurship forms the major part of the enquiry.

2.0 LITERATURE REVIEW: POVERTY IN NIGERIA

Nigeria as a nation is among the poorest countries in the World and many of its population are still living in abject poverty, with more than 50% on a living wage of less than $2 per day (World Bank 2014; Adesina, 2013). The level of economic growth not only affects poverty, but poverty incidences also affect lives and economic growth. Studies have confirmed that economic growth is one of the ways to address the problem of poverty and this can be achieved through the development of enterprise, entrepreneurship and social entrepreneurship, which by their operations generate employment and the redistribution of wealth (Aiyedogbon

and Ohwofasa, 2012). The World Bank (2014) has described Nigerian poverty as a paradox, which has also been confirmed by other authors, such as Aiyedogbon and Ohwofasa, 2012; Aigbokhan, 2012.This view asserted that Nigeria is rich but that the people are poor and the level of wealth of the nation does not reflect the lives of the people (Aigbokhan, 2012).

Four decades following Nigeria`s independence, the country still remains in abject poverty, with an annual per capita income of less than $300 (Akinmulegun, 2014). This is below the average of $450 for sub-Sahara Africa (Akinmulegun, 2014). The World Bank (2014) reports that per capita consumption and per capita income are lower than in the early 1970s. PCI dropped from $1,600 in 1980 to $290 in 2002 and there was a further reduction in 2012 to $120. This fall was as a result of unemployment, neglect in agriculture, currency depreciation, corruption and bad leadership (Adesina, 2013).

In the past decade, studies have indicated that there is a relationship between economic growth and poverty (Aiyedogbon & Ohwofasa, 2012). First, poverty tend to slow down economic growth and economic growth tend to improve poverty levels through the redistribution of income and the provision of employment (Adesina, 2013). The current economic recession in Nigeria is also caused by the high poverty situation (Aigbokhan, 2012). Unemployment is a major cause of poverty and is considered as a barrier to social progress and transparency (Akinmulegun, 2014). The level of poverty in Nigeria has led to degeneration into armed robbery, kidnapping, terrorism, corruption, insecurity and other vices (Akinmulegun, 2014). There is, therefore, a need to address the problem of poverty in Nigeria in order to reduce the resultant effects of poverty mentioned above, i.e. terrorism, corruption, kidnapping, armed robbery, bad governance, etc.

Research has been undertaken with regards to various strategies to alleviate poverty in Nigeria, but there has been scarce research that has addressed how CSE can be used as a collaborative strategy to reduce the level of poverty in Nigeria (Abubarkar, 2012). Williams (2012) studied the evolution of collective strategies among organizations at Stanford United and among research and development consortia and concluded that collectivism is a formidable tool for networking and addressing social issues. Mair et al. (2012) researched collective entrepreneurship and its contribution to sustainable rural development in Greece, but this research was not focused on Nigeria, and not on Lagos in particular. With such a huge population there is therefore a need to look at the effect of CSE within the context of Nigeria.

Whilst there has been some research on CSE by Montgomery et al. (2012) titled "Collaboratively Shaping Social Good", which focuses on the effectiveness and use of collaborations in fighting poverty, not much research has been conducted on the effectiveness of social entrepreneurship and its

success in reducing poverty within the context of Nigeria. This research, therefore, argues that there are different forms of collaborations and strategies that can be used to address poverty, such as alliances, cooperatives, licensing agreements and joint ventures.

Within the Nigerian context, CSE has received very little attention with regards to collaborative strategies that may potentially curb poverty (Faridi et al., 2015). Many authorities have shown concern about the level of poverty in Nigeria and researchers have also looked at poverty from different perspectives, but to date a resolution has not been found (Edet, 2015). In fact, Idris and Yusof (2016), who researched the proliferation of intervention programmes and poverty reduction, concluded that poverty is a major problem in Nigeria and requires a multidimensional approach. Edet`s study (2015) on poverty alleviation from the perspective of policy implementation and concluded that policies relating to poverty are key in alleviating poverty in Nigeria. Kasali et al. (2015) argues that among other factors, micro financing will help to alleviate poverty in Nigeria through entrepreneurship and social entrepreneurship. Oyediran et al. (2015) posited that engagement and investment in agricultural cooperatives will alleviate poverty in Nigeria. The position of Oyediran et al. (2015) is in line with this research, as a cooperative is a form of collaboration that is used for poverty alleviation. Idris & Agbim (2015) argued that micro financing will alleviate poverty in Nigeria; this is poverty alleviation from another dimension of financing. Finance is an important factor needed by CSEs in poverty alleviation. Effiom & Francis (2015) opined that multilevel marketing is an important poverty alleviation index. The findings of Effiom & Francis did not touch on collectivism and the importance of collaboration in poverty alleviation in Nigeria, but this research is investigating CSE as a collaborative strategy to alleviate poverty in Nigeria.

More recently, Adiyia et al. (2016) suggested that our attention should be shifted to tourism as a poverty reduction mechanism. An economic evaluation of fiscal and monetary policies will help the Nigerian government in the fight against poverty alleviation (Abula & Adebayo, 2016). Jacob and Onwughalu (2015) criticized the position of Effiom and Francis (2015) and suggested that marketing will not alleviate poverty at any level. From another perspective, Aye et al. (2016) suggested that women's development is a panacea to poverty alleviation, and that education for women is education for all. Hassan (2015) looked at poverty alleviation from the point of view of GDP. He stated that the government should make a concerted effort to increase GDP in order to reduce the level of poverty in Nigeria. Daniel (2016) claimed that international organizational development will impact on poverty alleviation in Nigeria. Corruption is a major cause of Nigeria's poverty and curbing corruption will eradicate poverty in Nigeria (Gonzalez, 2016). Organizational development, such as small and medium enterprises, will grow the economy and alleviate poverty (Okon & Edet, 2016). Entrepreneurship education, entrepreneurship and social missions will eradicate poverty in Nigeria (Olusegun, 2013). Interestingly, Maria (2015) said that cooperatives play a major role in

economic development and poverty alleviation, whereas Aniebonam (2012) opined that community development will impact positively on the community and help local poverty eradication. Looking at the foregoing literature, none of the literature has focused on the impact of CSE as a collaborative strategy to reduce poverty specifically in Nigeria, hence the importance of this research.

CSE could be used as a poverty alleviation measure because it is holistic and integrates so many different aspects of the community, such as economic, social, cultural, environmental and political. It is obvious that social entrepreneurship is an agent of poverty alleviation but the dimension of CSE as a poverty alleviation mechanism has not been adequately researched.

This research is the first of its kind within this sector in Nigeria, as this sector consists of the highest number of social entrepreneurs (Oyelola et al., 2013). Many programmes, schemes and research projects aimed at poverty reduction have been conducted within Nigeria, but the results have not been very positive. What is more, these research projects were not focused on the present sectors, the Finance and Education sectors. Therefore, the focus has shifted to examining the effect of collective social entrepreneurship as a collaborative strategy for poverty reduction.

The study by Pache & Santos (2013), Peterson researched into the role of the private sector in alleviating poverty. The study used data from 58 countries. Regression analysis was conducted on these findings and the scatter plots indicate that there is an indirect correlation between the two. That is, the private sector reduces poverty as hypothesized, and with the added innovation of entrepreneurship, the ideas are more effective in reducing poverty. This suggestion will be studied in this research.

According to the World Bank report of 2012, 189 countries signed the Millennium Declaration for the adoption of millennium Development goals, according to which, the goal is to reduce poverty, i.e. the number of people living on less than 1 dollar per day by 2015. Looking at the foregoing argument, it is therefore pertinent to carry out an investigation of CSE as a collaborative strategy to reduce poverty in Nigeria after all other strategies have failed.

The level of the impact of poverty with respect to the Nigerian context is examined with the help of nature and strategies of social entrepreneurship. In this research, a collective lens is used to examine social entrepreneurship and collaborative action and how it can be used to solve social problems. In a situation where a single actor may not be successful, collaboration can be used on numerous levels to achieve social changes. Collaborative action is needed for bringing about a social change and, most especially, for addressing the menace of poverty. The necessity to collaborate with outside actors and draw on external resources in order to bring about changes can be explained with the help of some of the prior literature across the social movements (Martin et al., 2016; Desai, 2016; Martin et

al., 2016), cooperatives (Spear, 2000), institutional change (Yozwiak et al., 2016; Ku et al., 2016; Iwasaki et al., 2015) and cross-sectorial partnerships (Sala et al., 2016; Desai, 2016; Moshtari, 2016). Collective social entrepreneurship is the primary focus of this research, which involves the collaboration of similar as well as diverse actors to apply business principles to solving social problems. By examining social capital, social relationships and the necessary actions that could bring about social change, social entrepreneurship behaviour and theory can be understood in a better way. Collective social entrepreneurship is also useful in building new resources and improving the existing ones, and understanding the effect of the reshaping and emergence of the institutional arrangements that can create social values (Montgomery et al., 2012). I define collective social entrepreneurship as the coming together of similar as well as diverse actors for the purpose of applying business theories and principles to resolve social menace.

Looking at several examples of the collective actions taken within the social entrepreneurial literature has enabled the researcher to understand and comprehend the field in-depth and enabled the researcher to answer several questions, such as what collective social entrepreneurship entails, including the form of collaborations, their strategies and opportunities, as well as the important strategies that ultimately lead to the outcome of social change, which are related to collective social entrepreneurship.

POVERTY ALLEVIATION

When a person cannot access the basic needs of humans, i.e. food and water, it is called poverty (Hickel, 2016; Ravallion, 2016). It can be described as a multidimensional condition, as the person loses their dignity and their ability to improve their lives is affected; society is also affected in various ways (Hickel, 2016). Poverty alleviation is amongst the biggest challenges that countries face in current times (Sharpley, 2016). For most countries, the majorities of the citizens earn below the national average and are poor. As described by Clyde & Karnani, 2015), poverty reduction is the process by which countries need to identify their assets, create new avenues for asset utilization and enhance the transferability of benefits from those assets. Countrywide efforts would be required to make these benefits available for the common welfare (McKague et al., 2015). The process of poverty reduction would involve activities related to the removal of socio-economic barriers (Begum et al., 2015). The same has been stressed by Green et al., (2015) and Chen et al. (2015), who stress that poverty reduction would require many interrelated forces to be attacked at the same time. The knowledge and skill building of people, increasing access to educational opportunities, reducing the level of deprivation and an increased public role in decision-making are some of the key steps for alleviating poverty in the first place. Mohammed et al. (2009) and Peterson (2015) suggest that countries need to apply the right mix of people,

technology, credit and information to make the best use of available resources to reduce poverty.

Poverty is essentially a multidimensional attribute and does not have a standard definition (Peterson, 2015). It is believed to be a situation of low income leading to low consumption and the inability to satisfy daily needs (Mohamed & Xavier, 2015). Individuals suffering from poverty struggle to provide shelter, education, health facilities and basic security for themselves and their family members (Qi & Tang, 2015). The same concept has been stressed by Kanbur (2015), who believes that poverty is a function of demographic variables, such as education, child mortality, health, etc., and that the lack of the above parameters creates poverty in the first place. Similar definitions have been provided by the Faridi (2015), which sees poverty as a state of the short-term deprivation of basic human needs. Almost all the definitions stress the economic, social and psychological incapacitation that individuals suffering from poverty tend to face (Adiyia et al., 2016). Abubarkar (2012) argued that the alleviation of poverty requires the consideration of such factors as increased income, education and training, employment creation and business opportunities, welfare and standard of living, skills development, savings and investment.

COOPERATIVES AND POVERTY ALLEVIATION

The foremost voluntary business organizations formed for mutual development are the cooperative societies (Melton et al., 2016). These societies are managed by the people through shared capital contribution or profit contribution accrued from their respective businesses. In short, these societies are democratically managed by the members (Kasmir, 2016). Henry (2012) has defined cooperatives as autonomous associations or organizations that are voluntarily managed by people in order to meet the social, economic and cultural needs of a democratically owned and operated enterprise. Cooperative is defined as a member-owned and group based enterprise or business, which aims at the social and economic development of any sector (Othman et al., 2012). Juliá-Igual et al. (2012), considered cooperatives as an association of a person with limited means and voluntarily achievement of its goals through democratically-controlled business organizations. The person is also responsible for sharing the profit and loss of his accrued shares and is liable to take all the benefits associated with the organizations (Jolly and Raven, 2015). Cooperatives act as a catalyst for the growth of the local entrepreneur (Tregear & Cooper, 2016). This is because it helps in mobilizing and operating the capital, and further helps in entrepreneurial development. This is supported by Mair & Marti (2009), since they understand that cooperative societies are owned, controlled and operated through their members on a non-profit or cost basis. Cooperative enterprises help in providing several

productive employments and alleviating poverty through the achievement of social integration and collaboration (Mathuva, 2015). They also help in that they are a model for providing values of self-help, democracy, social responsibility, equity, equality and solidarity (Kania & Kramer, 2013; Poledrini, 2015).

According to the studies by the World Bank (2014), around 1.4 billion people around the world are living below the poverty line (Dauda, 2016). The economic growth in places such as the Caribbean and Latin America has been extremely slow and thus there have been huge concerns regarding poverty (Saraiva, 2016). The state of the economy in the Caribbean and Latin America has influenced the poverty level in the region (Saraiva, 2016). The reduction in poverty has been extremely slow in regions such as sub-Saharan Africa. The reduction in poverty in this area has been the slowest, when compared to other regions, and trends demonstrate that there will be further hindrances slowing down the reduction of poverty in the future (Kanbur, 2015). However, such conditions prevail even in some of the developed economies of the world (Peterson, 2015: 5). According to the US Bureau Censor report (2014), the poverty rate in the United States was around 12% (Sharply, 2016). This censor report is the official data and shows that around 37 million people are surviving in conditions of extreme poverty (Sharply, 2016). In fact, Lawanson (2016) said that the issues of inequity and poverty exist throughout the world and have become a major concern in today's environment. This is the reason why it is the prime objective of the MDG to reduce the level of poverty existing in the world. The policies and strategies developed to reduce poverty levels have been the prime focus of the discussions that have been undertaken to improve the economic and social conditions of people (Begum and Abdin, 2015). What is more, there has been a huge decrease in the rate of poverty reduction over the years (Begum and Abdin, 2015).

According to Augsburg et al. (2015), there are several factors that contribute to the development of entrepreneurship, such as the availability of capital, access to markets, policies, power supply which have an impact on the development of entrepreneurship.

3.0 METHODOLOGY

Quantitative primary data was collected using questionnaires and analyzed quantitatively using a multiple regression analysis in order to identify the relationship between poverty and collective social entrepreneurship. multiple regression analysis was used as one of the key statistical tools for understanding the relationship between Entrepreneurship, poverty alleviation and economic growth. SPSS version 21 was used for conducting the necessary analysis of the formulated variables. SPSS has been chosen as the analytical tools because it is

well equipped, it contains the appropriate statistical tools, such as regression and multiple regression, and it has the appropriate cells for my analysis, forward method, enter method, etc.

The researcher adopts a disproportionate stratified sampling approach towards shortlisting the respondents for the survey. Disproportionate stratified sampling would help to get a true reflection of how the phenomenon under study occurs in its natural form, without trying to influence the outcomes by choosing a biased sample (Lawanson and Oduwaye, 2016).

About two hundred and twenty (220) questionnaires will be administered to the employees and the CEOs of the sampled organizations. The respondents were asked some of the following questions: My income has increased tremendously since I joined this organisation; Do you think this organisation has helped to create employment opportunities? This organisation provides the necessary training when the need arises? Joining this organisation has improved my standard of living? Skills development is a major consideration of this organisation? Do you have savings and investments since you joined your current organisation? Do you think this entrepreneurship is sustainable enough, to be able to address poverty in Nigeria? In your opinion what form of entrepreneurial strategy, suitably addresses poverty reduction in Nigeria?

4.0 RESEARCH FINDINGS AND ANALYSIS:

IMPACT OF ENTREPRENEURIAL ACTIVITIES ON ECONOMIC GROWTH AND POVERTY ALLEVIATION:

In determining the impact Entrepreneurial activities on economic growth and poverty alleviation, the results demonstrated a correlation coefficient of .495. As the model summary table shows, there is a linear relationship between Entrepreneurial activities on economic growth. The model summary table shows a coefficient of determination value of .245. The ANOVA table shows a significant value of .000 at $p<.05$. Table 1 shows that having a licensing agreement has a correlation value of .127 and a t- value of .958, joint venture has a correlation value of .437 and a t- value of 4.280, cooperative has a correlation value of .398 and a t-value of 4.153 and, finally, an alliance has a correlation value of -.647 and a t-value of -.209.

The results in Table 1 therefore suggest that both cooperatives and joint venture collaborations were statistically significant at $t = 4.280$ and 4.153 respectively, which implies that these forms of collaboration positively impact on economic growth and poverty alleviation. Collaboration through CSE cooperatives and joint ventures have a positive correlation value of .398 and .437 with a 0.5 t-value. This therefore implies that the more collaborations that there are, through deliberate entrepreneurial activities in Nigeria, the higher the likelihood of poverty

alleviation and economic growth. On the other hand, the results indicate that CSE collaboration through a licensing agreement, though not statistically significant with regards to poverty alleviation variables, as measured in this study, has a rather positive correlation value of .127. This simply implies that reliance on a licensing agreement as a form of collaboration by CSE organizations would exacerbate poverty in Nigeria rather than alleviate it. The reason for this may be attributed to different factors that are internal within CSEs or externally motivated. More so, a coefficient of determination of .245 also indicates that there is a linear relationship between the CSE collaborations and poverty alleviation. That is, a 24.5% increase in income is determined by the CSE collaborations. The F-test table shows a value of .000, which indicates a high correlation between the variables in the model.

The coefficient table (1) shows multiple linear regression estimates, including the intercept (the constant) and the significant levels. The Beta weights, .094, .407, .287 and -.209, express the relative importance of each independent variable (licensing arrangement, joint venture, cooperatives and alliances) in standardized terms. The findings here are twofold: firstly, all the variables, licensing arrangements, joint ventures, cooperatives and alliances, are significant predictors (although joint ventures and alliances are highly significant ($p < .01$), while alliances are particularly significant at ($p<.05$)). Additionally, only joint ventures have a relatively high impact in comparison to cooperatives (Beta = .407 and Beta = .287). In other words, the CSE collaborations (joint ventures) variables function more as a proxy for poverty alleviation than other variables. Similarly, the alliance Beta coefficient of -.209 demonstrates that the variable is correlated with the CSE collaborations variables, however it is less important with regards to poverty alleviation within Nigeria.

Table 1 **Impact of Entrepreneurial activities on economic growth and poverty alleviation**

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	2.905	.958		3.033	.003
CSE Collaborations	CSE Collaborations (Licensing Agreement)	.127	.132	.094	.958	.339
	Joint Venture	.437	.102	.407	4.280	.000
	Cooperatives	.398	.096	.287	4.153	.000
	Alliances	-.647	.230	-.209	-2.813	.005

a. Dependent Variable: Poverty Alleviation Variables (Increase Income)

Correlation Coefficient (R) .495 , R-Square .245

1a Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.495[a]	.245	.230	.396

a. Predictors: (Constant), Alliances, Joint Ventures, Cooperatives, CSE Collaborations

(Independent Variables)

1b ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.972	4	2.493	15.927	.000[b]
	Residual	30.680	196	.157		
	Total	40.652	200			

a. Dependent Variable: Poverty Alleviation Variables (Dependent Variables)

b. Predictors: (Constant), Alliances, Joint Ventures, Cooperatives, Licensing Agreements

(Independent Variables)

Impact of Entrepreneurship on employment creation and business opportunity

In determining the impact of Entrepreneurship on employment creation and business opportunity, a correlation coefficient .443 in the model summary table shows a linear relationship between Entrepreneurship and employment creation. The model summary table also shows a correlation of determination value of .196. The ANOVA table shows a significant value of .000 at p<.05. Table 5.3 shows that a licensing agreement collaboration has a correlation value of .127 and a t- value of .958. A joint venture collaboration has a correlation value of .437 and a t- value of 4.280, a cooperative has a correlation value of .398 and a t- value of 4.153 and, finally, an alliance collaboration has a correlation value of -.647 and a t- value of -.209.

The results in 2c therefore suggest that both Entrepreneurship collaborations were statistically significant at t= 3.712 and 5.663 respectively, which implies that these forms of collaboration will positively impact on poverty alleviation. Collaborations through CSE cooperatives and joint ventures have a positive correlation value of .862 and .409 with a 0.5 t-value. This therefore implies that the more collaborations that there are through deliberate cooperatives and licensing agreements of various CSE organizations in Nigeria, the higher the likelihood of poverty alleviation. On the other hand, CSE collaboration through joint ventures and alliances, though statistically significant with regards to poverty alleviation variables, as measured in this study, have rather negative correlation values of -.374 and -507. More importantly, a coefficient correlation of .443 also indicates that there is a strong linear relationship between CSE collaborations and employment creation. That is, a 19.6% increase in employment and business opportunities is determined by the CSE collaborations. The ANOVA table figure shows a value of .000 at p<.05, indicating a positive and significant relationship between Entrepreneurship collaboration and employment creation.

Looking at the coefficient value from Table 2c, the Beta weights show values of - .575, -.313, .265 and -.147, representing licensing agreements, joint ventures, cooperatives and alliances in standardized terms. These values show the relative importance of each independent variable. This indicates that the variables are significant predictors to poverty alleviation. Licensing agreements and cooperatives are highly significant ($p < .01$), while joint ventures and alliances are significant ($p < .05$). The analysis in Table 5.3, looking at the Beta values, indicates that licensing agreements and cooperatives will impact more on poverty alleviation than joint ventures and alliances, even though they are correlated.

2a Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.443[a]	.196	.180	.456

Predictors: (Constant), Alliances, Joint Ventures, Cooperatives, CSE Collaborations (Independent Variables)

2b ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.954	4	2.489	11.977	.000[b]
	Residual	40.726	196	.208		
	Total	50.680	200			

a. Dependent Variable: Employment Creation and Business Opportunity

b. Predictors: (Constant), Alliances, Joint Ventures, Cooperatives, CSE

2c Impact of CSE collaborations on employment creation and business opportunity.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
Entrepreneurial Collaborations	(Constant)	2.617	1.104		2.371	.019
	CSE Collaborations Licensing Agreement	.862	.152	.575	5.663	.000
	Joint Venture	-.374	.118	-.313	-3.183	.002
	Cooperatives	.409	.110	.265	3.712	.000
	Alliances	-.507	.265	-.147	-1.914	.057

Dependent Variable: Employment Creation and Business Opportunity
Correlation Coefficient (R) .443 , R-Square .196

5.0 Conclusions:

In determining the impact of Entrepreneurship on poverty alleviation and economic growth, a correlation coefficient of .495 in the model summary table shows a strong linear relationship between these variables through increased income. The model summary table reveals a coefficient of determination of .245, which indicates that there is a linear relationship among the variables explained. That is, a 24.5% increase in income is determined by the Entrepreneurship. Furthermore, results from Table 1 show that licensing agreement has a correlation value of .127 and a t- value of .958, joint venture has a correlation value of .437 and a t- value of 4.280, cooperative has a correlation value of .398 and a t- value of 4.153 and alliance has a correlation value of -.647 and a t- value of -.209. This result suggests that both CSE cooperative and joint venture collaborations were statistically significant at t= 4.280 and 4.153 respectively, which implies that these forms of collaboration will positively impact on poverty alleviation. Collaborations through CSE cooperatives and joint ventures have positive correlation values of .398 and .437 at 0.5 t-value, which implies that the more collaborations that there are through deliberate cooperatives and joint ventures of various CSE organizations in Nigeria, the higher the likelihood of poverty alleviation. On the other hand, CSE collaborations through licensing agreements, though not statistically significant with regards to poverty alleviation variables as measured, have a positive correlation value of .127. These findings suggest that Entrepreneurship will impact on poverty alleviation through various collaboration and strategies. The opinion of Fidelis et al. (2015), that collaborations and networking will alleviate poverty, supports the findings of this study. Kasmir (2016) also stated that collaborative arrangements will favour poverty alleviation and economic development.

The study revealed that Entrepreneurship have a positive impact on employment creation and business opportunity in Nigeria through cooperatives and licensing agreements. Evidence in the model summary table 5.3a also shows a correlation of determination value of .196, which shows a weak linear relationship between CSE collaboration and employment creation. That is, a 19.6% increase in employment and business opportunities is determined by Entrepreneurial collaborations. Results also show that licensing agreement has a correlation value of .127 and a t- value of .958, joint venture has a correlation value of .437 and a t- value of 4.280, cooperative has a correlation value of .398 and a t- value of 4.153 and alliance has a correlation value of -.647 and a t- value of -.209. This is an indication that both CSE cooperative and licensing agreement collaborations were statistically significant at t= 3.712 and 5.663 respectively, which implies that these forms of collaboration will positively impact on poverty alleviation. Collaborations through CSE cooperatives and joint ventures have positive correlation values of .862 and .409 at 0.5 t-value, which implies that the more collaborations that there

are through deliberate cooperatives and licensing agreements of various CSE organizations in Nigeria, the higher the likelihood of poverty alleviation. Recent studies posited that cooperative collaboration will create employment opportunities (Wollni & Fischer, 2015; Herbst & Prufer, 2016).

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CHALLENGES IN THE MANAGEMENT OF VIRTUAL ORGANIZATION

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ABSTRACT

Virtual organizations entail companies who network from different parts of the world through basic technologies. Many virtual organizations are driven by process innovation, globalization, and cost reduction. Managers structure the virtual organization mostly by an egalitarian structure with alliances. Alliances among firms from the same country could be less costly because they know their own culture and way of working. Various approaches and basic technologies are established to effectively manage either private or public sectors. Virtual organizations have both advantages and disadvantages, which help to determine organizational and employee trends. This paper presents base concepts of Virtual organizations (VO) including management concepts and practical examples. . Our cases show that they are characterised by stability and a long-term business strategy. Also, mentioned companies shared the similar objectives as identification of processes and competencies necessary that are required for virtual organizing.

Key words: *Virtual organizations ,IT, managers, management concepts*

JEL Classification*: L22, I2, J23, J24, D8*

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INTRODUCTION

A new way of thinking about business requires aproach like "Hollywood Movies" – people come together and bring their skills and abilities to projects and programs, they build and deliver the solution, and then many of them move on to the next "movie" later.

(Bensin,J.,2016).

As our society continues to advance into even more technological achievements, our ever-growing need for virtual organizations will continue to expand. Many organizations have utilized virtual resources, which has made them very competitive among other organizations. For example, Dell Computers moved away from a vertical integrated organization to a virtual organization that relies on business partners to fulfill major parts of their supply chain. An analysis of the methodologies of virtual organizations will be undertaken as virtual organizations will be defined; the structure will be established; the proper approaches and technologies in management will be explained; and examples of prosperous virtual organizations will be supported with evidence. Both the advantages and disadvantages of virtual organizations will also show us the trends that managers will face in the virtual world.

THEORETICAL OVERVIEW

The introduction of IT into an organization and trends such as agility, globalization, and increasing demands for products and services with high productivity have greatly motivated different organizations to cooperate (Nami,2008) .Also, this new environment calls for new thinking and way of business operating (Parlińska and Grabowska,2002):

a) Boundary crossing;
b)Efficiency;
c)Usage of competitive advantages;
d)Specialisation;
e)Need for high quality and pro-ecological products;
f)Usage of ICT and
g)Flexibility

This new requests determined a new form of organisation, i.e., 'virtual organisation' emerged in 1990 ,becaause for a single small or medium enterprise it was impossible to meet the entire requirements. According to recent research (Deloitte Human Capital Trends ,2016), today's digital world of work has shaken the foundation of organizational structure, shifting from the traditional functional

hierarchy to one we call a “network of teams.” The the new organization of today rewards people for their contribution, not their “position “(Bersin,2016).

The concept of virtual organizations begun to develop intensively during the last couple decades of the previous century. Also one number of scholars explained VO as organisations that integrate vertically and unify their core-competencies and function as one organization (Radović-Marković, et.al.,2014).Virtual organizations are also defined as companies whose members are within different regions of the world, which network through their computer by e-mail and groupware to share skills, knowledge and access to others' expertise (Certo and Trevis ,2012).). They are developed when traditional organisations „tried to maximize the benefits of the new information and communication technologies, forming flexible and dynamic networks to make best use of business opportunities“ (Halaris,et.al.2001,p.446).There is cooperation among members within the organization in order to deliver products or services in the means of a common business understanding. While, there is no office that exists for individuals, the virtual organization is viewed as one where there are unified members that are in a real physical location.

Ever since the concept of virtual organisations emerged in 1960s, a large number of studies have been carried out to explore the organisational business processes and the methods of their execution. „One who initiates a virtual organisation’s forming determines the most appropriate business processes complementary with the business skills of various firms“(Marković and Radović-Marković,2015 p.3). Competency is the capability of an individual verified by a written document and stating the fact that this individual is capable of doing a certain job. It is important to point out that, in the course of his/her education, the individual develops his/her competence in accordance with the standards set for that job (Radović Marković, 2011).

Virtual organizations have varying attributes, which involves a disperse network of individuals with differing skills and capabilities. There is a utilization of telecommunications and computing technologies, which help to support the distributed work teams. Virtual organizations are flexible by having no barriers like place and time; dynamic by including employee work environments and processing structures; and restless by freely changing products and services, geographic dispersion, and communication patterns for further growth. The interaction of individuals in a virtual organization is collaborative, cooperative, and a trustworthy atmosphere where everyone can collectively achieve success (Pang, 2001).

Virtual organizations are driven by many different situations. Some examples include the need for process innovation, globalization, and cost reduction. Within innovation, the motivation is usually from competitive pressures from stakeholder’s demands and the ability to increase productivity and quality. Globalization involves the ability to network with different people from around the

world with unique skills and abilities. Lastly, cost reduction improves the efficiency of the virtual organization by reducing physical assets in a traditional work environment with assets that are supplied in the individual's home (Pang, 2001).

The corporate structure of virtual organizations is almost entirely egalitarian. This means that the company shares equal job responsibilities and power with all employees. Egalitarian-style structure is one in which employees have general job descriptions instead of specific ones (McMullen,n.d.). While virtual organizations are mostly egalitarian, there are leaders that make decisions on the basis of the virtual team. These virtual teams set up alliances with some of the following individuals: employees, management, customers, suppliers, and government leaders (Fig.1).

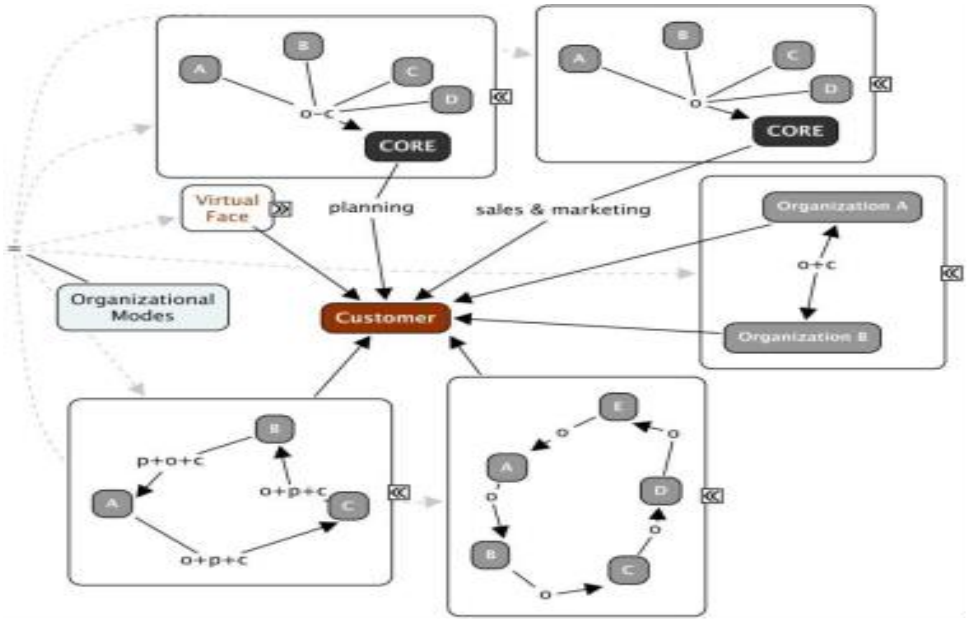

***Fig.1**. A virtual organization alliance*
Source:https://tupiwire.wordpress.com/2012/03/19/filling-in-the-blanks-cases-of-the-vbe/

They interact through interdependent tasks guided by a common purpose of bringing together a high-quality product or service to markets as soon as possible (Helms, 2006). Once, a virtual organization structure has been established by leaders than effective management must take place in the network of independent firms to design virtual operations and establish/maintain virtual relationships with

internal and external residents. Management must also support virtual teams by keeping members focused on the intended purpose of the virtual organization. They can motivate employees through specific market opportunities, world-class competence, information networks, interdependent relationships, and as many restrictive boundaries (Helms, 2006). The establishment of these motivating factors helps the management to effectively lead the virtual organization.

The manager that is in charge of virtual organizations must develop an approach when establishing their company. The approaches may include: telecommuting, telecenters, mobile working, hot desking, hoteling, and virtual teams. Within telecommuting, employees work at a location either from home or outside the home, which involves computers and telecommunications equipment in order to establish contact between coworkers and employers. Next, telecenters are satellite offices that are located in communities that are outside of major cities where space and equipment is provided to employees that are not available in the home. Mobil working involves mobile workers that utilize tools such as cell phones, e-mail, pagers, and laptops. Hot desking is an arrangement that involves employees sharing computer workstations on a needed basis. Hoteling is providing office space to employees when they need to utilize office resources. Virtual teams, as were discussed, collaborate from different locations through the use of e-mail, groupware, internet, and/or videoconferencing (Pang, 2001).

After an established approach, such as a virtual team, then basic technologies must support the virtual organization. Some of these basic technologies include the Internet and the World Wide Web, telecommunications, electronic mail, groupware like Lotus Notes, and video conferencing. Besides basic technology, knowledge management technology focuses on helping people to obtain the right information at an appropriate time so they can put it into action. The type of information that is included in knowledge management technology includes the following: collaborative technologies, extensible markup language (XML), intranets and extranets, personal devices, wireless technologies, virtual reality (VR), and portals (Pang, 2001).

One number of researchers pointed out that „purely virtual corporations are still uncommon, and the processes for developing cultural relationship in virtual

organizations and the ultimate impacts of virtuality are still unidentified“(Omale, 2016).

CHARACTERISTICS OF VIRTUAL ORGANIZATIONS: Advantages and disadvantages

Virtual organizations are characterized by (Fig.2):

It will have neither central office nor organization chart.

It will have no hierarchy, no vertical Integration.

Instead of a physical address as registered offices, it has IP address.

Central in the development of virtual organization is technology.

This organizational model is flexible .

Success in a virtual organization is the amount of collaboration that takes place between individuals .

The virtual organization consists of a network of independent companies

There are different virtual organization networking modalities, depending on the degree of collaboration and management required, and hence different types of information to be shared.

In a Virtual organization,the majority of the activities of the firm are contracted or outsourced.

They are working beyond borders.

Virtual firms are managed through the 'Net',

They redesigning the way we work

They deliver on-demand organizational learning

There is participant equality

There is geographical dispersion

They need only occasional face-to face meetings

The Changing Role of Management.

Fig.2*.Characteristics of virtual organizations*
Source:Author

- ***Advantages and disadvantages of VO***

Managers must be aware of the advantages and disadvantages of virtual organizations in order to effectively manage their organization. The first advantage in virtual organizations is the reduction in cost, which includes the cost to rent working spaces along with utility expenses such as maintenance, insurance, water, electricity, and raw materials. Second, there are some employees which are more efficient when they work at home than at a company's office. The office can be a place where employees can become easily distracted by other employee's work. Therefore, a virtual organization can produce more productivity when the employee is working from the convenience of the individual's home.

On the contrast, the first disadvantage of virtual organizations is that it is difficult to build a corporate culture that is desirable. The reason for this is that employees and employers have to work to understand more about the different culture that these individuals come from in order to have a successful virtual organization. Another disadvantage is that conflicts could easily exist in a virtual organization. For example, within the Cambodian culture, it is inappropriate to directly talk about something negative with a manager; whereas, with westerners, it is appropriate to directly disclose negative issues with managers. Next, managers have a difficult time controlling workers in virtual organizations. The performance and commitment of employee's work is hard to determine since they usually work within their homes instead of a traditional office (Advantages and disadvantages of virtual organization , 2013). Lastly, communication may be misunderstood or not received by employees due to e-mail slang and informalities, technical jargon, confusion over teleconferencing protocols and outdated distribution lists. The lack of communication through face-to-face interactions, absence of body language, and vocal inflections tend to reduce the quality of the message. Alternatively, critical information that the manager wants to relay to employees may be delayed because of store-and-forward asynchronous communication. This could be presented as an issue if the information needs to be passed on in a timely manner (Pang, 2001).

ROLE OF MANAGERS IN VIRTUAL ORGANIZATIONS

Organizational and employee trends within virtual organizations must also be brought to the manager's attention. Managers are faced to wide variety of challenges as follow (Radović-Marković,et.al.2014):

Communication challenges – managers must learn to keep the lines of communication open.

Frequent communication-it is essential to success.

Need appropriate technological support (video teleconferencing, interactive groupware, etc.)

Technology challenges – all team members must have the same or similar technologies at their locations.

Diversity Challenges – different cultures have different perceptions on time and task importance.

In order for managers to effectively manage within virtual organizations, collaborative technologies must be integrated through either synchronous or asynchronous collaboration tools. Asynchronous collaboration tools allow communication to happen over a period of time that is most convenient for the individual. For example, discussion boards, blogs, and e-mail are all ways that managers are able to participate in a discussion that fits into the employee's schedules. In contrast, synchronous collaboration tools allow real-time communication to take place from different parts of the world. Examples include the following: virtual meeting rooms (group support systems), shared whiteboards, and video/audio conferencing (Ashley, 2003). These synchronous forms of medium are useful for discussions that involve more interactions where ideas are shared with other group members in virtual organizations.

Surprisingly, an interesting combination exists where managers in virtual organizations can integrate both synchronous and asynchronous collaboration. An example of this virtual organization is MITRE's Collaborative Virtual Workspace (CVW), which provides a continual virtual workspace where applications, documents, and individuals are available in virtual rooms, floors, and buildings. The user is provides a context for communication and document sharing, which is found in each virtual room. Next, individuals are able to meet in rooms to discuss ideas through the use of chat rooms or audio/video conferencing rooms to exchange documents and URLs with one another. Users are able to lock rooms and privately communicate ideas with other members. Also, users can put documents in different rooms, which allow other users that would like to read documents access through whiteboards, URLs, and notes (Pang, 2001).

Further technologies in virtual organization include extensible markup language (XML), which is a meta-markup language for the description of data elements on the World Wide Web. XML is becoming the common structure for data exchange in distinct varied systems for virtual organizations. The intranet is a network that belongs to the virtual organization and prevents unauthorized website access through a firewall blocking admission. The virtual organization shares company information and resources with managers and employees through the intranet. Some examples are manuals, procedures, internal job offerings, employee information, schedules and calendars, databases and project management. The extranet provides further accessibility in virtual organizations to include external stakeholders such as customers, suppliers, and trading partners. Some examples of

extranet applications are collaboration, data sharing, project management, news and training (Pang, 2001).

Personal devices are also included in technologies, which include personal digital assistants (palmtop computers), cell phones, e-mail devices, and Internet appliances. These devices help employees to have accessibility to their work anywhere, so they are able to reach management and clients. Wireless technologies involve Bluetooth, which enables cell phones, computers, and personal digital assistants to be connected with each other over a short-range (10-meter) wireless connection via a radio frequency. Virtual reality is an artificial environment that is created using software where the user actual perceives the environment as real. One type of virtual reality includes an immersive experience where the user will wear a helmet or goggles to interact with the virtual world. Desktop systems are another low end spectrum virtual reality where the system is run on personal computers. Portals are the last knowledge management technology, which allow users to access other websites from one main website for additional resources and services. For example, portals include search engines like google, e-mail, web links, databases from different sources, forms, documents and task lists (Pang, 2001).

Managing people in virtual firms require different style and type of management.Also,work is more team oriented, making it more difficult to assess individual contributions.Managers must find new ways to evaluate and supervise those employees without seeing them every day in the office.In addition,training should be offered so all workers can understand the new work environment.

Organizations should build a strong organizational culture to enhance its success (Omale, 2016).When building a culture within a virtual firm, managers have numerous tools at their disposal to compensate for the lack of social context, geographical location and the normal behaviours of a non-virtual firm.

There are a number of features of a virtual firm that should be considered as part of the culture .

The first feature of the culture of a virtual firm is trust- Since a manager cannot always see his or her employees, they must be able to trust that their employees are doing the work that they are supposed to be doing.

The second feature of the culture of a virtual firm is leadership- It is important that a company’s leaders show the behaviour that they want their employees to exhibit. These are the role models of the firm that will set the tone for the entire company.

The third feature is that a virtual company needs to doing things differently. Virtual companies will always be different from traditional companies, and the culture needs to reflect that.

The fourth feature of a virtual company is that there will be some positions within the company that do very boring work, for example, those in a call centre or at a help desk .

The fifth feature of a virtual company is the emphasis on communication.

EXAMPLES OF GOOD PRACTICE

The technology in virtual organizations has been established in both private and public sectors. Private sectors are part of the economy that is not state controlled, but rather controlled by individuals or companies for profit. On the other hand, public sectors are a part of society that is controlled by national, state or provincial, and local governments. Examples of private and sector virtual companies are Dell Computers and the Shoes of Prey.

Dell Computers is a global company operating in 34 countries in three world regions, with about 35,000 employees**.** It has made a rapid transition from a vertically integrated organization to a private sector virtual organization. The company relies on business partners to outsource any part of its operation to companies that can implement the work with more efficiency, reliability, and cost effectiveness. For example, the components of a Dell computer are made by other companies while Dell is able to focus on its strengths; such as marketing, customer support, and integration. The virtual organization of Dell Computers is comprised of Dell customer service representatives, assembly line and crew, supply workers for various components, the UPS truck and the driver who delivers the computers and individuals from MasterCard who pay for the services. Each component in the virtual organization works succinctly together to accomplish the intended goal of delivering quality computers to individuals ernet forums. Forums (so-called Internet, Web forums) or discussion groups appear as one form of interactive communication between individuals (consumers, as well as salespeople and consumers) and they represent a modern form of viral and by word of mouth marketing (especially if they are independent – not connected to the salesperson). Simple usage without leaving true identities and cost creation make some of the reasons to access the forums. They can also be a component of a Website, which additionally completes its contents and the possibility to communicate with consumers.

Shoes of Prey is a company that started in October 2009 and allows its customers to design their own shoes on its website. To date, it has only existed as an online store. Shoes of Prey ships to customers around the world.

The company has become a net exporter for Australia, shipping 40% of sales to customers outside of Australia within the first year of operation.

The company released a promotional YouTube video that became the 5th most viewed on YouTube worldwide and the most commented on video worldwide of the day shortly after its release.

The video drove over 500,000 hits to the company's website, which converted to a 300% permanent uplift in sales (www.shoesofprey.com).

Based on our examples of virtual organisations, businesses are obviously willing to take risks, and organisational trust has been hypothesised for the development of such co-operative behaviour. Our cases are characterised by stability and a long-term business strategy. This does not mean that VO are static but that the emphasis is on gradual shifts over time based on mutual benefits. In both case examples it is clear that the trust development process has been speeded up by the use of shared information systems. Also, mentioned companies shared the similar objectives as identification of processes and competencies necessary that are required for virtual organizing. This includes the human and technological competencies including the capability to co-operate.

CONCLUSION

Managers that work in virtual organizations have the responsibility of managing employees in a mostly egalitarian organization where employees are treated as equals. The manager must determine the most appropriate approach for managing their employees through telecommuting, telecenters, mobile working, hot desking, hoteling, and virtual teams. Once the approach is determined, managers must use synchronous or asynchronous collaboration tools along with other technological tools such as the intranet and personal devices. Managers then must determine if they want to manage in a public or private sector of a virtual organization. They also must lastly notice the advantages and disadvantages of virtual organizations, so they can effectively manage their virtual teams.

Organizational trends involve more telecommuting, outsourcing, providing 24-hour-a-day storefronts, partnerships and strategic alliances, and growth in virtual intermediaries. Outsourcing helps businesses to fulfill their requirements by providing application service providers when telecommuting at either work or home. The accessible 24-hour-a-day storefronts help provide customers access to products and services at their own convenience. Partnerships and strategic alliances are starting to grow due to the need to gain a competitive edge and new customers. The last trend, growth in virtual intermediaries includes education brokers, market organizers, and personalized service providers.

Employee trends are prone to change in virtual organizations. The following trends are expected to take place in the upcoming years: no set schedule or workplace; greater amount of focus on employee's initiatives and responsibilities; increase in flexibility in guidelines and rules; higher mobility of individuals; and possible decrease in job security. Each trend is relevant for future endeavors within management of virtual organizations.In line with this, further research could be carried out to find out more about demands placed on managers to keep up with the technology.

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Links

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