

## **INTERACTION OF SOCIAL AND INTELLECTUAL CAPITAL - KEY PRECONDITION FOR CREATION OF NEW KNOWLEDGE AS ORGANIZATIONAL COMPETITIVE ADVANTAGE**

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**Abstract.** *The primary aim of this paper is to present how new knowledge as organizational competitive advantage is created by natural interaction between social and intellectual capital. The paper first gives an overview of the key theoretical interpretations of social and intellectual capital and thereafter analyses how structural, cognitive and relational dimension of social capital, through exchanging and combining with existing intellectual capital, creates new intellectual capital. The key value of new intellectual capital lies in the fact that it belongs to the corpus of group or socially tacit knowledge which is the key precondition for creation of innovative business solutions. Thus, new collective forms of knowledge enable the organization to make and maintain its advantage. Therefore, it can be said that the process of generating intellectual capital through social capital is a value basis for creating new knowledge and organizational competitive advantage.*

**Key words:** *intellectual capital, social capital, knowledge, innovation, organizational advantage*

### INTRODUCTION

For some experts, intellectual capital represents an invisible and unclear dimension, for others it is mainly an issue of measuring and accounting while some regard it as a strategic environment for creation of sustainable value of an organization. Recent researches on intellectual capital point to the need to study this area beyond the framework of reporting on intellectual capital, to focus more on relational or networking dimensions, on social capital which enable the flow of knowledge among different actors and, thus, creation of value and future influence (Edvinsson, 2013). This is one of the reasons why today relational capital, as one of the components of intellectual capital, is

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not considered from the perspective of customer relations only, but from all external actors. This is the reason why International Integrated Reporting Council has proposed a new categorization where relational capital and social capital would be reported separately (Martini, Corvino, Doni, & Rigolini, 2014).

The fact that intellectual capital based on social capital can be a model for successful business operation can be proved by the network-organized company Apple, which is considered to be an example of innovative management of knowledge. For Apple Company, intellectual capital based on social capital is a manner of correctly directing assimilated knowledge in the company with the aim of generating innovative ideas and their development (Edvinsson, 2013).

However, the ability of an organization to create and share knowledge is a product of various factors including special conditions which organizations develop so as to transfer tacit knowledge, organizational principles that individual and functional expertise is organized, coordinated and communicated by and nature of the organization as a social community (Kogut & Zander, 1996). One of the manners for a company to use its developed system of knowledge with the aim of creating organizational advantage is to connect social and intellectual capital, that is, to use the structural, cognitive and relational dimension of social capital for combining and exchange of existing intellectual capital which, thereupon, new and innovative intellectual capital will develop from (Nahapiet & Ghoshal, 1998).

This paper shall examine multidimensional forms of social and intellectual capital and how network resources of an organization enable it to use its social capital for generating intellectual capital which new knowledge and sustainable value for the organization would be developed from. This will, to some extent, also confirm the paradigm of intellectual capital as a future income-generating capacity of the organization, as an investment rather than an expense. Finally it will point to the need of shifting the focus from the theory of company and transactional expenses to the concept of organizational advantage, when considering an organization.

## 1. SOCIAL CAPITAL

The term social capital first occurred in community studies emphasizing the importance of networks of strong personal connections which have developed over time and which represent the essence of trust, cooperation and collective action in such communities (Jacobs, 1965). The concept started being implemented for researching a broad range of social and economic phenomena from human capital (Coleman, 1988), economic performance of a company (Baker, 1990), geographic regions (Putnam, 1995), to nations (Fukuyama, 1995). The key premise of the social capital concept is that networks are a value resource which enables to its members mutual recognition and long-term obligation which is the result of the feeling of gratitude, respect, friendship or institutionally guaranteed rights belonging to the members of the family, class or school (Bourdieu, 1986). Although all authors agree that the relation is important for social activity, the consensus has still not been reached on a precise definition of social capital. Thus, some authors limit the term only to the structure of the relations in the network (Baker, 1990), while others, like Putnam and Bourdieu also talk about potential resources that can be approached through the network. Like physical capital, referring to physical assets, or human capital,

referring to ownership of people, social capital, according to Putnam, refers to the relations between individuals-social networks, norms, reciprocity and trust developing from them (Putnam, 2000). In line with this definition is the group of authors dealing with the correlation between intellectual and social capital, seeing social capital as a sum of present and potential resources which are incorporated in the network, available through the network and emerging form the network of relations of individuals or social units (Nahapiet & Ghoshal, 1998).

### 1.1. Social capital theories

Scientists dealing with social networks mainly consider relations and connections to be the basic data for analyzing the social capital concept. Thus, a network is defined as a set of relations which connect defined groups of individuals or social actors, where each individual is described from the perspective of relations that he/she creates with other individuals in the network and it is called “ego”, while the one he/she is connected to is called “alter” (Knoke & Kuklinski, 1982). The conceptualization of social capital has theoretically most often been systematized through the theory of weak ties, structural holes and social resources.

*Weak ties theory* focuses on the strength of social connections that an individual uses. The ties among individuals are usually strong, emotionally more intensive and frequent and include types of relations like friendships, advisory, business (Granovetter, 1973). The information which any of the group members possesses will probably be shared soon among the group members or exchanged with the information another group member possesses. Ties between groups are usually considered to be weaker; therefore the reach to the information which is outside the group is quite weak. However, Granovetter believes that weak ties are actually a bridge between densely connected social groups and thus provide a source of unique information and resources. Granovetter noticed that it is more likely to reach, for example, sources of vacancies related information through weak ties, than through strong ties. Later researches by Bridges and Villemez (Bridges & Villemez, 1986) confirmed the benefits of weak ties.

*The Structural holes theory* does not focus on the characteristics of direct ties of “ego” but on the pattern of relations between “alters”, which are parts of the network of “ego”. Structural hole exists between two alters which are not directly connected. According to the structural holes theory, for ego it is better to be connected to as many alters which are not mutually connected in the network of ego. According to Burt’s theory, networks rich in structural holes have three benefits for an individual: unique and timely access to information, bigger negotiating capacity and, thus, control over resources and success, greater visibility and career opportunities which are present in the social system (Burt, 1992). Burt criticized the weak ties theory, emphasizing that the structural holes concept enables a more direct approach in bridging ties. Although empirical researches have confirmed the structural holes theory, they also suggested a range of limitations.

*The Social resources theory* focuses on the nature of resources incorporated in the social network. Lin and co-authors claim that it is not the weakness of ties that makes advantage, but the fact that those ties will probably lead to the resources that are necessary for ego to fulfill its instrumental aims (Lin, Ensel, & Vaughn, 1981). Alter which has characteristics or controls resources which are useful for fulfilling the aims of ego, can be considered a social resource. Thus, for example, alter, which provides advice

and support related to career development, is a relevant social resource when it comes to the efforts of ego to fulfill his/her career goals.

Although the review of literature reveals some controversies, when it comes to conceptualization of social capital, their integration is possible (Seibert, Kraimer, & Liden, 2001). The key precondition for integration is to recognize analytical difference between structural ownership of networks and the nature of social resources which are incorporated in the network so as to make a difference between their forms and contents. Weak ties theory and structural holes theory focus on the structure of the network, while social resources theory focuses on the content. This makes that these theories do not exclude each other but create the precondition to jointly focus on the process of accumulating social capital and examine which network structure provides greater or smaller access to important social resources, conclude Seibert, Kraimer and Liden.

### **1.2. Forms of social capital**

Gittel and Vidal identified two types of social capital: the one which makes people who already know each other closer and the one that connects people or groups who did not previously know each other (Gittel & Vidal, 1998). Putnam has named these two forms of social capital “bonding” and “bridging” (Putnam R., 2000). He further explains these terms.

*Bonding social capital* refers to creation of a core within one organization; it embraces and creates strong ties between groups of people sharing common characteristics. Actually it is about an inner need to create exclusive identities and homogeneity of the group, which makes people in the organization devoted to continual acting and often going beyond the limits given by job description.

*Bridging social capital* refers to connecting with the cores of other organizations; it creates strong ties with other groups and individuals outside its core social network. Organizations which have high level of this type of social capital include people from different social groups. This ability of the organization to reach other influential people and groups which are out of its essential network makes the difference in the sense of an organization’s ability to generate greater and stronger support and trust for what it does.

### **1.3. Dimensions of social capital**

The mentioned forms of social capital speak about resources which are rooted in relations, and confirm that social capital has different attributes. However, Putnam in his papers stated that further work would be needed on explaining the dimensions of social capital. Therefore, a group of authors examining the role of social capital in generating intellectual capital, distinguished three dimensions of social capital: structural, relational and cognitive (Nahapiet & Ghoshal, 1998).

*Structural dimension* refers to the social system and network of relations as a whole which explains general pattern of relations among actors, that is, how and who are relations established with (Burt, 1992). The most important characteristics of this dimension are presence or absence of network ties among actors (Wasserman & Faust, 1994), network configuration which explains the pattern of ties in the sense of measuring through density, connectedness and hierarchy (Tichy, Tushman, & Fombrun, 1979) and relevance which implies that a network created with one purpose can be also used for another (Coleman, 1988).

*Relational dimension* describes the nature of relations that people have developed over time through their interaction (Granovetter, 1992) like respect and friendship and which influence their behavior. The most important characteristics of this dimension are trust (Fukuyama, 1995), norms and sanctions (Putnam R., 1993), commitments and expectations (Burt, 1992), identity and identification (Hakansson & Snehota, 1995).

*Cognitive dimension* describes resources by which interpretation and systems of meaning are shared among network members (Cicourel, 1973). The most important characteristics of this dimension are shared knowledge and codification (Cicourel, 1973) and narratives (Orr, 1990).

Although the literature review suggests that social capital has several theories, forms and dimensions, two elements in common can be noticed: some kind of social structure is created and activities of individuals who are a part of the structure are facilitated (Coleman, 1990). This makes social capital a concept which encourages cooperative behaviour and thus creates new forms of associating and innovative organizations (Putnam, 1993) which is of the key importance for understanding institutional dynamics, knowledge innovation and value creation.

## 2. INTELLECTUAL CAPITAL

The term intellectual capital today is most directly connected with the capacity of an organization to use its non-material resources in the best manner, so as to be competitive and market sustainable. Today organizations operate in a dynamic environment characterized by constant market growth, innovated technology, strong competition, continual development of new products and services. This reality presses organization to become more capable of creating new knowledge which will then be incorporated into its organizational operation and enable innovation of new technologies, products and services.

### 2.1. Interpretation of intellectual capital

One of the best known classifications of intellectual capital, which was later modified by various contexts, was given by Sveiby and he systematized it in three fields: human capital, structural or organizational capital and relational capital (Sveiby, 1997). Unlike human and structural capital, relational capital is completely oriented to external boundaries of the organization. However, a common component of all three categories is *knowledge* which is based within the organization through skills and knowledge of employees, but also the knowledge which is with clients, suppliers, cooperants from various sectors, and which is far more difficult to develop and codify than the knowledge rooted in human and structural capital of the organization (Bontis, 1999). Authors researching the role of social capital in generating intellectual capital, interpret intellectual capital in the context of knowledge and ability to gain knowledge in social collective such as organizations, intellectual community or internship. These authors think that intellectual capital is an important resource and a capacity to act on the basis of knowledge and ability to gain new knowledge (Nahapiet & Ghoshal, 1998).

## 2.2. Dimensions of intellectual capital

Literature which interprets *intellectual capital in the context of knowledge* recognizes practical, theoretical and experiential knowledge or procedural knowledge which refers to well-practiced skills and routines as well as declarative knowledge referring to development of facts and proposals (Nahapiet & Ghoshal, 1998). The most quoted and the most influential is the classification given by Polanyi when interpreting knowledge as tacit and explicit, where the former refers to “know-how” and the latter to “know-what” (Polanyi, 1967). Thus it is suggested that knowledge is both an object and an action which enables improvement.

Anyhow, the extent to which it is possible to use knowledge depends on how much social or organizational knowledge differs from the knowledge of individuals, members of the community. For generating intellectual capital the perspective of social and contextual incorporated form of knowledge and learning is valuably more important than the simple aggregation of knowledge as a group of individuals (Nahapiet & Ghoshal, 1998). These two dimensions precisely, explicit/tacit and individual/social make the matrix form of the four elements of organizational intellectual capital: individual-explicit, individual-tacit, social-explicit and social-tacit (Spender, 1996).

*Individual-explicit* refers to conscious knowledge in the form of facts, concepts and frameworks which are stored and taken from the memory of an individual; *individual-tacit* refers to automatic knowledge which refers to theoretical and practical knowledge of people like artistic, sports or technical skills. Availability of people with this kind of explicit knowledge and tacit skills is an important element of organizational intellectual capital and they can be a key factor of organizational success (Cooke & Yanow, 1993).

The other two elements of organizational intellectual capital, *social-explicit* and *social-tacit*, belong to the corpus of shared knowledge and represent the most advanced form of knowledge which is why today companies have big investments in the development of knowledge and intellect distribution leverage (Quinn, Anderson, & Finkelstein, 1996), because collective knowledge is considered to be the most important strategic type of organizational knowledge and a factor of its competitive advantage.

## 2.3. Creation of intellectual capital

Since social, i.e. collective knowledge is the key element of intellectual capital, literature recognizes two key mechanisms for its creation: combining and knowledge exchange (Moran & Ghoshal, 1996).

Creation of social knowledge by *combining of knowledge* is based on two approaches. The first one suggests that the base of combining are incremental change, based on continual and gradual adaptation (Schumpeter, 1934), and development based on existing knowledge as a dominant form of progression (Kuhn, 1970). The second one suggests that it is about a more radical change like an innovation (Schumpeter, 1934), double circle of learning (Argyris & Schon, 1978) and a paradigm change and revolution (Kuhn, 1970). Although of different nature, these two approaches do not exclude each other, because they both refer to creating new combinations, incrementally or radically, or by combining previously unlinkable elements, or to the creation of new modes of combining elements that were previously associated.

The creation of social knowledge by *exchange* is essential when resources are in hands of different parties, having in mind that the creation of intellectual capital rests on

the process of combining knowledge and experiences of various actors. Social interactions, joint team activities and collaboration are important mechanisms of development and obtaining knowledge (Zucker, Darby, Brewer, & Peng, 1996).

However, in order to create social knowledge by processes of exchange or combining there are several conditions which should be met: access to collective forms of social knowledge, shared value of exchange and combination, motivation to participate in exchange and combination and capacity to combine and exchange (Nahapiet & Ghoshal, 1998). Sharp development of internet technology imposes that in 2015 it is expected that more than 5 billion brains will be networked by cables, per every 1000 new cable connections there will be 80 new network working positions (Edvinsson, 2013). This means that it is possible to expect that the *access* to creation of collective knowledge will be sudden rather than planned. Nahapiet and Ghosal suggest that parties involved in the process of exchange and combining, have to see interaction, exchange and combining as a *value*, even when it is not clear what the outcome will be and how it will happen. Further, those that participate in the process of knowledge exchange and combining have to be *motivated* enough by feeling that their engagement in knowledge exchange and combining is worthwhile. On the contrary, a lack of motivation can prevent exchange of good practices within the company (Szulanski, 1996). Finally, the *capacity* of combining information or experiences, due to the capacity to recognize the value of new knowledge, to assimilate and use it, is a key factor of organizational learning and innovating (Cohen & Levinthal, 1990).

### 3. NEW KNOWLEDGE AS AN OUTCOME OF SOCIAL AND INTELLECTUAL CAPITAL INTERACTION

Having in mind the social nature of intellectual capital, the previously explained theories and dimensions of social capital offer useful perspectives for understanding the creation of new intellectual capital, i.e. new knowledge. It is the structural, cognitive and relational dimensional forms of social capital that facilitate the development of new intellectual capital by influencing the conditions necessary for knowledge exchange and combining to happen (Nahapiet & Ghoshal, 1998).

#### 3.1. Influence of structural dimension of social capital on knowledge creation

The structural dimension of social capital influences the development of new intellectual capital, i.e. new knowledge through network ties, network configuration and a suitable organization (Nahapiet & Ghoshal, 1998).

*Network ties* influence the access of different parties to knowledge exchange and combining as well as to recognizing the value of such an exchange. Network ties create the possibility for one to obtain information before the people who have no network contacts, which is of great importance for commercially oriented research and development for which promptness might be an important success factor. Although collecting information, according to Coleman, represents an expense, social networks, which are sometimes often established for other reasons, provide information channels which decrease the amount of time and investments necessary for collecting information (Nahapiet & Ghoshal, 1998).

*Network configuration* i.e. its density, connectedness and hierarchy provide flexibility which is necessary for access to and exchange of information among network members (Ibarra, 1992). It is especially important that the network has several contact points which

information will flow through as they obtain more diverse information at a lower rate than in the case of dense networks (Burt, 1992). This aspect of diversity is very important because the creation of new intellectual capital is possible only when various kinds of knowledge merge from various sources and disciplines. On the other hand, weak ties certainly make the research easier, but they can also endanger the transfer of knowledge, especially if it is codified, when exchanging parties have different previous knowledge or when information is not sufficiently clear (Nahapiet & Ghoshal, 1998).

Finally, *suitable organization* based on social capital which is created in one context, including ties, norms and trust can often be used in other context also. Literature tells that the transfer of trust from family and religious surrounding is possible for some business situations (Fukuyama, 1995), that it is possible to incorporate the development of personal connections into business exchanges (Coleman, 1990), that it is possible to integrate social capital of an individual into an organization (Burt, 1992). This means that an organization created with one aim can be a source of valuable resources for other aims (Putnam R., 1993).

### **3.2. Influence of cognitive dimension of social capital on knowledge creation**

Social capital scientists have recognized that innovations happen by combining different knowledges and experiences through communication (Sagawa & Jospin, 2009). To that end, it may be said that the cognitive dimension of social capital influences the development of new intellectual capital, i.e. new knowledge through shared language, vocabulary and narrative (Nahapiet & Ghoshal, 1998).

*Shared language* influences the conditions of combining and exchange in the way that it represents a means that people use to discuss and exchange information. So, the more different the language and codification, the further people are from accessing information. The language also influences the perception of people (Pondy & Mitroff, 1979). By codes sensory data are organized into perception categories which give the framework for observing and understanding the environment and conceptual benefit of exchange and combining (Nahapiet & Ghoshal, 1998). Therefore experts recognize specific communication codes of groups as a value resource of an organization (Kogut & Zander, 1996).

In addition to language and codes, social anthropology literature also claims that *collective narratives* like myths, stories, and metaphors are also powerful communication means of communities for creation, exchange and protection of various meanings, which is today recognized as narrative cognitive form as opposed to paradigm form which bases knowledge creation process on rational analyses and argumentation (Nahapiet & Ghoshal, 1998). Narrative cognitive form makes the exchange of practices and tacit experience easier (Orr, 1990) which enables discovering and development of enhanced practice.

### **3.3. Influence of relational dimension of social capital on knowledge creation**

The relational dimension of social capital influences the development of new intellectual capital, i.e. new knowledge through network trust, norms, commitments and identification (Nahapiet & Ghoshal, 1998).

The researches by Gambetta, Putnam and Fukuyama show that in cases where relations are based on high level of *trust*, people are more willing to get involved in social exchanges generally and cooperants interactions specifically. Trust is based on the belief in good intentions, wish for exchange, competence, capability, reliability and openness (Ouchi, 1981). Trust is closely connected with cooperation because collective trust can be a strong form

which group members can rely on when solving certain problems related to cooperation and coordination (Kramer & Goldman, 1995). Trust is a precondition, indication, product and benefit of social capital as well as a direct road to other benefits (Cohen & Prusak, 2001), including reciprocity as an inevitable precondition for exchange and combining of knowledge.

*Norms* exist when socially defined rights of controlling activities belong not to the actor but to others (Coleman, 1990). It is a kind of consensus within the social system, expectations which are binding and which can, if based on the principles of openness, team work and tolerance, create strong and convergent groups liable to the development of intellectual capital (Janis, 1982). Culture and social norms help in creating social capital (Briggs, 2004), and then as its relational dimension motivate and ease access to different parties in combining and exchange of knowledge.

*Commitments* and expectations influence individuals and groups to undertake certain activities in the future, which may reflect on motivation to exchange and combine knowledge. Personal, professional and formal commitments which develop among various individuals and organizations as units of a social system bring with themselves expectations about overtaking future commitments, which makes the approach of knowledge exchange and combining easier (Nahapiet & Ghoshal, 1998).

*Identification* is a process where individuals see themselves as other group members, which might be the consequence of group membership or of group functioning on the principle of representativeness (Nahapiet & Ghoshal, 1998). Group identification does not only influence the growth of recognized chances of exchange, but it can also strengthen current frequency of cooperation (Lewicki & Bunker, 1996) which creates the chance for greater motivation and recognizing values of knowledge exchange and combining.

#### 4. ORGANIZATIONAL COMPETITIVE ADVANTAGE AS AN EFFECT OF NEW KNOWLEDGE

Social and intellectual capital today represent the base of the theory of organizational advantage which has occurred as a need to replace the theory of the business and transactional expenses which were based on marketing failure and decrease of transactional expenses. Special abilities of an organization to create and transfer new knowledge are recognized as the key element causing organizational competitive advantage while the organization's natural tendency to develop social capital and generate intellectual capital as something that shall explain the whole process.

Nahapiet and Ghoshal claim that time, interaction, interrelation and the quality of being closed represent the essences of the natural tendency of an organization to develop its social and intellectual capital (Nahapiet & Ghoshal, 1998). Literature also recognizes the importance of the said essences. To that end, *time* is considered as an important factor because all other forms of social capital depend on stability and continuity of the social structure. For example, both Coleman and Putnam claim that it is necessary that trust, norms, stability and durability of cooperation, as social capital elements, are being developed over time because durability and stability of social relations lead further to clear and visible mutual commitments (Misztal, 1996). *Interrelation* which later also implies coordination is recognized as the key attribute of business organization (Barnard, 1938) and a stimulus for development of many organizational forms of capitals. Because exchanges, or what Putnam calls reciprocity, which result in positive outcome for the overall social system rather than for an individual within the system, enlarge cycle of

exchanges among members which increase social identification and encourage cooperation norms and undertaking risks. *Interactions* are natural characteristic of social relations but they can be extinguished if they are not maintained. Unlike other forms of capital, social capital grows the more it is used, because essentially the worth of networks can only grow with the creation of new connections (Sobel, 2002). Social communities naturally have their space for conversation, action and interaction so as to develop own language system which they will create new intellectual capital by. Formal organizations connect their members in order to do their primary task, overlook activities, coordinate activities especially when it is necessary to have mutual adjustment to changes or innovation. *Closure* is a characteristic of strong communities that have identities which clearly distinguish their members from non-members (Bourdieu, 1986). Trust, identity, norms are consequences of the network being closed as well as the development of a unique language system supported by the isolation of community (Boland & Tenkasi, 1995). Unlike the market which is an open system basing its usefulness on the freedom given to individuals, formal organizations impose closing of system by clear legal, financial and social boundaries (Kogut & Zander, 1996).

Pursuant to the above said, it can be concluded that social and intellectual capitals have their natural connection through the ability of social capital to influence the conditions which are necessary for exchanging, combining and generating new knowledge. Also, intellectual capital generated once continues being generated through the need for new social interactions which will again enable exchange and combining and generation of new knowledge. This cyclic feedback of social and intellectual capital can be considered as a kind of organizational advantage leverage.

Although from one capital, social capital, a new one, intellectual capital, is created, essentially these two processes happen in parallel with reciprocal quality. The fact of both kinds of capital being founded in social activities and relations, makes their evolution very connected (Nahapiet & Ghoshal, 1998). Their natural interaction seen in collective forms of knowledge is of strategic importance for an organization, because they represent shared tacit knowledge which is considered to be one of the characteristics of organizational competitive advantage. While these collective forms of knowledge enable organizations to build and keep their advantage, complex relations between social and intellectual capital enable organizations to build and keep their value. This is the reason why the process of intellectual capital generation through social capital should be considered a value basis for organizational competitive advantage.

## CONCLUSION

The analysis of the relevant literature has showed that the issue of the role of social capital in generating organization intellectual capital, in the form of new knowledge, belongs to the corpus of multidisciplinary researches, because its aspects can include social sciences like sociology, politics, economics, organizational psychology, organization development, organizational management as well as natural sciences like social physics.

The paper has showed that the value chain of social capital theory is acute and that it enables the organization to fight the surrounding challenges, especially the lack of innovative knowledge. Natural relatedness of social capital to intellectual capital and vice versa is the consequence of, above all, intellectual capital being rooted in social relations and structures of these relations. It further influences a value basis of organizational

advantage, due to the following reasons: a) interaction of social and intellectual capital enables that social capital decreases transactional expenses economizing on informational and coordination expenses; b) interaction of social and intellectual capital enables the creation of resources which are long-lasting, which cannot be traded with, or cannot be repeated like tacit social knowledge, mutual connection or social complexity. This leads to the conclusion that differences between organizations can be presented through the differences in capacities to create and use their social and intellectual capital. Because of that, today the efforts of organizations and companies are more directed to investing in and enhancing strong personal and team relations, trust, norms and ties beyond own boundaries.

The paper has also revealed that in the natural mutual relatedness of social and intellectual capital there is an abundance of new, unused possibilities which can be very important for future income-generating capacity of an organization. Having in mind that the analysis of literature revealed that social capital enables the creation of intellectual capital, what can be anticipated is their mutual potential for nourishing, sharing and using intellectual resources on: a) personal level, which will reveal what an individual does not know, and how to compensate for that lack; b) organizational level, which will build trust and level collective capacity which will further enable enlargement of intellectual capital i.e., creation of group and institutional knowledge; c) social level, through social networks which can identify, recruit and nourish talents and improve the quality of life; d) global level, by shifting from capitalism 3.0 of Milton Friedman to capitalism 4.0 which will be based on new values and relations resting on the fusion of intellectual and social capital with the aim of finding talents as new connectors of alliances of intellectual capital that will multiply the effects of intellectual capital as opposed to human capital which is necessary to balance relational and structural capital (Edvinsson, 2013).

On the other hand, the paper also draws attention to the fact that, unlike with intellectual capital, there is no unique interpretation of social capital; therefore, in researches it is necessary to tailor the approach to social capital from the perspective of one or more parallel theoretically based definitions, dimensions, forms and elements. Moreover, it is necessary to take into consideration some of the key problems which render the topic of social capital controversial, like questions whether social capital is group or individual capital, whether the group should be closed or dense, whether social capital should be seen as a structure defined by its function, whether it can be seen as a quantitative concept like financial, human or physical capital.

Finally, since the paper referred to the literature on the role of social capital in generating intellectual capital as a process that leads towards new knowledge and ultimately organizational competitive advantage, new needs were discovered which could be subjects of similar researches in the future. First, it would be very useful to also examine negative or restrictive influences of social capital in generating intellectual capital, which can be consequences of its natural elements like norms, closure, restrictive approach to various sources of ideas and information. Second, since it is necessary to invest in social capital, especially in its relational dimension, it would be useful to establish what benefits can really be expected based on the invested means and whether they are worth investing at all. Third, it would be useful to examine the relations between social capital dimensions as well as their mutual influence on creation and using intellectual capital so as to more thoroughly understand organizational advantage. Finally, given that structures of social capital are of closed character and often conditioned by the type of grouping which can be of geographic, religious, class or other nature, future researches of social capital and its

correlation with intellectual capital should be directed to the specific entity that activities happen about and which social and intellectual capitals create around. This specifically means that it would be useful to conduct these researches on clearly defined types of organizations with limited resources because it is logical to expect that key elements, which are preconditions for generating and using intellectual capital, like norms, closure, trust, reciprocity etc. are not necessarily the same in nonprofit and public organizations or organizations operating in business sector.

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## **INTERAKCIJA SOCIJALNOG I INTELEKTUALNOG KAPITALA - KLJUČNI PREDUSLOV ZA STVARANJE NOVOG ZNANJA I ORGANIZACIONE KONKURENTSKE PREDNOSTI**

*Osnovni cilj rada je da prikaže na koji način se prirodnom interakcijom socijalnog i intelektualnog kapitala stvara novo znanje i organizaciona konkurentska prednost. Rad prvo daje prikaz ključnih teoretskih tumačenja socijalnog i intelektualnog kapitala a potom analizira kako strukturna, kognitivna i relaciona dimenzija socijalnog kapitala kroz razmenu i kombinovanje sa postojećim intelektualnim kapitalom stvara novi intelektualni kapital. Osnovna vrednost novog intelektualni kapitala se ogleda u činjenici da on pripada korpusu grupnog ili socijalno tacitnog znanja koje je ključan preduslov za stvaranje inovativnih poslovnih rešenja. Tako, ove nove kolektivne forme znanja omogućavaju organizacijama da izgrade i zadrže svoju prednost. Zato se i može reći da je proces generisanja intelektualnog kapitala posredstvom socijalnog kapitala vrednosna osnova za stvaranje novog znanja i organizacione konkurentske prednosti.*

*Ključne reči: intelektualni kapital, socijalni kapital, znanje, inoviranje, organizaciona prednost*