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## **Application of Technology to Enhancing of (Co-)creative (Co-)operation and Socially Responsible Action of All in a Society**

### **Abstract:**

Humankind is facing complex consequences of many human one-sided actions. It seeks solutions to reduce them, such as social responsibility (SR). These solutions should be based on creation of the biggest possible social and personal well-being, including consideration of the constraints in the natural environment. One should add to the narrow economic measures the psychological and sociological ones, summarized as happiness based on requisitely holistic creativity. Such action should include: requisitely holistic understanding of the world and one's own role in it; enhancing of ethics of interdependence; action on the basis of creating, co-operation and innovating aimed at finding and realizing solutions for real human problems; consideration of complexity of influences on the natural and social environments and their constraints.

How can technology support humans' SR? A possible chance lies in the creative application of internet – as a platform enabling global connections and (co-)creative (co-)operation in collaborative interest-based networks. This way can improve access to relevant information, knowledge transfer, and co-operation. An open access might increase the share of active/creative people: every network member can contribute to formation and realization of ideas. The improved information transfer between users and companies concerning the real needs and related solutions supports creation of the requisitely suitable products, including diminished burden to environment.

**Keywords:** basic goals of society, complexity, interdependence, well-being, environmental care, innovativeness, creativity, social responsibility, interest and innovation network.

### **1. The selected problem and viewpoint of consideration**

In the current period of time, humankind is facing complex consequences of many human one-sided actions and seeking solutions to reduce or even replace them. The toughest problems include pollution of humankind's natural environment, climate change, limited natural resources and growing stress, social differences, and alienation among humans. Undoubtedly companies have great influence on emergence and further strengthening of above mentioned problems, but companies are, or at least should be, only one of humans' tools, needed for implementation of humans' goals. In this paper we will try to find answers to the following questions: what are humans' basic goals; are companies (and their business activities) really only humans' tools;

what should be the basic principles of socially responsible (business) activity and how could humans use technology to enhancing of socially responsible action of all in a society.

## **2. The basic goals of society and the role of business activities**

What is the role of business activities and what kind of influence do they have on our lives? To answer this question we must ask ourselves what are the basic goals of human society. We must be aware of the role and place of individuals, economic (sub-)systems and human society within the complex whole, called Planet Earth. The individual is a part of human society and the society is a part of the system Earth, the main need of which is preservation of its (natural) equilibrium. In contrast to that, human society acts on the principle of minimizing its entropy at the detriment of other individuals, groups and organizations as well as of natural resources, which are also part of the system Earth. The latter is a rather closed system with a low capacity of renewal. These are some reasons for growing differences among members of the human society and for excessive exploitation of the natural environment – all in the name of progress, mainly the economic one, but comprehended one-sidedly and short-termed. Humans seem to give to the economic (sub-)system too much significance and, above all, to allow it too much influence, which is becoming equal to influence of entire human society or even above it. Thus the economic (sub-)system more and more dictates the goals of human society (Chomsky, 2005; Korten, 2006).

The socio-economic development has undoubtedly facilitated humans' survival and increased the quality of humans' (physical) existence, but on the other hand it makes business the central point of all our activities. Economic growth, gross domestic product, profits etc. are more and more becoming the main measures of success. But is this practice requisitely holistic? Are humans really only materialistic beings and can simultaneously live in disharmony with nature? Can we measure quality of life with economic measures only? Besides, business activities are performed in accordance with rules that don't have much in common with the laws of nature. Nature always tries to establish equilibrium. As a result, nature tends to self-balancing, self-adjusting, self-cleansing (Schumacher, 1989, 156); it is not inclined toward perpetual, one-sided growth of one of its members at the detriment of others. For long-term survival of humankind (and not only humankind) it is very dangerous, that the goals of economic (sub-)system are endangering equilibrium of the system Earth and that they are set up in contradiction with Earth's basic existential need (Korten, 2006; Raskin et. al., 2006; Schumacher, 1989). This experience expresses a lack of social responsibility and causes the profit to kill profit with the so called side effects of economic activities.

As a starting point in looking for possible solutions for a different, more socially responsible way of doing business, we would have to (requisitely holistically!) define the basic goals of society. Everyone should contribute to their definition and realization on the basis of strengthening of positive and suppression of negative influences on society and nature. What could these goals be?

The far-eastern philosophy includes one's happiness (inner and outer harmony) and avoidance of suffering in the main goals of individuals (Solomon, Higgins, 1998). Lately, psychologists, sociologists and also some economists are indicating that the essential goal of humans' activities should be a (requisite holistic) personal and social well-being. According to Stutz (2006), satisfaction with one's own standard of living, health, achievements, personal relationships, feeling of security and affiliation to society (or in short – welfare, contentment and freedom) are needed. Therefore the following factors should be provided: materially enough for good life, good health, good social relations, security and freedom of choice and action (2006,

11). Hornung states that the essential goal of humans is happiness. For good well-being the following needs should be fulfilled (2006, 334–337): material needs, informational and, at the level of individuals, psychological needs, security needs, needs for freedom and action, needs for adaptability, needs for efficiency and needs for responsibility.

Sustainable Development Research Network (SDRN) presented in their study (2006, 2), that we should distinguish between objective and subjective well-being. The objective well-being represents material and social circumstances, which are influencing an individual's personal objective well-being; it consists of the following dimensions (McAllister, 2005, 9): material, physical, social, and emotional well-being, development and activity. The subjective well-being stems from individual's perception of objective well-being (Arthaud-Day et al., 2005; McAllister, 2005). Perception depends on individual's subjective starting points (knowledge, emotions, mentality and values [Mulej, 2000, 88; Mulej, Ženko, 2004, 65]). Therefore a high objective well-being does not necessary simultaneously mean a high subjective well-being. We could also mention relative well-being, which depends on one's comparison with people playing important roles in one's life (Revkin, 2005; also ScienceDaily, 2006). Diener and Seligman presented the following partial formula for high well-being (2004, 25): living in a democratic and stable society that provides material resources to meet needs, having supportive friends and family, rewarding and engaging work and an adequate income, being reasonably healthy and having treatment available in case of mental (better: medical) problems, having important goals related to one's values, and a philosophy or religion that provides guidance, purpose and meaning to one's life.

We should also draw our attention to convergence of philosophical considerations about spirituality and discoveries of some natural (above all quantum physics) and sociological sciences (Bell, Morse, 2005; Capra, 1991; Khisty, 2006; McTaggart, 2002; Schumacher, 1989; Senge et al., 2004; Targ, Hurtak, 2006). We are speaking of findings, stating interconnectedness between all subjects (at least in terms of energy), which are therefore also interdependent. This offers explanation about one of the essential causes of problems, which we mentioned at the beginning of this paper. Humans are considering ourselves as subjects, independent from other subjects (and nature) and therefore forgetting about the ubiquitous interdependence. Therefore humans act rather one-sidedly and cause unpredictable and often undesirable consequences.

Considering all above stated guidelines, we could conclude about the basic goals of society: *humans should strive for a requisitely holistic quality of life (objective and subjective well-being) and human solidarity (based on ethics of interdependence), simultaneously considering ecological sensitivity of natural environment, its constraints, and the laws of nature.* This goal demands reconciliation of the economic with the ecological, psychological and sociological viewpoints of thinking and acting as an essential part of humans' values. A requisitely holistic socially responsible action should therefore be reflected with a three-fold positive influence (Figure 1): (1) increasing social and personal objective well-being; (2) prevention of negative and strengthening of positive influence on natural and social environment; and (3) positive influence on humans' subjective starting points, to achieve requisite holism of their thinking and acting and thus strengthening their subjective well-being.

Connection between socially responsible actions and influence on subjective starting points is very important, because the latter influence one's perception of objective well-being and consequently one's willingness for (creative) action and therefore (non-)creation of social objective well-being. The latter is becoming an important problem, above all in economically most developed societies. In (Mulej, 2007) we are calling attention to that problem with the presentation of Porter's model of evolution of competitiveness (Brglez, 1999, 22–23). See Figure 2 (comments about culture are ours).

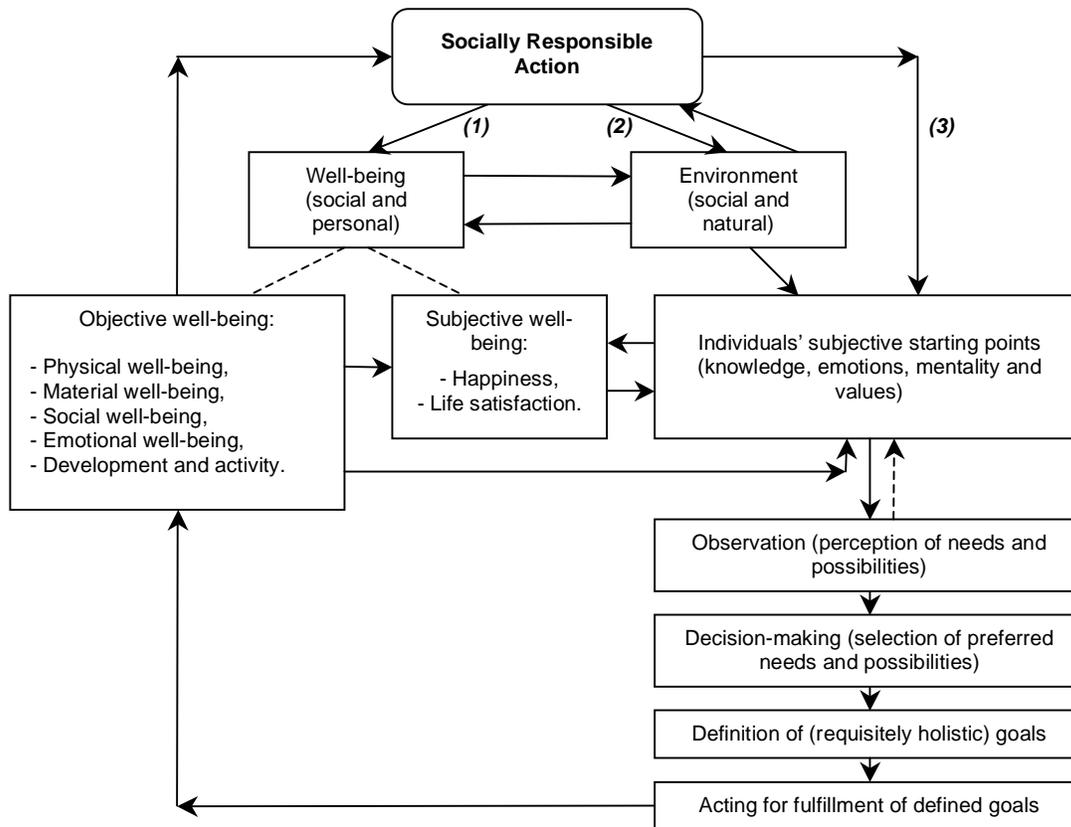


Figure 1: Connection between socially responsible actions and well-being

PHASE	ECONOMIC BASIS FOR DEVELOPMENT	RESULTING CULTURE
1. Natural factors	Natural resources and cheap labor, providing for a rather poor life for millennia	Scarcity and solidarity, collectivism, tradition rather than innovation
2. Investment in modern technology	Foreign investment into the area's economic development; hardly/poor competitiveness in international markets	Growing differences, local competition, individualism, ambition to have more, be rich
3. Innovation based on local knowledge	Nation or region lives on its own progress and attain a better and better standard of living by international competitiveness	Growing differences and standard of living, global competition, ethic of interdependence, social responsibility, ambition to create
4. Affluence	People have finally become rich, which makes them happy in material well-being as a blind alley	Complacency, no more ambition, consumerism; what is quality, then?

Figure 2: Porter's phases of evolution of competitiveness

Porter models evolution of bases of competitiveness from the phase 1, based on natural resources, via phase 2, based on investment, and phase 3, based on innovation as the background of success, to the phase 4 – affluence. In the latter the economic laws on covering needs with scarce resources no longer fit. This kills the ambition to create in order to have. From economic viewpoint it would therefore be necessary to enter the third, innovation, phase as soon as possible and to stay there as long as possible. But: is such consideration requisitely holistic regarding the problems mentioned above, and from the viewpoint of realization of the basic goals of society?

The first problem, as we see it, is that constraints of natural environment and principles of human solidarity are overseen. The second problem tackles the individual's perception of quality

of her life. We must ask ourselves: why does the ambition to achieve more and live better diminish in the affluence phase (from materialistic viewpoints)? Maybe the key to answering this question is lying in living better – from what? Diener and Seligman and SDRN established that satisfaction with one’s life is increasing with growth of GDP, but only to a certain level of GDP. Afterward the connection disappears (Diener, Seligman, 2004, 6; SDRN, 2005, 12). It seems that the influence of some other impacts on perception of the objective well-being (other dimensions of well-being) then becomes stronger and thus more important. This statement once again proves the importance of influence on one’s subjective starting points and consequently on one’s perception of objective well-being and hence on motivation for (creative) work. Sheldon (2001) namely noticed that there is a stronger positive connection between well-being and orientation toward the inner values than the orientation toward the outer values (i.e. material and social status, image, etc.). Besides that, orientation toward the inner values contributes to greater motivation for realization of one’s personal goals as well. (See also: Udovičič, Mulej, 2006).

It seems that a longer staying in the third phase is not a requisitely holistic solution. Humankind should therefore make transition into a new, *fifth phase*, based on creativity and innovativeness, but on creativity and innovativeness with “the cause” – to help our shared society attain basic goals, simultaneously considering ubiquitous interconnectedness and interdependence, which includes constraints of the natural environment. In this way, humans, maybe, could unite aspirations for long-term survival of humankind (and other subjects of the system Earth) with aspirations for success of humans’ tools – companies. See Figure 3.

5. Holistic creation and social responsibility	Material wealth suffices; effort aimed at spiritual wealth, healthy natural and social environment as requisitely holistic well-being	Ethic of interdependence and SR, ambition to create, diminish social differences to those caused by creation, including innovation
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Figure 3: The new, *fifth phase* of evolution of competitiveness

Porter and Kramer recently published a text (2006), in which they suggest that companies should revise their business strategies in order to consider social problems and try to help to solve them. It is an interesting text in terms of SR. But they didn’t offer solution for the affluence phase problem; they likewise devoted too little attention to ecological problems and problems of (future) scarcity of some natural resources. They did not consider requisitely holistically the influence of business activities on (requisitely holistic) objective and subjective well-being (and thus humans’ happiness) and on natural environment.

### 3. Socially responsible business activities for fulfillment of the basic goals of society

Findings, presented in the previous sections, are offering some thoughts about the role of business activities in human society and about meaning and use of principles of requisitely holistically defined SR in everyday business activities. Business activities should contribute to fulfillment of the basic goals of society by the following means: (1) increase of objective well-being on the basis of creation of products, which would contribute to satisfaction of material and informational needs and needs for security, freedom and action, adaptability, efficiency and responsibility; (2) positive (or the least possible negative) influence on social and natural environments; (3) positive influence on humans’ subjective starting points (inside and outside the company). We call positive the influence, which is strengthening long-term objective well-being, ethics of interdependence, and consideration of the law of requisite holism.

As we have already mentioned, the human and natural influences on humans' subjective starting points are very important, because they influence humans' perception of objective well-being, and simultaneously humans' willingness for (creative) (co-)operation, and consequently strengthening of the social objective well-being. Influence on subjective starting points also, indirectly, influences the degree and mode of consumption of goods. This is important from viewpoints of scarcity of some resources and of the environmental protection. Namely, if company uses its marketing tools (to achieve its business goals) in a manner, that creates artificial needs and accordingly influences consumers' subjective starting points, it actually makes, from society's and nature's viewpoint, (at least) three-fold harm: it needlessly uses scarce resources; it increases possibility of environmental pollution; and it creates inner tension within individuals, which want to satisfy such artificially created need. This artificial need results in a growing stress and diminished motivation for creative work. Instead of this, marketing tools should be used for discovering of existent and prediction of future real needs (in order to increase objective well-being) and for active inclusion of the interested individuals in the process of value creation (Prahalad, Ramaswamy, 2004; Prosenak, 2005). In this way we could reduce the production of the less- and un-necessary products and consequently reduce the use of scarce resources.<sup>1</sup> Such approach to business action would have a positive influence on creation of the objective well-being, as the real needs would be better fulfilled, and simultaneously a positive influence on perception of created objective well-being (i.e. subjective well-being) of the consumers and employees would be achieved. The latter would also contribute to increase of motivation for creative work<sup>2</sup> and consequently to possible business success of companies.

The key factors of a socially responsible action therefore include: (1) requisitely holistic understanding of the world and one's own role in it; (2) enhancing of ethics of interdependence; (3) action on the basis of creating, co-operation, and innovating aimed at finding and realizing solutions for crucial real human problems; (4) consideration of complexity of one's own and the synergetic influences on the natural and social environments and their constraints. Business strategies should be planned and executed within the above mentioned guidelines. For this purpose, an adequate culture in both the companies and the society is needed as well. Such culture must be based on the principles of ethics of interdependence and on willingness of individuals to activate their creative potential to their own benefit and the benefit of the society at large as well (which is indirectly also their own).

How can we make this happen? One's desire for knowledge, and requisitely holistic personal development, openness and empathy for co-humans reinforce one's requisitely holistic understanding of the world, humans' relationships and interdependences. Everybody can take this road, once she so wishes. Humans also dispose of much creativity, but it often remains tacit and unused, or used in one's free time and for one's own benefit only. In addition, humans lack interdisciplinary cooperation enabling synergetic effects. In many organizations, both enterprises

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<sup>1</sup> Affirmative case, which presents how is it possible (on the basis of good understanding of customers' needs and creativity of employees) to innovatively, i.e. usefully and beneficially, change the way of doing business, is presented by Rothenberg (2004). The meaning of innovation and market orientation to sustainable development is also considered by Pepper (2001), Jackson (2005) and Seyfang (2004).

<sup>2</sup> Florida (2004) states that motivation for creative work depends on 3T: (1) tolerance attracts (2) talents and (3) technology, which is needed for realization of creative talents' ideas. Tolerance depends on one's mental models, created on the basis of one's subjective starting points. The latter are formed in the course of life by the influence of environment (parents, education, media – marketing and politics etc.). Therefore it makes sense that the discussion about the 3T in the 27<sup>th</sup> PODIM conference (Rebernik et. al., editors, 2007) has added a 4<sup>th</sup> T: time for adopting the 3T in a region, country or company.

and public sector, culture does not support creation and cooperation. Therefore, humans must receive a chance to engage in (co-)creative (co-)operation, including their leisure time, but in a way making benefit to the society at large as well. A better contact between companies and users of their products must be enabled, and it should include the phase of future needs detection and designing their potential solutions. Users know best what they wish from a product. Hence, they must be involved rather actively in the invention-innovation process for the biggest possible benefit for customers and society at large to be attained along with the smallest possible destructive impact over the environment. The open innovation concept implies their role much better than the closed innovation concept does (Chesbrough, 2003; Chesbrough et. al., 2006; Gloor, 2006; Hippel, 2005; Huston, Sakkab, 2006; IBM, 2006; Jangtchi, ed., 2007; Tapscott, Williams, 2006). The modern technology such as internet can support the open innovation and increase SR.

#### **4. Example of application of information and communication technology to enhancing socially responsible action**

Similar statements are true of business activities and of technology and technological research – they should be used (above all) for implementation of the basic goals of society. For this purpose the existent technologies could (and should) be used adequately as well. In this section we will discuss how could humans use the means of information and communication technology for strengthening of innovativeness and (co-)creative (co-)operation, which could consequently contribute to increase of (holistic) well-being and decrease of negative influences on their environments. We are above all thinking of a creative application of internet, however not in terms of data presentation, but as a platform for connecting individuals and companies with common interests, with the intention to create value for themselves and the society at large. It is all about (active) inclusion of the interested individuals in the companies' process of value creation and possible desirable consequences that might arise from that. In this way one could achieve:

- A better satisfaction of real needs of customers, since they are active in detection of needs and creation of products that would satisfy that need;
- A more efficient use of natural resources (from the viewpoint of their scarcity and (non-)renewal capacity), since increased efficiencies of the innovation and value creation processes are expected;
- Individuals could express their (tacit) creative potential and thus achieve a bigger self-satisfaction, gain new knowledge and, maybe, gain some (additional) income or even start their own businesses;
- A better and more efficient connection between individuals, which strengthens the humans' consciousness of ubiquitous interconnectedness and interdependence.

The essential foundations of the described platform include mutual connection and creative cooperation of the interested individuals and their open access to companies' innovation and value creation process. Phenomena of connection on the basis of shared interests gained new dimensions in recent years with the emergence of so called social networks. On the other hand companies are more and more opening their innovation processes to public and thus enabling inclusion of interested individuals and other stakeholders in execution of those processes. More on so called "open innovation" models is available e.g. in Chesbrough (2003), Chesbrough et. al. (2006), von Hippel (2005), Jangtchi, ed. (2007), Tapscott, Williams (2006) and Huston, Sakkab

(2006). We will discuss the possibility of connection between both above mentioned factors – mutual communication and cooperation between individuals and their inclusion in (open) innovation process of interested companies.

The so called “Web 2.0” applications are making such activity possible, but that is not enough. Namely, they are enabling consumer participation (O’Reilly, 2005), but they should be upgraded in order to enable creation of value for customers, companies and the society at large. Therefore, a rather active and adequate role of companies is needed. In short, companies should adapt their business strategies to the principles of Web 2.0:

- Companies should enable (or at least stimulate) interacting connection of potential users of their products in order to enable them to co-create the desired value. Companies could (and should) use knowledge and ideas, gained from this connection, for creation, communication, and distribution of adequate value for broader markets;
- Companies should enable interested individuals to access the data, needed for value co-creation, including their proprietary data;
- Companies should attract users of their products to testing of novelties and further product development. In this way companies would gain an important source of customers’ data and at the same time a reliable channel for diffusion of innovations;
- The future of competition lies in an approach to value creation, based on an individual-centered co-creation of value of consumers and companies (Prahalad, Ramaswamy, 2004, 12). Therefore companies must attend to the quality of co-creation experiences, not just to the quality of the firm’s products and processes (ibid, 16). Companies must also consider the context in which every single customer tries to satisfy her own needs and use this knowledge to personalize her experience. Context adds to the event, which is enabling experience, dimensions of time (when did it happen) and space (where did it happen). Therefore, context is a constituent part of the event and consequently of the experience. Companies could use context for experience personalization. The latter is easier in their close cooperation with their customer. Thus, companies should acquire good understanding of heterogeneity of customers, including socio-cultural dimensions of the context, and enable a good both-way communication.

Let's return to the interacting connection between individuals. The question emerges: how an individual, who wants to exchange knowledge and ideas, could find, in the plethora of data, the partners and data, matching her interests? The platform enabling this, must therefore offer its members adequate data as well as a chance to co-create (in synergy of different sources) their own sets or even systems of data, messages and information in line with their shared interest. How could the platform offer (only) the adequate data? A better quality at minor quantity of data could be achieved, if data searching and data aggregation application takes into consideration the meaning of data and the context, for which the data is needed.<sup>3</sup> In short, it is all about

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<sup>3</sup> The so called “semantic web” is conception within which the solution to above mentioned problem is searched. The semantic web is an evolving extension of the World Wide Web in which web content can be expressed not only in natural language, but also in a form that can be understood, interpreted and used by software agents, thus permitting them to find, share and integrate information more easily (source: Wikipedia). For example, a computer might be instructed to list the prices of flat screen HDTVs larger than 40 inches with 1080p resolution at shops in the nearest town that are open until 8pm on Tuesday evenings. This action, today, requires search engines that are individually tailored to every website being searched. The semantic web provides a common standard (RDF) for websites to publish the relevant information in a more readily machine-processable and integrable form.

personalization of data. Every network member can also contribute information deemed to suit the shared goal of the network and consequently enhance the quality of network's database. In addition, the platform serves as a clear area for a creative dialogue. Hence, the aim of such interest network is connection, enhancement of mutual trust, and transfer of knowledge and other information.

How can we make this happen? Connection of individuals could be carried out with the help of internet application, similar to social network, with two main differences from them: application should offer to its users adequate data, specifically suited to their common interest, and it should rather actively search adequate partners (individuals and later on companies, which will help in the transition from individual's idea to the new product – value). Such interest-based group is called collaborative interest network (CIN).<sup>4</sup> The most active and creative network members make its core, which is called a collaborative innovation network (COIN), contributing most ideas and new knowledge. They spread this knowledge into CIN with the help of a broader group of members, which are known for their active role in knowledge dissemination. This group, together with COIN members, forms the so called collaborative learning network (CLN). Other (less active) members of CIN are learning from CLN. In this way the knowledge and ideas flow from COIN, through CLN, to CIN. The basic principles of such innovation interest-based networking are creativity, collaboration and communication (Gloor, 2006, 49), which are a very important part of the COIN innovation process. Companies with adequate capabilities (and interest, of course) should become a part of this process and a partner to COIN in development and realization of an idea. See Figure 4.



Figure 4: COIN-driven innovation process (adapted from Gloor, 2006, 42)

Members of COIN are the main partners of the interested companies in research, development and testing of new products as well. Thus, COIN contributes ideas, assists development and initially tests novelties. Transfer of potential novelties from COIN into a broader interest network CIN matters to enterprises: it can provide for a very important and credible communication channel enabling a better diffusion of innovations and other novelties, thus improving success of innovating. It may lead to the phase 5 in Fig. 3.

We also must draw attention to the question of trust among network members. Namely, a great problem could be the lack of trust among individuals, which participate in interest-based network. Thus, it is very important that COIN operates on the basis of the following basic principles: openness, peering, information sharing, and global action (Tapscott, Williams, 2006). The latter is important, because it can strongly contribute to enhancement of diversity of views in the network. In this way holism of individuals and enhancement of the ethics of interdependence could be strengthened. Gloor presented (2006, 89) properties of COIN, which should contribute to realization of its participants' shared vision, based on their common interest; see Figure 5.

<sup>4</sup> The idea and terminology of interest and knowledge networks stems from work by Gloor (2006). We recommend you to read this book in order to gain deeper insight into idea and realization of these networks.

	<b>Innovation</b>	<b>Collaboration</b>	<b>Communication</b>
<b>Organization level</b>	Meritocracy	Consistency	Transparency
<b>Team level</b>	Swarm creativity	Code of ethics	Trust network
<b>Individual level</b>	Creative intelligence	Ethical conscience	Knowledge sharing

Figure 5: Individual, team and organizational properties of COIN (adapted from Gloor, 2006, 89)

Individuals should be creative (to create invention), think and act in accordance with the ethics of interdependence and the law of requisite holism (to enhance collaboration), and ready to share knowledge with other network members (to enable unimpeded flow of knowledge and ideas). At the team level, a new dimension is added to previous, individual properties – namely the capability of connecting. Thus we are talking about swarm creativity, code of ethics (of entire team) and trust among members. At the organization level, meritocracy, consistency and transparency should be present, in order to enable functioning of the network.

What could be the benefits of formation of the described platform? From individuals' viewpoint access to relevant information, knowledge transfer and co-operation could be improved. Potential product users can co-create value for themselves. An open access might increase the share of active/creative people: every network member can contribute to formation and realization of ideas. The improved information transfer between users and companies concerning the real needs and related potential solutions supports creation of the requisitely suitable products, including diminished burden to environment. All that could have positive influence on the implementation of the basic goals of society – the socially responsible and hence requisitely holistic behavior based on ethics of interdependence and (co-)creation.

## 5. Some conclusions

Humankind, especially the most advanced and quickly advancing parts of it, are reaching the phase of affluence, if economic data only are viewed. Happiness should result, but owning things provides less of it than creativity and SR, based on ethics of interdependence of humans in the local as well as broader society, including the global humankind. Creative co-operation is necessary for creativity to be requisitely holistic. Technology, such as internet is able to support it. For this purpose a platform, enabling global connections and (co-)creative (co-)operation in collaborative interest-based and innovation networks, is needed. The global connectedness and co-operation between humans contributes to awareness of interconnectedness and therefore strengthens the ethics of interdependence. This way can also improve access to the relevant information, knowledge transfer, activation of individuals' (tacit) creative potential, creative co-operation, and inclusion of the interested individuals in the companies' innovation processes. The improved information transfer between users and companies and more active role of the former in innovation processes supports creation of the requisitely suitable products for users and the society at large. Therefore negative influences on the environment could be diminished as well. Social responsibility and phase 5 could have more chance to exist.

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