Innovativeness as a Meta-Competence of Enterprises and Catching-Up Economies of the Twenty-First Century

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Abstract

The article has a conceptual character. The author proposes appreciation of a subjective aspect of the existing objective approach applied to innovation management and to exercising innovation policy. Such a need results from the necessity to overcome slow progress in competitiveness of enterprises and economies in Central and Eastern Europe and to make possible the widest activation of innovative potential of human resources and to eliminate obstacles encountered by enterprises when accessing innovative talents. The imitation of patterns based on the technocratic (objective) approach oriented towards innovation management is burdened with a high risk of ineffectiveness. The substantive model of innovativeness proposed in the article opens up a possibility of innovativeness becoming a universal competence (a meta-competence). It also shows the ways of integrating innovativeness management, and not only innovation management, with state innovation policy and institutional reforms oriented towards disseminating the progress of civilization.

Keywords: meta-competence, organizational innovativeness, innovative competences, subjective approach, substantive model of innovativeness, innovation management

1. Introduction

Innovations and innovativeness as an ability to introduce innovations are active factors, dynamic capabilities (Tecce, 2014), in the development of enterprises and economies, which have been appreciated in the economic research at least since the times of Joseph A. Schumpeter (1934). However, only decades later, the coincidence of many factors led to the emergence of a competition of a new type based on the search for synergistic effects from a joint use of various innovations. These categories became particularly important around the globe in connection with globalization of liberalization, development of IT and information society (Teece, 2007; Bal-Woźniak, 2015). In the US, all efforts were focused on the emergence of a new economy, economy stimulated by innovations, innovation-driven economy (Porter et al., 2006) – in Europe it was known as the knowledge-based economy to emphasize its connection to triply sustained development (economically, socially and ecologically), as well as well-being.

In practice, it resulted in the necessity to find ways of increasing competitiveness of enterprises and economies. In connection with the development of knowledge-based economy and imitation of governance and management patterns practiced in the countries of *Technology Frontier Area* (TFA), and recommended by the leading streams of economics and management sciences in the countries of Central and Eastern Europe, optimistic visions were promoted of catching-up with development and modernization of enterprises and economy. The Lisbon Strategy from the year 2000, despite its modification and adoption in 2010 of a new strategy – Europe 2020, turned out to be not so useful for improving the creation of an economy stimulated by innovations. It is shown in diagnoses of progress on building economy stimulated by innovations prepared by various scientific centers, on different levels, as well as accepted proposals to social and economic policy. With reference to Polish enterprises and economy, it is possible to formulate a thesis about a specific innovative blockade (Bal-Woźniak, 2012). With the justification of this thesis, you need to question the way of thinking about innovativeness, more precisely, the existing and dominant technocratic (objective) approach to innovations and innovativeness.

Therefore, the main hypothesis comes down to a statement that the reasons of insufficient innovativeness of enterprises and economies indicated in the public debate and reports (IUS, 2014; GII, 2014) do not reach the essence of the problem. The real foundations of innovativeness are of psychological and social character, therefore they are subjective (Amabile, Pillemer, 2012), and not only technical or financial. Thus, innovativeness needs to be appreciated from the subjective side and a new paradigm of development of an innovativeness-based economy (or innovativeness economy), and not only of an innovation-driven economy (GCR, 2014-2015), needs to be formulated. A substantive model of innovativeness is a specific matrix resulting from "superimposing" the complex of institutional foundations on psychological and social bases of human functioning in work processes and beyond them. The proposed model is based on natural predispositions of people to be active in various areas of functioning, not only work. This new paradigm of development based on innovativeness indicates that innovativeness becomes a universal competence (a meta-competence). Thanks to its popularization, it would be possible to use innovativeness not only in building competitiveness of enterprises and economies, but in a wider context of development (Bal-Woźniak, 2015) and dissemination of the progress of civilization.

2. Development dilemmas of enterprises and catching-up economies

The globalization of liberalization, information-telecommunication revolution and network economy dynamize contemporary innovative processes. They take place under considerable pressure from the competition of a new type based on broadly-understood innovations (technological, product, organization and management, marketing and others) and bring huge advantages to the business world, as well as accelerated changes connected with well-being (Teece, 2006). An inexhaustible development potential found in innovations is emphasized in the economic growth theories, which are set within the framework of neoclassical economics (Solow, 1956) and the new growth theory (Romer, 1986). On the microeconomic level takes place the search for synergistic effects of broadly-understood innovations, without which it is impossible to acquire competitive advantages (Porter, 2006). Moreover, according to an OECD report, "during the past decades economic growth among high-income countries has been underpinned by efficiency improvements driven by technological innovation" (OECD, 2012, p. 8).

However, in the case of Poland and other post-socialist signatories of the European Union, the situation of innovativeness looks differently (Bal-Woźniak, 2010). A synthetic indicator of innovativeness for all countries whose accession to the EU took place after the year 2004 is below the average for the whole EU (Fig. 1). The indicator for Poland equals 0.279, which puts Poland among countries with moderate innovativeness described as moderate innovators. However, it is the last place in this group and it indicates a limited progress in comparison to the previous year. If the degree of pro-innovative advancement of economic growth was measured by the share of R&D expenditures in GDP, the possibility of catching-up is faint. Poland starts from a very low level: the increase of this indicator from 0.57% in 2006 to 0.87% in 2013 does not change much if the TFA countries spend on R & D ca. 3%, with a few times higher GDP *per capita,* continuously increasing this indicator. In such circumstances, we should not overestimate the increase of the share of R&D expenditures of enterprises from 0.17% in 2008 to 0.38% in 2013, even though it is, undoubtedly, a positive process (Lacka, 2013).In the context of monitoring the effects of innovation-based economy in the scope of improving the innovativeness of enterprises, it seems appropriate to present an analysis of the share of innovative enterprises in an economy, understood according to existing standards of OECD, Eurostat (Oslo Manual, 2005, p. 61-62), i.e. companies that introduced at least one product or process innovation in a given time period. Such Polish companies constitute less than 20% of all enterprises and close up the ranking of EU and selected non-EU countries (Fig. 2).

The existing experiences in spending a wide stream of European aid funds do not show a promising prognosis. The same situation is with required substantial improvement in education quality and scientific research results, the support of innovation and knowledge transfer within the EU and a full use of information and communications technologies, as well as ensuring that innovative ideas are turned into new products and services, which would contribute to increasing growth, creating new jobs and solving social problems in Europe and in the world. All above-mentioned factors are directly connected with innovativeness as a factor that drives growth. According to the OECD report (2012) quoted earlier: "The growth scenarios for the global economy over the next 50 years are shaped by developments in education, technological progress and labor force participation based on a framework in which GDP per capita in each country is expected to converge to the long-run path that is consistent with its own endowments, policies and institutions" (p.9).

For catching-up countries and their enterprises, the implementation of development scenarios requires: overcoming limited progress in building competitiveness; ensuring a wider activation of creative potential of human capital; and eliminating obstacles encountered by enterprises when accessing innovative talents. Such a perspective seems to be provided by the popularization of the subjective approach to innovativeness, which leads to innovativeness management being integrated with state innovation policy and institutional reforms oriented towards disseminating the progress of civilization.

3. The essence of innovativeness as a meta-competence

Innovativeness is an ability to introduce innovations (Salavou, 2004; Bal-Woźniak, 2010; Ruvio et al., 2014). In operationalization processes it is expressed as an intensity of introducing innovations. In fact, it indicates a focus on results, on evaluation of what exists. It is a common approach, especially due to the possibility of operating on quantifiable values and ensuring comparability across studies in that way. Such an approach is applied in official statistics and rankings.

The recognition of the essence of innovativeness and its low level in catching-up countries poses a question whether skills to take up innovative behaviors are available or exist at all (or whether they were already formed). Typical questions about organizational competences are related to the so-called core competences as described by Prahalad and Hamel (1990). They concern those types of competences which are essential for building competitive advantage (King, Fowler, Zeithaml, 2001). The approach used to create a knowledge space for popularizing innovativeness at an enterprise level is proposed by Nonaka and Takeuchi (1995). They point out processes of knowledge creation in an organization, which is also connected with building innovative competences.

Innovativeness as an enterprise's meta-competence is not one of many competences, but the only one that enables an enterprise to face all arising challenges thanks to the quality of its components: knowledge, skills, attitudes and values. "Height, depth, weight and rank" (Chmielecki, 1999, p. 178) of each of these elements decides about features of innovative behaviors (used to introduce innovations) as a form of externalizing innovative competences.

The subjective approach to innovativeness results from the obviousness of a thesis that innovations are the result of people's creative activity. Therefore, the subject of innovativeness, which is always a human being, is an essential pillar needed to bring innovativeness first to a certain level and then to maintain this level, and to activate and develop autonomously innovative dynamics (within authority) and according to arising challenges. Therefore, its internal innovation potential is indispensable to activate all other resources for innovation purposes. Innovativeness should be treated as a feature of people who, within their professional functions (employees, managers, scientists, representatives of authorities) and social roles (parents, caregivers, educators, leaders, teachers), show innovative attitudes and take up innovative behaviors. Such an approach is more difficult to express and measure rather than connecting innovativeness with the intensity of introducing innovations.

However, it better reflects the essence of innovativeness. It makes possible to reach into deeper layers of its foundations, emphasizing causative character of a human being as an essential participant in all processes. It is connected with the co-responsibility of an individual for the level of innovativeness in an enterprise they represent. Of course, according to the professional and organization roles played by an individual (Mintzberg, 1975). Innovativeness of an individual able to use certain knowledge resources, i.e. having a certain intellectual capital, is translated into the innovativeness of an enterprise and economy (Edwards-Schachtera et al., 2015) Despite a huge number and variety of innovative behaviors, it is possible to distinguish four types of them: creating or searching for new solutions, adjusting them to the conditions of a specific economic organization[1], implementing in practice and popularizing them. Taking into consideration a statement that for every situation in which a person finds themselves there is a defined basic activity, a question appears whether in contemporary conditions of building an information society it would not be appropriate to accept innovativeness as a commonly binding activity, regardless of the currently played role or one's position in the social structure.

[1] Here, an economic organization was indicated, however, is it commonly known that the contemporary world is the world of organizations and a person realizes all their activities within particular organizations. In chronological order, these are: family, educational, religious, training, scientific organizations, enterprises and other economic organizations, political organizations, land administrations, regional, national, transnational and global organizations.

Nowadays, we live in highly changeable surroundings, which create many new situations in all environments and for all entities. An effective way of overcoming problems with this changeability is showing innovativeness and taking up innovative behavior. Connecting innovativeness with a meta-competence indicates that it may be used to shape many other competences. A demand on innovativeness as a meta-competence is linked with its instrumental character, which has a unique power. It can be a tool to: use the potential of network economy and information society; utilize achievements in some spheres of human activity to develop other spheres; break various barriers, including those coming from deep-rooted mindsets; protect against threats of all kinds (including negative effects of globalization of liberalization); face environmental turbulences, which shortens to the minimum the time between catching an impulse and reacting to it.

In the current European and global situation, innovativeness as a meta-competence is necessary. The use of a real innovation potential is not available within the existing approach to innovativeness, which emphasizes effects expressed as numbers of introduced innovations that bring certain economic effects, but without paying much attention to building skill sets of people as creators of new solutions.

4. The psychological and social basis of attitudes and innovative behaviors

Psychological theories of subjectivity are crucial for the subjective approach to innovativeness. Contemporary psychology distinguishes two basic ways of understanding the subjectivity of an individual: internal and external (Sotwin, 2006). According to this, a subject is an individual who considers themselves a factor able to initiate action and changes in the outside or (and) inside world. Subjectivity – applied to limit external determinism towards an individual – is realized by the influence of a human being on the course of events, therefore their control over environment. Subjectivity based on limiting internal psychological determination is connected with the topics of self-determination, self-control, and goal-setting. These goods are complementary and they cannot be implemented separately (Taylor, 2001, p. XV).

In psychological approaches, subjectivity is interpreted as an attribute of human action or a regulatory process (active cognitive paradigm), a special type of agency (attribution theories), or full self-actualization of a human being (humanistic psychology).In the existential stream of humanistic psychology, an individual as a person is a free and responsible subject able to develop individually, broaden and improve their potentiality. Acknowledging the subjective perspective on innovativeness analysis as one of human potentialities is equal to making a hypothesis that human beings are able to understand its importance to them. Using the attention devoted to subjectivity in psychology and in organization (Korzeniowski et al., 1983), it was assumed that the idea of subjectivity, as a typically human feature connected with the personal (spiritual) dimension of a human being, may be broadened and applied to the process of forming an innovation maturity of a person.

In the sociological approach, the subjectivity of an individual is a specific activity of this individual, which is realized in the potentiality of creating one's own life, having an influence on reality, an ability to form material environment, and creativity in building interpersonal relations. It is conditioned by possessing competences essential to an effective participation in the structures of social system. They encompass cognitive, normative, causative and evaluation competences. They are used according to the will and the knowledge of an individual and for purposes treated by the individual as their own (Cichocki, 2003).

Theoretical thinking has ultimately brought an assumption about distinguishing four aspects in the structure of innovativeness as a meta-competence. It results from them that a person can change themselves and the surrounding world according to their own needs and based on whether they can:

- Identify a situation, i.e. be aware that innovative values exist (awareness-related aspect),
- Evaluate and interpret possibilities and necessity to act according to one's own goals and feelings (comfort or discomfort) and the feeling of being obliged to act (emotional aspect),
- Understand a situation in the context of various interrelations, i.e. have the skills to associate observed phenomena with patterns acquired earlier based on one's knowledge (cognitive aspect)
- Undertake actions while feeling free, self-determined and responsible (behavioral aspect).

A human being brings about radical changes thanks to exhibiting innovative behaviors. It is true that not the whole society shows pro-innovative behaviors but quite a large group of innovation-inspired people. Whether the implemented changes are innovations depends on the fact if they bring a positive sum of benefits.

It happens sometimes that an implemented change causes negative ecological or health effects, but it is still called an innovation. Emphasizing certain benefits, including those cultural and spiritual ones, is very important, as innovations are most often associated only with technical aspects and economic benefits.

5. The institutional foundations of innovative attitudes and behaviors

The role of institutional foundations in the context of enterprise's innovativeness is at least double (Casper, von Waarden, 2005). These foundations may foster or hinder the introduction of innovations. However, in the context of the subjective approach, of special importance are institutions-as-rules (North, 1990) and then institutions-as-organizations. The former are directly connected with the formation of certain human dispositions determining innovative competences of employees, which constitute innovativeness as a meta-competence. The process of building and disseminating employees' innovative competences as the subject of innovativeness management of an enterprise is, in fact, compiling all indispensable resources of innovativeness in an enterprise in the form of appropriate (desired, expected) innovative behaviors taken from its social environment. If such resources are in this environment, an enterprise can easily acquire innovative employees. Thanks to such behaviors, other resources can be "activated" (understood as: used with benefit): those that belong to an enterprise and those accessible to it.

However, there is an important problem. Innovative behaviors of employees are derived not only from pro-innovative instruments, rules and management procedures existing in an enterprise, but, first of all, from pro-innovative stimuli encoded in behavioral institutions. Behavioral institutions constitute formal and informal rules limiting the free choice space and influencing human interactions and the rules of the game in the society. The importance of these formal rules, informal norms and the ways of their enforcement (North, 1992, p. 477) is even greater because they shape the way we think and act.

Formal institutions, the so-called external norms encoded in acts of law, regulations, plans, codes of ethics and implementation arrangements, may be decided upon administratively, i.e. be in force from a given date, be changed and adjusted to emerging problems. However, informal institutions are relatively stable, with limited elasticity, and they change gradually in the historical process over generations. They grow out of accepted mindsets, habits, conventions, belief systems, values. Through them is expressed the influence of the past on the present and the future, therefore there exists the so-called dependency "on the path", on path dependency (North, 1990, p. 62, 65-67), which is present to a certain degree in all areas of institutional space: families, schools, religion, economy, legal and political systems (Turner, 1997).

The specification of behavioral institutions by O. Williamson (1985) is used in the context of economic structures that foster innovativeness. He divided behavioral institutions into a few levels and according to the time they needed to form: institutions of the highest level (traditions, customs, religions forming themselves over hundreds or thousands of years); in a shorter perspective of decades – legal and political systems; and of the lowest level: agreements and cooperative principles between organizations (formalized and non-formalized ones) formed usually over a few years. However, due to the proposed subjective approach to innovativeness, more important are possibilities to strengthen internal determinants of innovativeness of an individual as a potential or current employee. They are present in the whole structure of institutions, which in the times of J. Turner could be presented as six institutional complexes. They encompass family life principles, educational standards, religious practices, and the rules of the economic game, legal norms and the rules of the political game (Turner, 1997).

Institutionalization as a long-term process is determined by complex criteria of various development goals and may be connected in multiple ways with an innovativeness criterion understood as operational efficiency of different systems (a person, an organization, a national economy). Due to its complexity, it might be inconsistent in the scope of its complexes. These inconsistencies may be corrected up to a certain degree by using the integrated approach. In this context and with reference to particular institutional complexes, attention should be drawn to a few problems.

The rules of family life are responsible for the creation of innovative attitudes and behaviors according to the assumption that innovativeness is not an imminent feature of the subject, but a result of culture and engagement in it of human individuals. It results in acknowledging that social evaluation decides about the way of participation of an individual in innovative processes. Similarly, the responsibility for the level of creativeness as a source of individual success, i.e. innovativeness, lies primarily in the upbringing.

A family is a primary plane of formulating evaluation criteria, ways of thinking and acting, as well as attitudes towards challenges, threats and changes. Which package of the ways of thinking and acting a family brings to an individual is determined by the cultural context in which it functions, as well as by resources of information, knowledge and, more broadly speaking: intellectual capital, available to it.

Educational standards are shaped mostly by the education system of all levels. However, the educational process does not take place only on the school level. It starts in the family and continues also through religion, the business sector, law and politics. In an information society a huge influence on the characteristics of human capital has, additionally, the mediocratic information noise. In all cases, the function of education is popularization of a particular way of life, attitudes and dispositions to fulfill various roles in the economy and society, including dispositions to come up with innovations. If there are regulators in an economy that harmonize the educational process with market incentives and development challenges then it provides a great opportunity to shape innovative attitudes and use innovativeness to create human capital. Shaping and developing innovative competences through various channels causes a problem of integrating education. In order for competences to be functional, when it comes to the needs resulting from the proposed model of innovativeness, it is necessary to connect particular parts of the process of developing creative competences with the help of integrated education management from birth to old age. It could not be efficiently realized without the coherence of educational institutions with reference to all areas of institutional space.

Institutions of religion are not only a historically consolidated form of satisfying spiritual needs of individual and social groups (Mohanty, 2013). Their universal deposit of values is a set of controlling tools to change individual's environment and the individual themselves, to interpret the purpose of this change and to shape its functionality (in the context of inter- and intergenerational responsibility). In this context, they are: oriented towards a selection of changes; limitations of changes against the deposit of values advocated by religion; a barrier to the use of trial and error in the modernization of a society and unethical ways of using market opportunities. Thanks to that, they add a moral sense to innovativeness, competitiveness and economic efficiency and extract from them social equity. In this sense, the influence of religion is about strengthening the attitudes of engagement and creative behavior in creating a chance to popularize the readiness to "replenish the earth and subdue it"; to modernize the environment of human existence; to implement changes (innovations) for a person's own benefit, but in the spirit of inter- and intergenerational responsibility.

With reference to institutions as **the rules of the economic game** in the form of norms and principles governing the economic life, it should be noted that, in practice, their operation is partly filtered and adjusted by non-formalized institutions, which may have their own specificity in different national economies. An institutional change connected with a shock transition to the rules of the market game increases the risk of collision between internal and external (formalized) norms. Institutional inconsistency connected with it becomes a source of contradicting stimuli that limit, and even destroy, activity, creativity, entrepreneurship of whole social groups that are not catching up with changes. In the context of innovative behaviors of economic entities, special importance is given to solutions being a part of the policy of systemic change and socio-economic development which may soften those collisions.

It applies specifically to the following: the human capital development policy, the structural policy oriented towards improving markets (mainly the job market), the facilitation of risk management in public and private sector's research and development in relation to R&D expenditures, the support of knowledge and technology transfer, as well as FDI influx, the creation of a network of business consultancy services, etc.

Legal norms are determined purposefully and knowingly, that is why they may be used to trigger desired behaviors and to sanction the negative ones. However, they are present in the complex and long-term process of bringing about the constitutional order. However, rooting them in the EU's *acquis communautaire* and strengthening thanks to them the competitive order and subsidiary principles of welfare states in the framework of social market economy, revealed many problems in the scope of innovative behaviors and building an innovation-based economy. It did not protect the Polish economy from a low quality of law, which sometimes does not respect Polish business reality. It imposed too many amendments to legal acts; it complicated decision-making processes and fostered non-transparent regulations with interpretative loopholes, which made rent seeking possible at the expense of behaviors oriented towards technological, product or management innovations. There is also a problem of low awareness of law, difficulties in operating in the economy that is sometimes overregulated by inconsistent legal norms.

It creates problems mostly for small and medium enterprises; it blocks entrepreneurship and channels creativity into searching for legal loopholes and appropriating free funds from the EU, and not into innovations and innovativeness.

Institutions as rules of the political game are connected to shaping innovativeness in the way that the state can integrate all factors of development into a coherent system, not only those that are in efficient market mechanisms or financial capital, but also in technologies in a material sense (the structure of physical capital) and in skills and knowledge (education and the quality of human capital), attitudes of people and nation towards new knowledge by participating in the creation of culture and rational men's wit and will (Abramowitz, 1993; Reinert, 1999). These factors underlie the infrastructure of organizational innovativeness. In fulfilling this mission by the state, we should not overlook the increasing importance of inter- and transnational organizations, as well as de-etatization. It means that the state must shift in many areas from *government* to *governance,* i.e. co-governance and participatory governance (Sikander, 2015). Good examples can be found in network structures, in which participate government agencies, self-government units, business entities, the scientific sphere (universities), the media and civil society. Similarly, families with encoded culture in their ways of thinking – the users of innovations. In the subjective model of innovativeness, the role of the latter is equally important as the role of research institutions, government support organizations and companies. They are, after all, entities of innovativeness-based economy and towards their development goals' functions must be oriented the institutional structure of all subsystems of the innovative environment. A significant limitation of the institutions of politics on building an innovativeness-based economy is the way of using the institutions of democracy, the access to knowledge and its quality. They are conditioned by the institutional context, especially by non-formalized institutions and their adherence to the path (path dependency). The new paradigm of development based on the subjective model of innovativeness seems to be useful for eliminating these limitations.

6. The substantive model of innovativeness

The substantive model of innovativeness proposed in the article is a specific matrix resulting from "superimposing" the complex of institutional foundations on innovative behaviors originated in psychological and social bases of human functioning in work processes and beyond them (Fig.3).

The structure of the substantive model of innovativeness presented in Fig.3 is a consequence of accepted realistic research hypotheses. A subjective layer of innovativeness of an enterprise is emphasized in it. Innovations may also appear wherever people with innovative competences are present. The bigger the number of people, the more probable it is that innovations will appear as enterprises have an easier access to these competences. It is visible from its structure that the solution to the problems with a low level of innovativeness in enterprises or in whole national economies, as in the case of Poland and many other EU-28 countries, should be found in the new approach to innovativeness. The objective approach is insufficient as enterprises encounter a shortage of innovativeness, which cannot be overcome by external transfers as in the case of physical and financial resources or even technologies. It does not mean that it is possible to leave out the objective approach – it is important but insufficient. It should be complemented by the subjective approach and this approach must be highlighted and disseminate.

Such a chance is offered by a holistic approach to shaping innovativeness which gives at least an equal role to its subjective determinants and to technical and financial ones that are currently dominant. Strengthening innovativeness of an economy requires popularization of innovative behaviors. It is possible on condition that creativity is triggered (Amabile, 1998; Amabile, Pillemer, 2012), and the logic of human activity is respected (Nowak, 1973). In this logic, it is important to be aware of the fact that every human action is determined by inherent features, i.e. subjective features, and external features present in the surroundings, i.e. objective features.
In search of a way to connect in an interdisciplinary way the theory of attitudes, the idea of subjectivity, a degree of an individual's maturity and the essence of innovativeness – with reference to the model of creating attitudes towards the subject of the attitude which are (or may be) innovations – it was proposed to base the process of shaping innovativeness on four pillars (awareness-based, emotional, cognitive and causative).

An awareness-based pillar of innovativeness highlights being aware of development challenges and situations that require innovative actions. The category of innovative awareness corresponds with the concept of environmental awareness, but it is more closely related to managerial awareness.

Managerial awareness requires a method of perceiving an enterprise in which the complexity of perception is connected with analytical, critical and synthesizing aspects that synthesize all basic phenomena in an enterprise to find a new solution in a creative way. The essence of an innovative situation is a growing dissonance between current conditions and expectations about them. When there is a lack of sufficient awareness of innovative needs, signs indicating the innovative character of a situation will be missed.

An emotional pillar of innovativeness plays a role of a creative trigger of pro-innovative activity and it is associated with emotional intelligence. Emotional intelligence, also referred to as motivational intelligence (Salovey, Mayer, 1990), determines the level of engagement. It is important in all types of activity, but it is indispensable in innovative activity. It is expressed as readiness to undertake acts of transgression. Acts of transgression, understood as going beyond limits, are not reserved for exceptional people (elites, geniuses) only, but are undertaken by ordinary people on condition that they achieve a particular level of motivational maturity.

A cognitive pillar of innovativeness is a condition of making knowledge ready to act. It takes place in the process of gaining proficiency in operating certain sets of knowledge. The cognitive pillar encompasses knowledge and skills to apply it, including skills to conduct an innovative activity which depend straight on the process of learning and its efficiency manifested in the form of certain competences. In a particular organization, they are a derivative of gained professional education by managers and contractors, as well as knowledge acquired during lifelong learning and gained experience.

A causative pillar of innovativeness, which crowns innovative competences, determines the implementation of innovations. Dispositions, which are shaped as a result of the "learning process" that takes place in other pillars, may be strengthened or weakened depending on the level of existing agency. Innovative activity may be a direct, independent action in a given workplace or a joint team effort. Favorable conditions for the latter are occurring more often within the network structures including the economic ones, for example, within Porter's clusters. Flows of horizontal information, based on resources of social capital, foster the knowledge-sharing process, hence they complement, complete and enrich this knowledge. Despite seemingly more favorable conditions among structures (organizations) and individuals, the scope of subjective activity is still limited and not only in the area of innovative activity.

The approach presented in the article, which emphasizes the human role, clearly indicates the necessity and possibility to manage a particular resource of an enterprise - innovativeness. The final goal is to determine procedures, tools and regulatory mechanisms (management and governance), control and self-control mechanisms, in other words "supervisory" instruments (or more broadly speaking: "management" instruments) used in management, governance, administration and leadership systems. Stimuli to use various "supervisory" instruments must come from the level of an enterprise if the enterprise wants to achieve its goals. In practice, they may take two completely different, but complimentary, courses. The first is innovativeness management in an enterprise with the use of theoretical and practical achievements of human resources management based on competences and innovation management. It is directed at shaping and popularizing innovative behaviors, stimulating learning processes and infusing organizational behaviors with features of innovative behaviors.
The second one is innovativeness management based on models of interorganizational management. It is directed at shaping interorganizational relations with organizations from microenvironment and harmonizing goals of an enterprise with organizations from macro environment.

7. Limitations of the concept and recommendations for future research

There are various limitations on popularization of the proposed solution, but only three issues are presented here.
First of all, we should pay attention to the lack of unanimity in defining and understanding innovativeness (Ruvio et al., 2014). It would seem that authors' contestations are unambiguous when they define innovativeness as an ability to introduce innovations. However, at the stage of operationalization, they pay more attention to the intensity of introducing innovations rather than to answering a question about availability of a potential that makes introductions possible, in particular the one found in the resources of human capital.

The problem with understanding innovativeness, which is connected with its definition, only seems to be a limitation on popularization of the proposed solution. Firstly, various ways of understanding innovativeness indicate that it is a topic of interest for a large group of specialists, including economists, representatives of authorities, sociologists, psychologists and pedagogues. Secondly, the model may be an integrating element in the process of creating innovative systems.

The subjective model of innovativeness draws attention to the quality of behavioral institutions. This quality is a result of nurturing the development of human capital and an effect of an interaction of all institutional complexes within which people grow in maturity, including the innovation maturity. No one questions institutional conditions but, due to the prevalence of their existence, conducting studies is very difficult as rules, norms, procedures and other limitations on choice are ubiquitous. Human action is universally institutionalized according to various criteria. Hence, there is one more important problem connected with institutions – the problem of institutional consistency. In practice, it comes down to ensuring unambiguous logic of action, in our case in the context of stimulating innovativeness. It is a very complicated problem as particular institutional complexes function according to their own logic and they are usually characterized by excessive regulations. "Cleansing" the institutional space would bring greater freedom in making choices as a condition necessary to develop creativity, but it is very difficult to do in practice.

Institutional inconsistency is a result of disturbances in the overall cognitive balance and common opinions generated by spreading lack of satisfaction with achieved results caused by external and internal factors. These disturbances may destabilize individual models of the game, which becomes a stimulus for institutional changes, so undertaking new actions that have not been used before.

Studying innovativeness as a meta-competence brings hope that acquired knowledge in this field will help find creative solutions in this matter. A meta-competence is connected not only with universality, occurrence, and usability and with using it to shape other competences, but also with finding solutions to problems that affect it.
It is possible to gradually overcome these limitations by intensively conducting and developing interdisciplinary research on the following:

- Building awareness that innovativeness is a valuable instrument of coping with challenges and threats of the contemporary world;
- Strengthening the feeling of responsibility for showing engagement or its lack;
- Developing competences during lifelong learning (innovative competences in particular);
- Shaping a praxeological skill in creating and using realization conditions for innovative behaviors.

Creating a compact and unambiguous cognitive system and popularizing the subjective approach to
Innovativeness would be an opportunity to allow institutions that foster innovative attitudes of people as subjects of management processes on different levels of the integrated system of innovativeness to grow roots and to initiate acknowledge and accept them.

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Figures

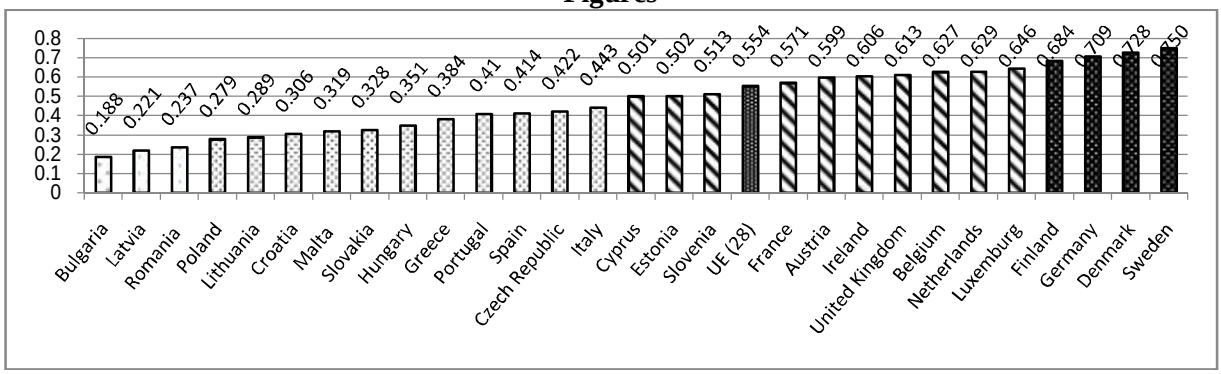
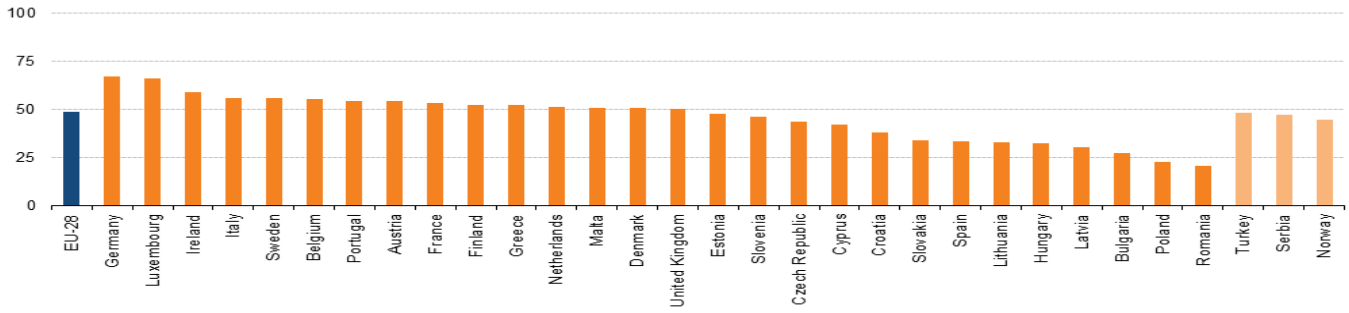


Fig.1. Innovation potential of the EU countries

Source: Innovation Union Scoreboard (IUS, 2014).



(*) The survey reference period covers the three years from 2010 to 2012.
Source: Eurostat (online data code: inn_cis8_type)

Fig. 2. Share of enterprises conducting innovative activity as % of all enterprises in the EU and selected non-EU countries

Source: Eurostathttp://ec.europa.eu/eurostat/statistics-explained/index.php/Innovation_statistics [2.08.2015].

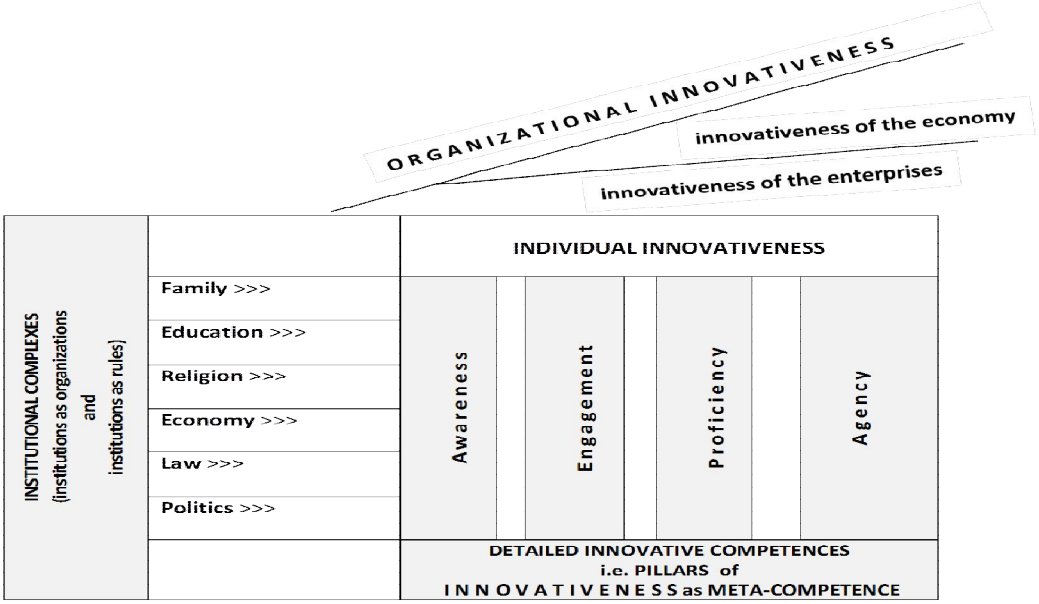


Fig. 3.Scheme of the substantive model of innovativeness

Source: own elaboration.