# HOW TO IMPROVE INNOVATIVENESS OF SMALL AND MEDIUM ENTERPRISES

Zlatko NEDELKO Vojko POTOCAN University of Maribor, Slovenia

### **ABSTRACT**

In current economic conditions, one of the primary aims of strategic management in organizations is to improve their performance. This is especially applicable for Small and medium sized enterprises (SMEs) which need continuous innovation in order to survive and further develop. In that frame is of crucial importance innovativeness of SMEs. Innovativeness of SMEs and their members is dependent upon synergic set of factors, whereas most fundamental and/or underlying are personal values of SMEs members. First step in the process of improving innovativeness of SMEs is therefore holistical understanding of innovativeness and/or preferences of SMEs members towards innovativeness. In that frame this contribution discusses two theses: 1) Personal values of SMEs members are fundamental in/for understanding innovative thinking, and 2) SMEs members' must innovate their values in order to retain/improve SMEs innovativeness. The paper presents a possible framework for innovating personal values of SMEs members in order to improve innovativeness of SMEs. Paper also lays and important ground work for further research of impact of personal values on SMEs members' innovativeness.

**Keywords:** Entrepreneurship, Globalization, Innovation, Innovativeness, Small and medium-sized enterprises, Members values

### INTRODUCTION

Strategic management is the process of ensuring that an organization possesses and benefits from the use of an appropriate organizational strategy (Collins, 2001; Chesbrough et al., 2006; Chesbrough, 2009). Therefore an appropriate strategy is one best suited to the needs of an organization at a particular time. In the current economic conditions (i.e. global economic crisis) the primary aim of strategic management in organizations is therefore to cope with changed economics conditions. Changed conditions require quick and appropriate actions, in order to achieve superior fit between the organization and its environment so as to achieve organizational goals. In the frame of strategic management in organization, one among most important and crucial area of management working in the current economic conditions is also designing of appropriate behavior of SME's members. Currently, frequently emphasized dilemma of researching SME's member behavior is question of their innovativeness. In selected context we are focusing our attention on examination of the innovativeness problematic in the framework of SMEs members' personal values, since SME's members personal values are one among most important drivers of their working and behavior in organization.

An organization is not only a business system (BS), which it is when the selected viewpoint of dealing with it exposes its business attributes. Called with different names (such as firm, enterprise, company) business systems (BSs) became very influential institutions of the modern age (Schumpeter, 1934; Kuratko, 2008). Since the great majority of BSs are small and medium enterprises, it is almost impossible to reach any goal in the society without engaging also SMEs (Hebert and Link, 1989; Fink and Kraus, 2009). Currently, in Europe about 99 % of all enterprises are SMEs, employing beyond 50 % employees (Potocan, 2005; Potocan and Mulej, 2007; Potocan, 2008). Demands over SMEs, too, have developed from efficiency by synergetically adding quality, range, uniqueness, and sustainability, in recent decades (Collins, 2001; Potocan and Mulej, 2007). This requires innovations all the time.

Innovation is defined as every novelty found beneficial in the experience of its users (Afuah, 1998; Rogers, 2003; EU, 2006). Or, in other words: Innovation = invention + commercialization (Afuah, 1998). Business practice proves that innovative business (= business style based on innovation rather than routine) tends to yield much more value added than a routine-based one. It is especially crucial as a way out of the current economic crisis. Therefore, the modern BSs face two important challenges, at least: how to satisfy demanding customer's requirements, and how to make their own business requisitely innovative to make customers happier with it than with competitor's supplies.

Synergy of findings from research of both challenges says that one-sided professionals/humans fail to perceive that success depend on systemic thinking based on interdisciplinary creative cooperation. It is helpful to develop and maintain innovativeness and creative cooperation of all organizational members.

Therefore, SMEs must create and implement holistic working and behavior like or even more than the bigger enterprises. Meeting these requirements depends on influential humans, not only on the institutional order alone. Thus, most SMEs must create innovative behavior and working if they wish to survive in the modern environment.

We discuss here the issue of improving the level of innovativeness on the basis of knowing: situation in literature about innovation, diffusion of attributes of innovative enterprises among SMEs, and innovativeness of organizations' members in Slovenian organizations, especially in SMEs.

#### LITERATURE REVIEW

Literature on innovation abounds. There are many more authors and contributions about different aspects of the innovativeness of SMEs today than ever before (e.g. see Lester and Piore, 2004; Leydesdorff, 2006; Sheshimski et al., 2007; Fink and Kraus, 2009; etc.). Pyka and Scharnhorst (2009) offer an interesting new approach to change and learning. Leydesdorff (2006) offers an interesting new concept of modeling, measuring and simulating the knowledge-based economy. Schwartz (2006) is trying to help people be more entrepreneurial (and has already sold over four million copies of his book, which is a sign of its own how far many people are from the capacity to master their destiny in the innovative society). Lester and Piore (2004) are warning – under the label of the need for capacity of interpretation - that the contemporary American education lacks schooling that fosters the capacity of creative interdisciplinary co-operation, which is a precondition for success in the innovative efforts. Nussbaum (et al.) (2005) raises awareness that 'despite spending huge sums on R&D, most corporations have dismally low levels of innovation productivity – up to 96 percent of all new projects fail - and offers suggestion how to get better at this. McGregor (2006) points to attributes of the most innovative companies of today. Huston and Sakkab (2006) are given room in Harvard Business Review to inform about their new model for innovation. Business Week decided to focus on innovation for its 75th anniversary issue under the label "The Innovation Economy" in its special report. In June 2006 Business Week published its inaugural issue of IN: Inside Innovation with these words from its editor: "We dedicate ourselves to the proposition that making innovation work is the single most important business challenge of our era. Our goal is to make a meaningful difference in the difficult journey toward building innovative business cultures." (also see Nussbaum et al., 2005; Potocan and Mulej, 2007; Kelley, 2009). The International Society for Knowledge and Systems Science links knowledge with holistic thinking (e.g. see Potocan, 2005; Gu et al., 2006; Potocan and Mulei, 2007). Conferences STIOE, which have taken place nine times so far on a biannual basis link systems thinking, innovation, quality, entrepreneurship, and environment (Rebernik et al., 1992-2008; Potocan and Mulej, 2007; etc.).

It's impossible to include all references on innovation in economic, sociological, psychological and other literature; it is no longer a technological topic only. IBM (2006) reports on a world-wide survey finding that innovation of business is even more crucial than the technological innovation (see also Shane, 2008; Conway and Steward, 2009). Here, we are going to put another question: is it enough to deal with the innovation process, innovative business, and innovative society, once we want to attain the holism in consideration of the contemporary life and trends; our response is clear: no, it's not.

In other words: SMEs becoming more innovative mainly on the base of innovative working and behavior of their members. The important part of improving the level of innovativeness of SME's members also presents importance of innovativeness for all SME's members, and state (i.e. level of current) of their values connected with innovativeness.

# DIFFUSION OF ATTRIBUTES OF INNOVATIVE ENTERPRISES AMONG SMEs

Entrepreneurship can be considered:

- A legal feature, i.e. ownership of enterprises, such as family ones (e.g. see Kuratko, 2008),
- An economic feature, i.e. searching for, creating, and using new business opportunities to make innovations (e.g. see Sheshimski et al., 2007), or
- A psychological and sociological attribute of the entrepreneur as a person (e.g. see Collins, 2001).

One-sided attempts of behavior (i.e. perception, thinking, decision making, communication, emotional and spiritual life, and action) are normal with the normal specialists, if they do not want and/or know how to co-operate with other specialists who are different from them, and make therefore oversights and finish in fictitious holism causing mistakes (from e.g. bad cooking all way to world wars). Owners, entrepreneurs and managers of SMEs are often quite close to this danger: they do not have many co-workers, they have often established their own SMEs because they had no other chance to survive after losing their jobs as employees (Rebernik et al, 1992-2008; Rebernik et al., 2000-2009). Often, this means that they are very good in a technical profession, on which they intend to live, with full right, but less good or even completely uneducated in running a SME (Nussbaum et al., 2005; Basadur and Gelade, 2006; Kelley, 2009). An entrepreneur produces an enterprise rather than a product; his professionals produce the product as a part of his/her basis to produce a SME, in the first phase (Chesbrough et al., 2006; Gloor, 2006; Chesbrough, 2009).

Entrepreneurial SME's must in the new economic conditions radical redefine their goals and tasks, rethink areas of their own work, and innovate the characteristics of their own operation, like as synergetic entity of:

- Understanding of SME itself SMEs must be obviously viewed as inventions that are supposed to become innovations, not only their products.
- All influential stakeholders of SMEs must be persuaded in a (innovative) process for the transition from invention to innovation to happen.

The modern circumstances no longer allows for routine-loving owners, entrepreneurs and managers, like a long-term stability used to for millennia (Fagerberg et al., 2006; Meyer, 2008; Conway and Steward, 2009; Potocan and Mulej, 2009). Therefore, the new bases of a modern ownership, entrepreneurship and management may include serious novelties aimed at becoming management innovations such as (Basadur and Gelade, 2006; Potocan and Mulej, 2007; Potocan and Mulej, 2009):

- Owners, entrepreneurs and SME's members must thoroughly rethink and innovate their operation to improve their SMEs competitiveness, permanently create and sell new products and services, which must become innovations;
- Owners, entrepreneurs and SME's members must create operation globally, and act locally; they need direct links with their end users, to know both their market and the broader consequences of their action in time;
- Owners, entrepreneurs and SME's members transition from the commanding hierarchy to the 'process-based' specialization and interdisciplinary creative cooperation is of special importance, in order for a SME to activate capacities of every member and partner in the value-chain;
- Owners, entrepreneurs and SME's members must reconsider their absorption capacity for inventions and other knowledge from research organization, which are their potential and/or real partner in research and development (R&D), because most SMEs cannot afford R&D departments of their own, but need fresh knowledge and information on technology, market-

- ing, accountancy, law, etc.;
- There is a growing need for the interdisciplinary capacity of owners, entrepreneurs and SME's members (in SMEs) (e.g. systems thinking, inter-cultural capabilities and knowledge, permanent education and training, formation of personal standards of ethics of interdependence and the standards of entrepreneurship behavior, capacity of anticipation based on a broad interdisciplinary cooperation, cooperative and team work capacity).

For above mentioned reasons, owners, entrepreneurs and SME's members must changed their values, culture, ethics and norm of their work and behavior (and perception of its role, importance and characteristics) to meet the newly emerging conditions of business operation.

But, where we are with changing of basic values (for innovativeness and innovative working and behavior of) SMEs' members in Slovenia?

# INNOVATIONS AND INNOVATIVE BEHAVIOR IN SLOVENIAN ORGANIZATIONS

SMEs cannot avoid the modern global economy and its demand for innovative business as a precondition for competitiveness. Given their small size and related pool of professionals, SMEs need to work very hard on members' innovativeness and related personal traits. Making a SME successful must be considered as an invention-innovation-diffusion process that tackles: the businesses mix of the given size, the SME as an entrepreneurial achievement, and entity of values/culture/ethics/norms.

Thus all preconditions concerning both the content and the process of innovation must be considered, which requires the holism and therefore systemic rather than one-sided thinking/behavior of the usual specialists. Hence, values/culture/ethics/norms of owners, entrepreneurs, SME's members must also be innovated along with their knowledge.

Therefore the following hypotheses are postulated:

H1: Members of Slovenian SME's consider innovation as an important characteristic of their working.

Figures from research on diffusion of novelties aimed at becoming innovations (Afuah, 1998; Lester and Piore, 2004; McGregor, 2006) include into rather innovative recipients of novelties only about 18 % - 30 % of all adults. This means that new concepts such as economic entrepreneurship replacing routine-loving behavior (including employment without a lot of own responsibility) are difficult to implement.

From the viewpoint of current situation in Slovenia, the level of understanding and acceptance of innovations among SME's members is relatively favorable. About details of general framework, institutional conditions for innovativeness and state of innovativeness in Slovenian organizations see Rebernik, et al. (2000-2009) and Potocan and Mulej (2007). The results of survey of personal values of members in Slovenian organizations in 2010 indicate that members of organizations consider innovations (and innovative conditions) as important characteristics of their working.

Innovative thinking of SME's members is importantly dependent upon synergetic whole objective factors (e.g. organization goals, requirements of owners, shareholders) and especially subjective starting points of management (see Mulej, 2000). In that frame we can emphasize values of SME's members, as one among crucial factors, which influence innovative thinking of SME's members.

This lead to the conclusion that SME's members, based on their personal values, recognize and/or be aware of need for innovative thinking, which is executed though their working and behavior in organizations. Key factor in that frame are personal values of SME's members, which are either favorable either unfavorable to innovative thinking of SME's members.

Based on our previous researching and cognitions of others (see: O'Reilly et al., 1991; Lester and Piore, 2004; etc.), we identified following set of criterions for examination of innovative thinking:

- SME's members stimulation for creativity;
- Openness of SME's members for new ideas and other's knowledge;
- Benevolence to changes;
- Perception of risk;
- Innovativeness as a value.

H2: The personal values of SME's members support innovative thinking of SME's members in Slovenian organizations.

Figures from research of entrepreneurship and innovativeness include finding that about 40 % of the adults in a society must be entrepreneurial persons to make enterprises economic rather than only legal entities, called enterprises (Rogers, 2003; Rebernik et al., 2004; Chesbrough et al., 2006; Chesbrough, 2009). This percentage must be achieved by innovation (as a process) of human values, which will not be a novelty yielding no benefit to its users, but an innovation (as outcome). The results of survey of members of Slovenian organizations in 2010 indicate that personal value of organizations' members influence (and/or support) innovative thinking of members in Slovenian organizations.

Based on management literature, and above mentioned conclusion, we can conclude that there is (indirect) link (and/or relationship) between values of SME's members and innovative thinking of SME's members (see: Mulej, 2000; Mulej, 2007; Potocan and Mulej, 2007). We can assume for our research that is possible to assign (more or less) significant personal value for support of innovative thinking.

Based on presented cognitions and our experiences, we identified several (most probably) relationships between items (which constitute construct innovative thinking) and selected personal values of management) (see for example Katz, 2003; Gloor, 2006). Cognitions are summarized in Table 1.

Table 1: Significant values for innovative thinking

Innovative thinking	Significant personal value
SME's members stimulation for creativity	Creativity
Openness of SME's for new ideas and other's knowledge	Broad-minded
Benevolence to changes	Dynamic life
Perception of risk	Daring
Innovativeness as a value	Innovativeness

#### **METHODS**

Based on our cognitions presented above, we include in our sample SME's members. Our sample consists of 260 members of SME's in Slovenia. Data were obtained through a field survey of personal values of SME's members in Slovenian SMEs in 2010. Sample included SME's from all Slovenia (i.e. a relatively representative regional coverage; sample met the basic-activity structure of Slovenian SME's, with a good fit to the industry-based structure of the Slovenian economy). According to proposed hypotheses we measured personal values of SME's members and innovative thinking. More facts about survey are available by the authors of this contribution.

For measuring personal values "The Schwartz Value Survey (SVS)" was used (Schwartz, 1994). To the original SVS, which consists of 56 items, we add "innovativeness" as a value. Respondents rate each personal value, using a 9-point Likert-type scale, ranging from "opposed to my values" (-1) to "of supreme importance" (7) (see: Ralston et al., 1997; Yammarino et al., 2005).

For measuring "innovative thinking" we identify construct "Innovative thinking", based on different prior studies of innovativeness (see: O'Reilly et al., 1991; Potocan and Mulej, 2007). 5 items in construct are measured using 7-point Likert-type scale, with anchors refereeing to low innovative thinking (1) and high innovative thinking (7). Items in construct assess SME's members stimulation for creativity (1 – not supporting; 7 – supporting); openness of SME's members for new ideas and other's knowledge (1 – refusing; 7 – accepting); benevolence to changes (1 – don't support; 7 - support); perception of risk (1 – aversive; 7 – preferable); and innovativeness as a value (1 – low; 7 – high).

For examination of the impact of personal values at innovative thinking, we identify relationships between selected personal values (i.e. creativity, broad-minded, dynamic life, daring, innovativeness) and items in construct "innovative thinking".

For analyzing data several methods were used. Based on tests of normality (we used Kolmogorov Smirnov test), we can conclude that all items (i.e. items included for testing both hypotheses) are not congruent with normal distribution (see Argyrous, 2006). Since assumptions about normality are markedly violated, we used adequate non-parametric statistics tests (when applicable). In that frame Spearman's correlation coefficient (rho) was used for measuring association between selected item about innovative thinking and assigned personal value of SMEs members. We used Cronbach's alpha for measuring reliability of construct in Hypothesis 1 (i.e. innovative thinking). More about utilized methods for data analysis see in Argyrous (2006).

### RESULTS OF SURVEY

#### **Results for Hypothesis 1**

H1: Members of Slovenian SME's consider innovation as an important characteristic of their working.

For measuring "innovative thinking" we identify construct "Innovative thinking", which consists of five items (see above). Of the total 260 cases all were processed in analysis. Cronbach's alpha is 0.806, which indicates high overall internal consistency among the five items representing the Innovative thinking construct.

Table 2: Mean values for "Innovative thinking" items

	N	Mini- mum	Maximum	Mean	Std. Deviation
Management stimulation for creativity	260	1	8	6,50	1,511
Openness of management for ideas and knowledge of employees	260	1	8	6,83	1,369
Benevolence to changes	260	1	8	6,53	1,482
Perception of risk	260	1	8	5,63	1,623
Innovativeness as a value	260	1	8	6,63	1,611
Valid N (listwise)	260				

Based on obtained results we can draw several tentative conclusions about Innovative thinking of Slovenian SME's members:

- Among several items is most important openness of SME's members for new ideas and other's knowledge, while perception of risk is the lowest;
- SME's members are willing to accept new ideas and other's knowledge (i.e. from environment of organization, from other members of organizations), since current situation (e.g. coping with crisis; post-transition period of organization transformation) require mobilization of all available ideas and knowledge in organizations in order to survive in fierce (e.g. emerging, global) competition. On the other hand, accepting (also) ideas of other members is important prerequisite for innovations in organizations and especially SME's;
- SME's members stimulate creativity of other member of SME, since creativity is central to innovativeness. On the other hand SME's members must be benevolent to changes, since innovativeness is based on (continuous) changes;
- On the other hand SME's members are not so interested to accept (too high) risk. This could have deeper roots, e.g. in traditional aversive perception to risk among Slovenians.

We support Hypothesis 1.

#### Results for Hypothesis 2

H2: The personal values of SME's members support innovative thinking of SME's members in Slovenian organizations.

In our conclusions regarding Hypothesis 1, we point out several possible relations between personal values of SME's members and items referring to innovative thinking. That will be outlined in frame of testing Hypothesis 2. For the purpose of researching the impact of personal values on innovative thinking we assign (more or less) significant personal value to each item in construct (see above).

<b>Table 3: Correlation</b>	between inno	vative thinki	ng and	personal	values
-----------------------------	--------------	---------------	--------	----------	--------

Innovative thinking	Significant personal value	Correlation
1. SME's members stimulation for creativity	Creativity	r=0.172 (p=0.005)
2. Openness of SME's members for new ideas and other's	Broad-minded	r=0.343 (p=0.000)
3. Benevolence to changes	Dynamic life	r=0.106 (p=0.087)
4. Perception of risk	Daring	r=0.124 (p=0.046)
5. Innovativeness as a value	Innovativeness	r=0.293 (p=0.000)

Results in Table 3 indicate that there are significant relationship between assigned personal value and selected item innovative thinking (p<0.05). In one instance (i.e. benevolence to change and dynamic life) a correlation of 0.076 (p=0.223) indicate no relationship. Regarding strength of relationship we can conclude that for relationships 2 and 5 (see Table above) is relationship is quite strong for (used) explorative approach and from our selected view point. Other two relationships, 1 and 4 indicate weaker relationship.

Some tentative conclusions about relationship between innovative thinking and SME's members personal values are:

- SME's members who value creativity (as a personal value) high, put a lot of effort to stimulate creativity of other members of organization;
- SME's members who are broad-minded, are open for new ideas and knowledge of other employees;
- SME's members who give more priority to daring, are therefore more benevolent to changes in organization;

- SME's members, who value innovativeness, are very much concerned with innovativeness and consequently innovative thinking, which they spread among other members of organization.

On the base of our research we can therefore support 4 of 5 identified relationships in Table 3 (p<0.005).

# PRACTICAL IMPLICATIONS: SOME SUGGESTIONS FOR IMPROVEMENT OF INNOVATIVENESS

Based on above presented cognitions we can conclude that for improvement of innovativeness of SMEs innovation of personal values of SMEs members is needed. The cognitions about personal values of SMEs members present base for implementation of invention-innovation-diffusion processes (IIDP) in SMEs (Mulej, 2000; Rogers, 2003; Potocan and Mulej, 2009). IIDP presents entity of three phases: (1) discovering ideas and turning ideas into inventions, suggestions, and potential innovations, which is more or less an internal process in organizations, (2) finding the first happy customers ideas to become innovations, and (3) finding many happy customers by diffusion. Successful implementation of IIDP is not possible without innovation of VCEN of (all) members SMEs.

From the whole problematic of improving innovativeness in SMEs we will outline some possible and also most probable dilemmas for innovation of VCEN in SMEs.

But innovation of VCEN is connected with different questions and doubts. The first question includes: "Will the economic system and business politics practitioners accept inventions, if they do not bring solutions, which offer more benefit than used to be the habit so far?"

Many Western researchers of these problems presuppose that the market pressure alone makes businesses, including the economic system and business politics institutions willing and able to absorb whatever new knowledge shows up if they feel that their application of this knowledge will increase their competitiveness due to better efficiency and effectiveness (Rogers, 1995; Mulej, 2000, Katz, 2003; Potocan and Mulej, 2007; Conway and Steward, 2009). Therefore, they claim, it is the role of the government to remove obstacles for competition and to invest in education and training in capabilities, which are needed for people to cope with more demanding markets of products and services. This may be true, if business persons are entrepreneurial rather than routine lovers. The conclusion: modern values, knowledge, including know-how, make a system of preconditions for the institutions (i.e. SMEs) to work properly.

The second question is: In which level we must innovate VCEN, if we wish to improve the innovativeness of SMEs? The individual, organizational, and national VCEN need to be innovated, but not technology only (Mulej, 2000; Potocan and Mulej, 2007; Potocan, 2008). This helps interdependence of mutually different and hence complementary specialists to become visible. A lot of help can come from transforming the marketing-like offices of the economic system and business politics institutions from a service of selling/promoting to a service of providing information, including the one about the research organizations, and thus serving as the bridge between businesses and research organizations.

We do not see the problem in transfer of the narrow professional related knowledge, but in the managerial and organizational questions of SMEs. But the most crucial of all novelties is the following:

- According to its role as the general coordinator and manager of the most general issues of a society, the government defines the framework conditions, including the ones related to the transfer and absorption capacity concerning novelties supposed to become innovations;
- Government can act in this role by commanding, subsidizing, enabling, allowing, but also as a rather big buyer in a buyers' market; the latter role may be the best choice in this case;

Therefore, government can and should define in its procurement rules concerning supply to all government offices, medical, educational and other public organizations, that only the most innovative organizations may be suppliers.

To be able to succeed, government must also be a role model of innovation. Innovations related to the management style and organizational process and methods can take place in its offices, too, like everywhere else.

The next question is: How to transform invention to innovation, from the view point SMEs? From empirical discussions about any product or service for market, including the new management and organization of services/offices in the economic system and business politics, we briefly conclude (Mulej, 2000; Potocan and Mulej, 2007; Potocan and Mulej, 2009):

- There are many products or services that offer the same functionality, but there are other criteria for a customer to choose one of them. This applies to the economic system and business politics institutions, too. They are no longer free of competition: the entire European Union is on its way to become one single 'market' for the economic systems and business politics regulation as well;
- Product or service developers may be concerned about the technological attributes only of theirs product/s, or conceive it/them more holistically, which is what the new our concept of the economic system and business politics organization suggests;
- To meet customer criteria of good enough quality, products must be good on a holistic basis.
  Thinking about holism must include technology, production, business planning and doing, marketing, human resources, and several more aspects, as a system. This applies to the economic system and business politics institutions, too;
- Any product or service management, developing, producing, and selling should hence better be a very interdisciplinary endeavor, which links at least business, technology, human resources, organization, management, into one whole. This applies to the economic system and business politics institutions, too.

This means that creativity and holism in the phase of a product (= the economic system and business politics services and organization and management under discussion, in this case) development (without later phases of the process) are not enough, although essential (Mulej, 2000; Potocan and Mulej, 2007).

The concept is important because today, worldwide, there is a lack of education in systems thinking / systems theory; there are many unavoidable narrow specializations; and hence there is a lack of consideration of holism (Mulej, 2000; Rogers, 2003; Shane, 2008, Kelley, 2009). Even more: holism is frequently considered fictitiously, limits of consideration being reduced inside narrow specializations with their interdisciplinary co-operation, and reviving the out-of-date reductionism under the name of systems thinking (Mulej, 2000; Potocan and Mulej, 2007; Potocan and Mulej, 2009).

We also must mention questions of systemic quality (as seen by customers / users). Another aspect of making an invention, such as the new economic system and business politics organization and management, an innovation and really useful, tackles its application by many. Research on diffusion of novelties (Afuah, 2002; Lester and Piore, 2004; Gloor, 2006; Kuratko, 2008; etc.) demonstrates on the basis of several thousand cases that it is very difficult for an author and his or her change agent to make an invention - suggestion accepted by the potential customers. What they find good enough, is called excellent / perfect; it depends on five pillars of total quality, which are interdependent and each of them must be excellent (Hebert and Link, 1989; Afuah, 2002; Lester and Piore, 2004; Chesbrough, 2009). They are: Products, Processes, Leadership, i.e. Cooperative management, and Commitment, linked in a synergy by Organization.

A product is perfect if meeting criteria of "systemic quality in frame of SMEs working" made of the system of interdependent and interactive price, (technical and commercial) quality, range, uniqueness and sustainability as they are both defined and accepted by customers and important environment/s. This is where new management model must fit in.

A detailed discussion of single starting points exceeds the chosen frame of our discussion. This is a topic for another occasion.

#### CONCLUSIONS

The primary aim of our paper was to present possible ways for improvement of SMEs. In that framework and based on presented theoretical cognitions, we introduce and test items for measuring innovative thinking and their linkage to personal values of SME's members. Regarding to relative importance of other measured characteristics of organization (which are not presented here) we can conclude that innovativeness is considered as an important characteristic of SME's members. We therefore support Hypothesis 1.

Based on examination of relationship between selected personal values and innovative thinking, we can conclude that SME's members' personal values play an important role in innovativeness of SME members, since the strength of relationship is significant, and from selected view point relatively good. We therefore could confirm Hypothesis 2, in four of five identified relationships.

Results from the survey reveal that SMEs members (in Slovenian SMEs) estimate innovativeness as an important value of their work and/or work of organization.

But cognitions about importance of innovativeness (as personal or as organizational value) are not enough for holistics improvement of level of SMEs innovativeness. We must add also other important solutions, like: (1) Will the economic system and business politics practitioners accept inventions, if they do not bring solutions, which offer more benefit than used to be the habit so far?; (2) In which level we must innovate VCEN, if we wish to improve the innovativeness of SMEs?; How to transform invention to innovation, from the view point SMEs?.

This paper lays possible ground work for future examination of relationship between SMEs members' personal values and innovativeness of SME's members.

### REFERENCES

Afuah, A. (1998), Innovation Management: Strategies, Implementation, and Profits, Harvard Press, New York.

Argyrous, G. (2006), Statistics for Research, Sage Publications, London.

Basadur, M. and Gelade, A. (2006), The Role of Knowledge Management in the Innovation Process, Creativity and Innovation Management, 15(1), pp. 45-62.

Chesbrough, H. (2009), Open Innovation, Harvard Business School Press, Boston.

Chesbrough, H., Vanhaverbeke, W. and West, J. (2006), Open Innovation: Researching a New Paradigm, Oxford University Press, Oxford.

Collins, J. (2001), Why Some Companies Make the Leap ... and others don't. Good to Great, Random House Business Books, Sidney.

Conway, S. and Steward, F. (2009), Managing and Shaping Innovation, Oxford University Press, Oxford.

European Union (EU) (2006), Implementing the partnership for growth and jobs: Making Europe a pole of excellence on corporate social responsibility, EU Publishing, Brussels.

Fagerberg, J., Mowey, D. and Nelson, R. (2006), The Oxford Handbook of Innovation, Oxford University Press, Oxford.

Fink, M. and Kraus, S. (eds.) (2009), The Management of Small and Medium Enterprises, Routledge, New York.

Gloor, A. (2006), Swarm Creativity. Competitive Advantage through Collaborative Innovation Networks, Oxford University Press, Oxford.

Gu, J., Nakamori, Z., Wang, T. and Tang, X. (eds.) (2006), Knowledge and Systems Sciences, A Paper Presented at KSS2006, Global Link, Hong Kong.

Hebert, R. and Link, A. (1989), In Search of the Meaning of Entrepreneurship, Small Business Economics, March, pp. 39-49.

Huston, L. and Sakkab, N. (2006), Connect and Develop: Inside Procter & Gamble's New Model for Innovation, Harvard Business Review, March, pp. 1-9.

IBM (2006), The Global Innovation Outlook, IBM, Armonk.

Katz, R. (ed.) (2003), The Human Side of Managing Technological Innovation, Oxford University Press, Oxford.

Kelley, D. (2009), Adaptation and Organizational Connectedness in Corporate Innovation Programs, JPIM, 26(5), pp. 487 – 501.

Kuratko, D. (2008), Entrepreneurship: Theory, Process, and Practice, South-Western College Pub, Cincinnati.

Lester, K. and Piore, M. (2004), Innovation - The Missing Dimension, Harvard Business Press, Cambridge.

Leydesdorff, L. (2006), The Knowledge-based Economy, Universal Publishers, Boca Raton.

McGregor, J. (2006), The World's Most Innovative Companies, BusinessWeek, April 24, pp. 63-74.

Meyer, M. (2008), How Honda Innovates, JPIM, 25(3), pp. 261 – 271.

Mulej, M. (2000), The Dialectical Systems Theory, Faculty of Economics and Business, Maribor.

Mulej, M. (2007), Systems theory, Systems Research and Behavioral Science, 24(3), pp. 547-357.

Journal of Global Strategic Management | V. 4 | N. 1 | 2010-June | isma.info | 18-29 | DOI: 10.20460/JGSM.2010415836

Nussbaum, B., Berner, R. and Brady, D. (2005), Special Report, Business Week, 8/15 August, pp. 51 -68.

O'Reilly, C.A., Chatman, J. and Caldwell, D. (1991), People and organisational culture: a profile comparison approach to assessing person-organisation fit, The Academy of Management Journal, 34 (3), pp. 487-516.

Potocan, V. (2005), Efficiency or effectiveness, Organization, 38(10), pp. 570-576.

Potocan, V. (2008). Why we need trust in organization? In: Issues in Global Research in Business & Economics: conference proceedings of PODIM, pp. 102-115.

Potocan, V. and Mulej, M. (2007), From an institutional transition to a real one into an innovative enterprise, Faculty of Economics and Business, Maribor.

Potocan, V. and Mulej, M. (2009), How to improve innovativeness of SMEs", Management, 14(1), pp. 1-20.

Pyka, A. and Scharnhorst, A. (2009), Innovation Networks, Springer, Berlin.

Ralston, D.A., Holt, D.H., Terpstra, R.H. and Yu, K.C. (1997), The impact of national culture and economic ideology on managerial work values: a study of the United States, Russia, Japan & China, Journal of International Business Studies, 28(1), pp. 177-207.

Rebernik, M. (et al.) (2000-2009), Global Entrepreneurship Monitor – GEM, FEB, Maribor.

Rebernik, M. (et al.) (eds.) (1992-2008), STIQE conferences (Proceedings), FEB, Maribor.

Rogers, E. (2003), Diffusion of Innovation, The Free Press, New York.

Schumpeter, J. (1934), The Theory of Economic Development, Harvard University Press, Cambridge.

Schwartz, J. (2006), The Magic of Thinking Big, Simon & Schuster, London.

Schwartz, S.H. (1994), Are there universals in the content and structure of values, Journal of Social Issues, 50(4), pp. 19-45.

Shane, S. (2008), The Handbook of Technology and Innovation Management, Wiley-Blackwell, New York.

Sheshimski, E., Strom, R. and Baumol, W. (2007), Entrepreneurship, Innovation, and the Growth Mechanism of the Free-Enterprise Economies, Princeton University Press, Princeton.

Yammarino, F.J., Dionne, S.D., Uk Chun, J., and Dansereau, F. (2005), Leadership and Levels of Analysis: A State-of-the-Science Review, Leadership Quarterly, 16(6), pp. 879-919.