Abstract: In accordance with the basic developmental goals of EU, expressed in the Lisbon strategy [1], Slovenia is aiming to become competitively successful state. One of the Slovenia’s goals is also to be placed among ten the most successful EU member states. Considering the governmental strategic documents on one side and the actual state of the country’s competitiveness on the other, there is the gap between Slovenia’s ambition and its competitiveness ranking among world countries. The ranking of Slovenia in The World Competitiveness Yearbook [2] shows that its competitiveness falls every year. Out of 60 world countries Slovenia was ranked on 52nd place in 2005 (in 2004 on 45th place). One of the reasons for such position can be found in insufficient innovativeness of the Slovenian enterprises.

In the paper the results of the research on innovativeness of Slovenian enterprises are presented. The cognitions show (especially for the medium sized enterprises) that the enterprises innovativeness in Slovenia is mainly concentrated in technological areas, which in our opinion is not enough for creating the needed competitiveness of Slovenia. We observe the lack of presence of integral management models in the governance and management of the Slovenian enterprises. Therefore, we see the MER Model of Integral Management as possible contribution in changing the present conditions in Slovenian enterprises. The Model, with its “innovative focus”, is applicable not only in enterprises in Slovenia but in other countries as well.
Keywords: Innovation and Innovativeness, Competitiveness, Management, Integral Management, MER Model of Integral Management, Organizational Innovation

1 Introduction

In accordance with the basic developmental goals of EU, expressed in the Lisbon strategy (2000), Slovenia is aiming to become competitively successful state. One of the Slovenia’s goals is also to be placed among ten the most successful EU member states. Considering the governmental strategic documents on one side and the actual state of the country’s competitiveness on the other, there is the gap between Slovenia’s ambition and its competitiveness ranking among world countries. The ranking of Slovenia in The World Competitiveness Yearbook [2] shows that its competitiveness falls every year. Out of 60 world countries Slovenia was ranked on 52nd place in 2005 (in 2004 on 45th place). One of the reasons for such position can be found in insufficient innovativeness of the Slovenian enterprises.

In the first part of the article the cognitions of the research on innovations and innovativeness of the Slovenian enterprises are discussed [3]. The cognitions indicate (especially for the medium sized enterprises) that the enterprises innovativeness in Slovenia is mainly concentrated in technological areas, which in our opinion is not enough for creating the needed competitiveness of Slovenia. We observe the lack of presence of integral management models in the governance and management of the Slovenian enterprises. There is no doubt that the basic condition for achieving the higher level of enterprises competitiveness is the holistic and innovative governance and management of enterprises. Several models of integral management have been developed worldwide [4].1 In the article we argue the importance of MER Model of Integral Management, which can, due to its “innovative focus” and holistic approach, help in achieving higher level of competitiveness of enterprises. As such the Model is applicable not only in enterprises in Slovenia but in other countries as well2.

1 More on this topic you can find in Belak, Duh, 2004.

2 We thank Prof. Dr. Stefan Kajzer for his contribution in the development of the MER Model of Integral Management and for his thoughtful comments during the preparation of this contribution.
2 Innovation and Innovativeness as the Basis of “Knowledge-based Economy”

Innovation is a core stone of the »Lisbon strategy« launched by the European Council in March 2000, and emphasized by subsequent European Councils, in particular at Barcelona in 2002 [5]. Innovation is at the heart of the “knowledge-based economy” and is recognized to be a more complex and systemic phenomenon than was previously thought. Systems approach to innovation shift the focus of policy towards an emphasis on the interplays between institutions (businesses, research centres, political-decision makers), looking at interactive processes both in the creation of knowledge and its diffusion and application. It also requires the creation of synergies between different policies, such as enterprise policy, training policy and RTD policy [6].

A concise definition of innovation is »the successful production, assimilation and exploitation of novelty in the economic and social spheres« [7]. Green Paper [7] presents also a more detailed definition of innovation: »innovation is the renewal and enlargement of the range of products and services and the associated markets; the establishment of new methods of production, supply and distribution; the introduction of changes in management, work organizations, and the working conditions and skills of the workforce. « These definitions continue to be a valid basis for the EU approach to innovation policy, and are consistent with the Lisbon European Council’s perception of the importance of innovation to competitiveness.

Since it is through enterprises that the economic benefit of the successful exploitation of novelty is captured, the enterprise is at the heart of the innovation process. For enterprise, innovation is a crucial means to create competitive advantage and superior customer value. Except for certain types of technology-based enterprises, the focus is not on technological aspects of new product development, but on innovative ways to improve their positions in the market [5].

Efforts at Member States and EU-level should be supported by upgrading of knowledge on innovation, innovation systems and innovation performance, through improved statistics on innovation and through analysis. One of the current activities in this direction is the collection of data on firms’ innovation behaviour by the Community Innovation Survey (CIS), implemented via Eurostat and national statistical offices [5].

CIS is the main statistical instrument of the Union that allows the monitoring of Europe's progress in the area of innovation. The CIS creates a better understanding of the innovation process and analyzes the effects of innovation on the economy (on competitiveness, employment, economic growth, trade patterns, etc.). The CIS has been carried out for the first time in 1992 and since 2002 it has become a major data source of the European Innovation Scoreboard. The methodological basis of the CIS is provided by the Oslo Manual, joint publication of Eurostat and
the OECD. Data collection is done by the statistical offices or competent research institutes in the Member States. Oslo Manual is currently under revision in order to account for new orientations of European innovation policy.³

In Oslo Manual and consequently in the CIS the technological innovations are in the centre. Besides technological innovations it is widely recognized the importance of non-technological innovations to the economic performance of firms. According to the definitions in the Oslo Manual, two major types of innovation should be distinguished:

A. Technological product and process (TPP) innovations comprise implemented technologically new products and processes and significant technological improvements in products and processes. A TPP innovation has been implemented if it has been introduced on the market (product innovation) or used within a production process (process innovation). TPP innovation can be broken down between product and process, and by the degree of novelty of the change introduced in each case:

A technological product innovation is the implementation/commercialization of a product with improved performance characteristics such as to deliver objectively new or improved services to the consumer.

A technological process innovation is the implementation/adoptions of new or significantly improved production or delivery methods. It may involve changes in equipment, human resources, working methods or a combination of these.

B. Non-technological innovations are:

Organizational innovations⁴ which include the introduction of significantly changed organizational structures, the implementation of advanced management techniques and the implementation of new or substantially changed corporate strategic orientations.

Other changes in product and processes are changes which are insignificant, minor, or do not involve a sufficient degree of novelty or make “other creative improvements”.

Another classification of innovations used within EU is that between [5]:

Technological innovation, covering innovation derived from research;

³ Http://www.cordis.lu/innovation-smes/src/cis.htm
⁴ In the Annex 2 to Oslo Manual this type of the non-technological innovations is defined as to be organizational and managerial including following innovations: the implementation of advanced management techniques (e.g. TQM, TQS), the introduction of significantly changed organizational structure and the implementation of new or substantially changed corporate strategic orientation.
Organizational innovation, which reflects the recognition that new ways of organizing work in areas such as workforce management, distribution, finance, manufacturing etc., can have a positive influence on competitiveness. This term may also include business model innovation.

Presentational innovation is beginning to be used as a comprehensive term to cover innovation in areas such as design and marketing.

3 Innovations and Innovativeness in Slovenia

3.1 Strategy of Slovenian Economic Development and Competitiveness of Slovenian Enterprises

The Lisbon strategy is about improving the EU members states competitiveness in high added value products and services and more generally about securing Europe’s place on world markets by moving up the ladder of innovation, technology and productivity to become "the most competitive and dynamic knowledge-driven economy by 2010" [1]. By focusing on policies it aims to create the conditions that will allow sustaining an average of 3% growth per year by 2010.

The fundament of Lisbon strategy is the awareness that Europe’s success depends on the competitiveness of its companies as well as on the efficiency of its economic and social systems to generate sustainable economic growth, employment and social cohesion. We can shell out the key elements of the concept of competitiveness in a sound macro economic environment embraced in Lisbon strategy [8]:

Innovation, which implies:
innovation in products as well as processes in high performing workplaces,
making an efficient use of resources by focussing R&D efforts on products, activities and processes opening up real prospects for economic growth and by exploiting the possibilities of European synergies,
promoting entrepreneurship and entrepreneurial spirit across society,
sound industrial relations in innovation processes.

Employability, which implies:
active labour market policies promoting a balance between flexibility and security with well functioning employment services,
the promotion of life long learning to improve competences and qualifications,
availability of quality childcare and transport infrastructure to allow people to participate in the labour market.

Efficient social protection systems, which:

promote employment and facilitate mobility,

help workers to accept and be able to cope with change,

are financially sustainable.

**Environmental** policies striking the right balance between long term benefits and short term costs, which implies:

promoting eco efficient and energy saving technologies,

making extended impact assessment of policy proposals.

A supportive public environment, with

better regulation,

no distortions of competition,

high quality services and infrastructure.

Sound **macro economic** policies, with an adequate interplay between

sound fiscal policies consistent with a stability and growth pact promoting counter cyclicalty,

monetary policy primarily ensuring price stability and, without prejudice to this objective, supporting the general economic policies in the Community with a view to contributing to its objectives of a high level of employment and of social protection, sustainable noninflationary growth, a high degree of competitiveness and raising the standards of living as stated in Article 2 of the EC Treaty,

wage policies autonomously set up by the social partners and with real wage developments consistent with productivity growth.

On a basis of the Lisbon strategy and the competitiveness elements the Strategy of Slovenian Economic Development was developed [9]. The main purpose and the goals of the Slovene Strategy are to improve the economical and social as well as Slovenian environmental development in comparison to more developed EU member states. In a frame of economical development the Strategy tries to ensure the improving of the GDP and consequently the reduction of differences in economic development compared to the other EU member states. This should be achieved by enterprises’ internationalization, innovative behaviour in all phases of production process and by developing the new information-communication technologies. Therefore the main priority of the national policy is to improve the competitiveness and innovativeness of the economy as the key element for the
successful adoption to the technological changes as well as to the changes in the world markets [9].

According to the importance of knowledge, innovativeness, positive use of information, organization, management, etc. the Slovene Strategy points out the human (human capital) and the social relationships (social capital). It tries to ensure improved development of the social safety as well as to emphasize the importance of the social society instead of social state (government) [9].

In a frame of environmental policy the Strategy promotes its use in accordance with the sustainable development and welfare creation [9].

However, after 2001 when the Strategy of Slovenian Economic Development was published, we can observe the results of the Strategy guidelines, which ambitions were to lead Slovenia in upper part of the leader measuring the world countries’ competitiveness. The World Competitiveness Center, which is the publisher of the World Competitiveness Yearbook, used different competitive factors to make The World Competitiveness Scoreboard 2005 [2]: ECONOMIC PERFORMANCE (Domestic Economy, International Trade, International Investment, Employment, Prices), GOVERNMENT EFFICIENCY (Public Finance, Fiscal Policy, Institutional Framework, Business Legislation, Societal Framework), BUSINESS EFFICIENCY (Productivity, Labour Market, Finance, Management Practices, Attitudes and Values), INFRASTRUCTURE (Basic Infrastructure, Technological Infrastructure, Scientific Infrastructure, Health and Environment, Education).

In a population of 60 observed world countries, Slovenia was ranked on 52nd place in 2005, taking into consideration the competitiveness of the countries, measured with the above mentioned factors. Even more concerning is the fact that in a time period of one year Slovenia aggravated its position for seven places (45th place in 2004). Considering the fact that in a knowledge based economy the key success and competitiveness factor is innovativeness we can clearly conclude that the Slovene Strategy’s guidelines were not realized carefully enough or have not been realized till now.

### 3.2 Innovativeness of Slovenian Enterprises

In Slovenia, one of the leading academics in the field of innovation prof. dr. M. Mulej has developed the typology of innovations twenty years ago. The author

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5 Some other researchers working on topic of innovation: Maja Bucar, Franc Mali, Marjan Kavas, Klemen Koman, Alja Brglez, Mico Mrkaic, Mateja Drnovsek, Patricia Kotnik, Rado Pezdir [11], Leskovar-Spacapan G. [12], Bastic M. [13], Pivka M. [14], Ursic D. [15], Potocan V. [16], Jaklic M., Stanovnik, Udovicic, Socan L., etc.
argues in his recent research [10] that we are still not aware of different forms (types) of innovations. Mulej defines the following types (forms) of innovations (and inventions):

A. Regarding the content of innovations (inventions) the following types of innovations can be distinguished:

*Program innovations* – introduction of a new product which is well accepted by the customers.

*Technical and technological innovations* – these innovations improve products and production processes.

*Organizational innovations* – introduction of new organizational forms of work and cooperation. Such innovations include: human relationships, human resources management, learning organization, TQM etc.

*Managerial innovations* – introduction of improved relationships between managers and subordinates; new styles of management which encourage and activate all employees in order to make work organization a collective resource of innovation.

*Methodological innovations* – introduction of new methods of management and cooperation which support managerial innovations in realization.

B. Regarding the consequences the following types of innovations can be distinguished:

*Radical innovations* – significant (and useful) changes in a firm.

*Incremental innovations* – innovation which proceed as a series of small steps. Such innovations are very important especially from sociological and psychological viewpoint since their author can be almost everyone.

C. Regarding the official duty to innovate:

*Inside* – among inside innovations are those which are carried out and done by people in their working place.

*Outside* – are innovations created by the employees in areas for which they are not directly responsible.

Each innovation (and invention) has one of the characteristics defines under A, B, and C. In practice the innovations which are characterized by the combination (1), (1), (1) are the most risky but also the most profitable.

Mulej [17] and Kroslin [18] argue that these definitions of innovations are useful when we are talking about encouraging the innovation-invention processes within
the firms, but are difficult to use in empirical researches (surveys). Therefore surveys are very often concentrated on those types of innovations for which the measurements problems do not exist. This is especially true for technological product and process innovation. In different analysis are very often omitted small improvements in work procedures (which represent according to some estimates about 70 per cent of all innovations) and other non-technological innovations (management, organization, methods of work and coordination).

According to Mulej the organizational innovation is the introduction of new organizational forms of work and cooperation. Such innovations include: human relationships, human resources management, learning organization, TQM etc.

According to Oslo Manual organizational innovations are defined as the introduction of significantly changed organizational structures, the implementation of advanced management techniques and the implementation of new or substantially changed corporate strategic orientations. As such this definition is broader than the one developed by Mulej.

The classification of innovation (and invention) proposed by Mulej was used in the empirical research done by Kroslin [18]. The survey was based on the classification of innovations (and inventions) done by Mulej and on the adjusted Community Innovation Survey (CIS3) EU. The objectives of the empirical research were as listed below:

to define the invention-innovation potential of Slovene enterprises
to estimate the share of active innovative Slovene enterprises and compare it to EU
to test some new innovation indicators
to find out if the innovative enterprises are more successful enterprises as well.

The research was made on the population of 117 medium-sized enterprises. The original research aim was to divide medium-sized manufacturing enterprises on innovative active enterprises (IA), which carried out various innovation activities, on innovative non-active enterprises (IN), on innovative enterprises (I), which were able to create innovations, and on non-innovative enterprises. For the innovation classification in the research was used the similar criteria as in the research Community Innovation Survey (CIS3) EU, only that the broader typology and slightly different questions were used. The research showed that in Slovenia we had 99% of innovative active (IA) and 97% of innovative (I)

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6 Medium-sized enterprises were defined as those with 50 to 249 employees.

7 These are enterprises classified according to the Standard Classification of Activities (SKD) into the manufacturing activities (SKD D) corresponding to NACE D.
enterprises. Further also the complete adoption of the research typology and questions to the CIS3 showed no bigger differences in the research results.

As innovative enterprise was defined any enterprise which has in the previous years (2002-2003) carried out at least one of the improvements or innovations listed below, which were by the end of year 2003 perceived as successful (in their own perception):

- new products/services
- improved already existing products or services
- new national or international markets or market segments
- improved/new production processes and new equipment and machinery
- improved/new processes or supply sources (material, finance, or other sources)
- improved/new sale or marketing processes
- new management styles or techniques
- improved/new structure, organizational processes or working conditions
- new cooperation and working methods of employees

The research cognitions showed that in the last two years 79% of examined enterprises successfully introduced the improvements of already existing products or services and 74% of examined enterprises successfully introduced the new products or services. The examined enterprises were least successful in introduction of new working and cooperation methods of employees, sale and marketing processes, and styles of management. The cognitions also showed that enterprises put the lowest rate of effort to these last but most important areas of successful business operation and to the organizational innovation as one of the important competitiveness elements.

4 MER Model of Integral Management: It’s Contribution to the Innovativeness of the Slovenian Enterprises

In our opinion there are several reasons for the unexpected decrease of the competitiveness of Slovenia. Discussions at various levels have already been trying to give answers on reasons and measures, which would improve the present conditions (e.g. discussion Strengthening the Competitiveness of Slovenia in the
We are convinced that several complex researches will be made in the next couple of months, which will try to explain the reasons and give the basis for taking further measures. Therefore we do not dispose with the holistic scientific and professional cognitions regarding this issue during the preparation of this contribution. However, based on different political, scientific and professional discussions, we can conclude that one of reasons for the low level of Slovene competitiveness is also in (un)innovativeness of the enterprises. General opinion is that Slovenian enterprises are not innovative enough. We can add that Slovenian enterprises are not innovative enough in all necessary areas – their innovativeness is not holistic! The various research cognitions indicate (especially for medium sized enterprises) that Slovenian enterprises’ innovativeness is mostly focused on technological innovations, which in our opinion is not enough for the creation of the needed competitiveness.

In our opinion the reasons for such conditions in Slovenia can be found in low level of innovativeness and integration of enterprise’s governance and management. In Slovenian enterprises the innovatively oriented models of integral management are rarely used [21]. The already described researches showed that less than 20% of such management models were used in the research population. There is no doubt that the holistic and innovatively oriented enterprises governance and management is the basic condition for achieving a higher competitiveness level. Several models of integral management have been developed worldwide. Since all these models have been developed in the last few years, they are all oriented toward the promotion and realization of the innovativeness. In the article we argue the importance of MER Model of Integral Management (see the figure below), which was developed in Slovenia with the great support of knowledge from abroad.

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8 The discussion was organized in Slovene President’s house, where selected country’s top politics, economists and specialists participated.

9 The quoted research cognitions from previous years can be supported also by newer research cognitions.

10 Some of them were presented at MEB 2004 [22].

11 e.g.: St.Gallen Management Model [23], Hinterhuber’s Model [24], Kralj’s Model [25], etc.

12 For more detailed description of MER Model of Integral Management see: Belak J. and co-authors 2003 [26]; MEB 2003 [27], MEB 2004 [28], [29], [30], [31], and Jubilee Conference Budapest Tech 1879 – 2004 [4].
The MER Model is oriented at the promotion and realization of the enterprise’s holistic innovativeness:

In the MER Model the innovativeness is integrated in culture, philosophy and ethics of an enterprise; the enterprise’s innovative functioning is one of the most important ways of achieving its credibility.

The above stated is also true for entrepreneurship and synergy as the key success factors of the enterprise. The entrepreneurship is even based on the innovativeness; the synergy is on the other hand the basis for the innovative functioning of an enterprise. The innovativeness is necessary in almost all realizations of positive synergy effects. The Model enables the last also for the ecological dimension of enterprise’s functioning.

The innovativeness in the MER Model is not limited on one part of enterprise’s activities and processes – it is understood holistic and should be present in all
three enterprise’s sub-processes (basic, information, and management) as well as in all areas of enterprise’s functioning.

The MER Model enables (and requires!) the innovativeness at all hierarchical levels of the management process (political level, strategic management level and operational management level). It enables and requires the innovativeness in enterprise’s vision, mission, purposes and basic goals, strategies, in acquiring the needed resources for realization, in their strategic evaluation and allocation as well as in distribution of the operational tasks. Therefore the innovativeness is necessary (and possible) in planning and organizing as well as in directing, in realization itself and in controlling. The innovativeness is necessary (and possible) in preparation of information, in decision making as well as in undertaking measures, and in realization of the – with measures defined – further steps (which is already part of the basic process).

Institutionally all stakeholders are responsible and competent for enterprise’s innovativeness – every stakeholder at his process level; the owners and all other members of enterprise’s governance are responsible for the innovativeness of enterprise’s vision and policy; the management is responsible for innovativeness of enterprise’s strategies and operation.

Therefore in the MER Model the innovation management is not considered as a sub-system but as its partial system. This means that the innovation management should be present in the entire enterprise: in all processes, institutions, methods and in other instruments. Simply said, this means: “Function and operate innovatively always and everywhere”.

We are concluding our paper with the thought that the described MER Model of Integral Management is applicable not only in enterprises in Slovenia but in other countries as well.

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