VIRTUAL IDEA MANAGEMENT PRODUCTS: USE AND POTENTIALITIES

Elina Mikelsone
BA School of Business and Finance, Riga, Latvia
e-mail: elina.mikelsone@ba.lv

Elita Liela
BA School of Business and Finance, Riga, Latvia
e-mail: elina.mikelsone@ba.lv

Abstract
Purpose- on the basis of VIMP, its application analysis, the situation with the innovative solution development tendencies and VIMP perspective assessment in Latvia, to develop a basic VIMP application model and make suggestions on VIMP application and its enhancement in Latvia.
Design/methodology/approach- research is based on both, theoretical and empirical research methods, which include literature review, the interviews with experts and the survey results of 1111 respondents**,** the data analysis of 20 VIMP, 20 case studies of VIMP use globally and in Latvia, as well as an overview and data analysis of two main Latvian VIMP producers.
Findings- the results of the research show that in basic VIMP application model and its elements there is interest which is strictly determined by its role and aim, but to make the process more successful the choice of VIMP is to be based on 20 factors. There is a perspective application of VIMP in all sectors and it can be enhanced by not only VIMP representatives, but also academic, public and private sector.
Practical implications- the results of the research can be used by organizations from academic, private and public sectors (potential researchers, users or VIMP supporting organizations).
Originality/value- the research emphasizes the basic application model of VIMP and suggestions on how to apply VIMP more effectively and how to enhance its application.

Keywords- Innovation tools, Innovative solution development, Idea management, Virtual idea management products, Virtual, Networking
Paper type- Research paper

1. INTRODUCTION

In the world there is an obvious, gradual shift to knowledge based society model (Karnitis, 2006) and due to that, development of information society significantly changes production, economic, social and legal processes as well as the role of an individual in a society (Rifkins, 2004). The transition to knowledge based economy has also started in Latvia, which was initiated by Lisbon strategy and later was followed by Europe 2020 strategy (Ministry of Economy, 2012). These changes have also become more important because there is attention paid to immaterial resources (Shukla, 1997). Application of immaterial resources - intellectual capacity and innovative activity, determines the shift to a new economic era (Archibugi et al. 2002). Successful and effective enterprises start recognizing that the basis of growth and success is knowledge, its development and application (Straples et al, 2011), which coincides with the essence of information society – gaining more benefits from information, knowledge and information technology application (Vitols, 2006), as a result there is a rise in necessity of the tools, which can ensure it (Oster, 1999). One of such IT novelties which help to get, create and apply knowledge and develop innovative activity is virtual idea management products, which comprise systematic process – idea generation, evaluation and development, that helps the best ideas turn into real innovations, as a result becoming the most topical modern tool in the new era.

The problem of the research- ongoing changes in the world put the central focus on beneficial application of knowledge and information. Such focus makes virtual innovation solution development tools a crucial mean in optimal use of knowledge and information, because information technologies and their tools are among the elements which enhance innovation process (INSEAD, 2012). Different innovation solution development tools that help to apply knowledge are

widely described in researches, but there are much fewer virtual products that can ensure functions. In Latvia, in comparison with other countries, the internet technologies and the opportunities they provide are not used to a full extend which is shown by global innovation index research, where, although Latvia generally takes the 31st place, in the most important figures connected with the internet technology opportunity application to create innovation, Latvia occupies only the 72nd place. In the figure connected with its integration in company activities, such as creating virtual orders and so on, it is only in 92nd place (INSEAD, 2012). Firstly it is important not only to overview idea management products and their application tendencies, but also to make recommendations on successful application of such products. Secondly, in the world virtual idea management product (VIMP) application has already become an integral part of company innovation culture, but in Latvia virtual idea management products are applied at a comparatively low level. So, it is important to overview opportunities which application of these products can enhance in Latvia both in idea management enterprises and among academic, private and public sector representatives.

The aim of the research- on the basis of VIMP and its application analysis, innovative solution development tendencies and VIMP perspective evaluation in Latvia, develop VIMP application basic model and make suggestions on VIMP application and its enhancement in Latvia.

To achieve the aim the following enabling objectives have been formulated:

(1) To summarise theoretical materials and scientific literature on innovative solution development tools and VIMP;
(2) To compare 20 most popular VIMP according to 5P method;
(3) To develop VIMP application situation analysis in Latvia describing leading enterprises - "Stakeholde.rs" Ltd and "Ludere" Ltd, determining companies' characteristics and application areas where VIMP was applied more often. Research period January, 2011- November, 2012;
(4) To analyse 20 VIMP application cases in different sectors (public, private, academic) in Latvia and abroad;
(5) To develop VIMP application basic model for VIMP successful application;
(6) To conduct survey of 1111 people (chosen randomly) at working age (with work or apprentice experience in Latvia) on innovative solution development experience and their opinion on virtual idea management product perspective;
(7) To conduct three expert interviews;
(8) To describe the situation of innovative solution development tendencies and VIMP perspectives in Latvia, as well as to make suggestions on VIMP application and promotion within the frames of *ICT Triple Helix* model.

Idea management systems, products and their efficiency in different countries and different spheres were widely researched (Bothos et al., 2009) (Franke, 2003) (Franke, 2004) (Walcher, 2007) and the results obtained give the possibility to use them while researching virtual idea management product use and potentialities.

Research restrictions – in Latvia and abroad there is no single idea management definition. At the moment, there are only two VIMP developers in Latvia, but all VIMP available in Latvia are viewed as potentially possible to apply.

2. INNOVATIVE SOLUTION DEVELOPMENT TOOLS AND VIRTUAL IDEA MANAGEMENT PRODUCTS (VIMP)

Innovation is considered as one of central elements in creating base for knowledge economy, so different sector representatives are searching for sophisticated approaches to make innovation process more effective. In the 21st century, modern researchers focus on the ways of getting knowledge, its creation and application. Knowledge as an important element of a company has been emphasized by researchers T. Devenport and L. Prasec, who define it as a company asset, which requires continuous investment and support (Bounfour, 2005), P. Draker points that knowledge

becomes the only competitive advantage (Dawson, 1996). While shifting to knowledge based economy, a new notion has emerged – the company that controls existing knowledge, creates it systematically and continuously and applies it in its activities (Shukla, 1997). It results in the necessity for intellectual resources and their application motivation tools (Oster, 1999). One of such innovation resources is company employees and the parties involved (Goyal et al., 2007). Because of this, company's human resources are taking a more important role as innovation and idea management developers and promoters. Generation, evaluation and development of ideas require special methodologies to make the process more effective (Bothos et al., 2012). Therefore, nowadays the view that idea can be generated not only inside the company, but also outside it, is becoming topical. Such targeted knowledge flow process management accelerates inside innovation, but it is more crucial to ensure the flow of virtual tool application. Different virtual tools in innovation processes start playing an important role (Nelson et al., 2001). They ensure a new type of cooperation and innovation process activities without geographical borders (Dahlaher et al., 2010). A lot of organizations start using such virtual tools because they help to ensure requirement for inner and outer knowledge resource application to create innovation. One of such methods is VIMP application which is used by many well known companies, for example, by *Adidas, Henkel, IBM, Bombardier, Cisco Dell, 3M, Spar, Detecon, Google, Lego, Toyota, BMW, Melitta, Microsoft, Starbucks, Ideo, Samsung, Rocher, Tchibo*-is applied to involve their customers and employees in innovation processes (Roebuck, 2011) with the aim to enhance idea development.

In the world new tools for innovative solution development are emerging, by means of which one can ensure fulfilling different functions, starting from idea generation to concept, product and system launch in reality. These tools help organizations to develop competencies, technologies, ideas and concepts, transferring them into innovations (Mikel, 2012). Majority of these tools have been developed in the last decade (Tidd, 2001), (Phaaletal., 2006), for example, some of them ensure creativity enhancement (DeBono, 1999) (Kristensen, 2004), knowledge management (Nevoetal., 2007), intellectual capital management (Rivetteetal., 2000), open innovation realization (Chesbrough, 2003), (Dahlaheretal., 2010), but during the same period new solutions have been developed, such as virtual idea management products (VIMP).

VIMP are tools that comprise systematic process, idea generation, evaluation and development, which helps the best ideas turn into real innovations. VIMP development started in the beginning of 1990-ies, when the first VIMP were created ("passive" VIMP or products which offer to get suggestion boxes based in electronic environment, without additional evaluation or topic division opportunities), eventually VIMP market developed and in about 2005 the first "active" VIMP were created, which provided support for more effective idea management or the opportunity to submit, evaluate and develop ideas. At the moment, "passive" VIMP spread simultaneously with "active" VIMP or promotion of "passive" VIMP has stopped because "active" VIMP have become more effective and give more benefits to their users.

3. VIMP OFFER AND APPLICATION ANALYSIS

In 2013 VIMPs were distributed by more than 50 companies, including two of them in Latvia. Researching the offer, it was concluded that VIMP market in Latvia is at its introduction, but in the world - at its growing stage. It was concluded that, according to Porter five force model, in 2012 competition core in Latvia was fairly low, new comer threats were fairly high, replacement threats were average, supplier bargaining power was fairly high, but customer bargaining power was average, but in the world competition core was average, new comer threats were average or fairly low, replacement threats were average, supplier bargaining power was average, but customer bargaining power was average or fairly low.

3.1. TWENTY VIMP COMPARISON AND VIMP APPLICATION ANALYSIS IN LATVIA

Summarizing the information on twenty VIMP according to "5P" method, it was concluded that although VIMP is universally applied for different solutions by different users, there are factors which are important to assess while choosing it. In the research, 20 factors have been discovered – (1)possible idea creation sources, (2)format of questions solved, (3)idea evaluation mechanisms, (4)possibility of idea distribution into groups, (5)possibility to attach documents, (6)game mechanics, (7)awards, (8)possible award types, (9)time from order to product application, (10)idea comments, (11)process control mechanisms, (12)possibility to link to social networks, (13)language options, (14)design adjustment possibilities, (15)possibility to attach additional tools, (16)authorization possibility with social networks, (17)consultations, (18)training, (19)match of price and (20)promotion.

After the research it was concluded that, although all VIMP perform one function, they are different which gives an opportunity to find the most appropriate VIMP for every case.

From twenty VIMPs analysed, in Latvia there are only two used. Those are *Academy of Ideas* created by "Ludere" Ltd in 2011, which is used by enterprises, and organizations, and VIMP created by "Stakeholde.rs" Ltd in 2012, which is used by local authorities (in 2012 by about 9, in April, 2013 by about 25) and is aimed at getting ideas for local authority development. "Ludere" Ltd VIMP application and user characteristic are wider, so those are going to be viewed in detail (in the period from January, 2011 to November, 2012), to determine users and VIMP application. It was concluded that VIMP had been used by companies (52.8%), organizations/establishments (39.2%), but comparatively low by farmers (4%) and private customers (4%). Summarizing the results, it can be concluded that VIMP mainly was used for innovative solution development in marketing questions, but not so widely in other spheres.

The authors believe, that taking into account world practice when VIMP is used in different spheres, in Latvia as well, users should be encouraged to use those in wider range of question solution. Authors suggest that it VIMP developers in Latvia could develop interactive campaign in which determine the definite spheres where VIMP has been used successfully in Latvia and in other countries.

3.2. CASE ANALYSIS IN DIFFERENT SECTORS - IN LATVIA AND ABROAD

VIMP are successfully used in public, private and academic sectors, which proves their universal nature. In all the cases a common thread is that there are clearly determined parties, their roles, benefits and strictly determined authors' rights. In Latvia, all the opportunities provided by VIMP are not used to a full extend, for example, wide idea generator network development, because mainly society involvement is applied, not that of employees and determined groups (partners, customers, and so on). Abroad, VIMP application has become a part of company's corporate culture and the authors foresee that this tendency will also develop in Latvia since company managers are searching for process management types which would not be resource consuming (human resources, financial resources), but would be creative and ensure effective activity results. In private sector, both in Latvia and abroad, there are many successful VIMP application examples at enterprises. *Academy of Ideas* products have been used by many companies - "Prakse.lv" Ltd got ideas for virtual practice at enterprises, "Laima" plc. and "Pure Chocolate" Ltd have developed product and marketing campaign ideas, "Pareiza kimija" Ltd ideas for events, "Birojnica" Ltd for different improvements and so on. Abroad, there is a tendency to apply VIMP independently, for example, within a year "Bruce Power" Ltd. increased its profit by 12% using *Idealink Open* product.

In public sector as well, there are successful examples both in Latvia and abroad. The product of "Stakeholde.rs" Ltd has helped to create innovative solutions for local authorities (Iļjinska, 2013). VIMP *Academy of Ideas* created by "Ludere" Ltd in 2012 was used by Latvia's Ministry of

Environmental Protection and Regional Development on six different occasions, for example, to promote remigration of citizens of Latvia. Outside Latvia, *Idealink Open* products have been used by both International Olympic Committee and Ontario public authorities, which used VIMP for cost reduction ideas and lay the grounds for business incubator (Brain Banking Inc., 2012a).

In academic sector there are also a few cases of VIMP application. There is no such example in Latvia, but in US Duke University applies *Web Board* products for inner purposes (AKIVA, 2013).

4. BASIC APPLICATION MODEL DEVELOPED ON RESEARCH RESULTS

On the basis of theoretical aspects, VIMP offer and application research, VIMP basic application model has been developed, parties involved have been identified as well as application process basic elements. In the model, the main VIMP application involved elements are VIMP, users, idea creators (sources). In the model, a simplified VIMP application process is reflected. It includes product choice element as an essential factor. In the model, according to VIMP choice, three most essential elements of VIMP application process are presented; VIMP practical application to develop a definite solution, process closing and benefits (its evaluation, identification). The model is shown in Figure 1.

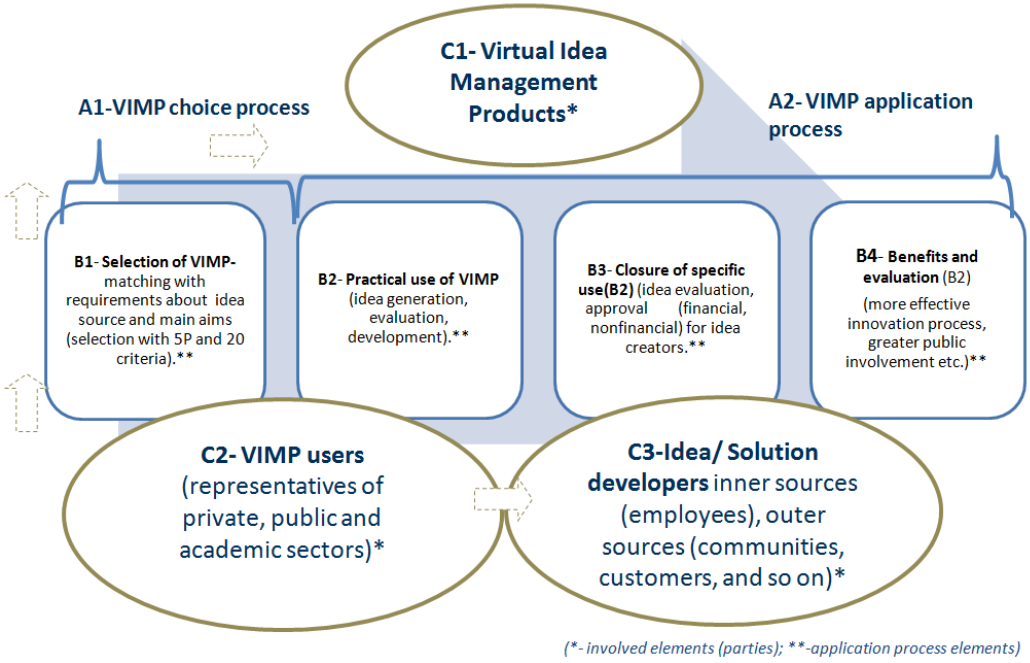

Figure 1. VIMP basic application model
Source: Developed on the basis of Marjanovic, 2012

In the application model there are three important elements or parties involved, they are VIMP (C1); VIMP user (C2); idea/solution creators (C3). For C2 or VIMP user it is essential to choose the most appropriate C1 or VIMP, by means of which to get the best results from the process or C3 to create the idea, evaluate and develop it. The research results show that the elements involved in the application model have to be interested in the result and with strictly separated roles and determined objectives (this process fits A1). Therefore one of the most essential stages is A1 (or B1) – VIMP choice, which in its turn if realized successfully provides effective application process (A2 or B2-B4). At stage A1, the author suggests VIMP evaluation against twenty factors (see Chapter 3.1.). From twenty factors mentioned in Chapter 3.1, it is the most important to draw attention to the sources involved, or, in other words, it is essential to identify participants. The most successful cases of analysed VIMP application showed that there were always clearly determined parties in them. It is also important to identify roles of the parties involved and their benefits. A1 stage is followed by A2 stage or VIMP application stage, in which the first process element is B2-VIMP

application (idea creation, evaluation, development). This process is going to be successful if B1 stage has been fulfilled successfully. It is followed by a not less important stage element B3-closing (the best idea evaluation, acknowledgement (financial, non-financial) to idea creators. It is possible to enhance by means of appropriate choice of VIMP, which includes award (financial, non-financial) possibilities. It is also possible for the company to realize it by means of additional activities, for example, awards for the best idea author, and so on. A closing stage is B4-benefits and their evaluation (more effective innovative process, high society involvement, wider market, and so on). In its sense this stage shows how effective the previous process has been run (B1-B3).

4.1. POSSIBLE BENEFITS OF APPLICATION

On the basis of VIMP and VIMP application analysis, possible VIMP benefits have been determined. As the main benefit it should be mentioned that VIMP offers new cooperation opportunities both for inside and outside idea creators. All the ideas created are kept for years, which gives an opportunity for new market penetration, income increase and cost reduction. A full list of benefits and beneficial parties is presented in Table 1.

Table 1

Benefits from VIMP application

	Benefits	Beneficiaries
Economic	Income increase.	Virtual idea management product users (representatives of public, private, academic sectors)
	Cost reduction.	
	The ideas created are kept and wait for the best moment for their realization.	
	New cooperation opportunities (with inner, outer idea creators).	
	New market penetration (new products and so on).	
	Possibility to involve people from other countries.	
	Opportunity to accelerate the processes (get the ideas quickly).	
	Opportunity to develop competitive advantage.	
	Opportunity to involve all level and structure employees in idea management, opportunity to create "combination chemistry".	
	Opportunity to involve experts who comment or develop ideas.	
	Increase in employees' loyalty (evaluate and apply more extensively their potential).	
	Increase in customer loyalty (by involving those in idea creation, by showing that their opinion is important. If employees create the ideas, then customers get better final product).	
Social	Opportunity to influence final product/service/overall development and so on (if the society is involved in an idea creation process).	Society
	Idea evaluation from other idea creators, possible acknowledgement (if the society is involved in an idea creation process).	
Technical	Opportunity to cooperate effectively with people who live in different time zones and on different continents.	Virtual idea management product users (representatives of public, private, academic sectors)
	Attractive virtual environment for idea creation.	

The authors concluded that VIMP application offers economic and technical benefits in every sector. They are also beneficial for the society, since it is involved in idea creation processes.

4.2. MAIN APPLICATION HURDLES AND OVERCOMING THEM

It is important to identify not only benefits of VIMP application, but also possible hurdles and problems while applying VIMP. The authors have researched them and have analysed those in Latvia by means of interviews and surveys, as well as developed the main application hurdle and its description of evaluation possibility. Both inner and outer factors were viewed as essentially important and the main hurdles and their elimination ways are presented in Table 2.

Table 2

Hurdles and their elimination

	Possible actions to eliminate hurdles	Responsible party
Inadequate information/ do not understand its application opportunities to a full extend	Special offers to different sectors.	Product creators.
	Informative materials – printed materials (for example, booklets on VIMP application and given opportunities), material in e-environment (for example presentations on VIMP opportunities and application and so on). To find new unusual ways to provide information to potential users and to society, for example, creating VIMP users.	
	To create "Interaction centre" in the virtual environment as a platform where the information on VIMP opportunities, application and tendencies, as well as the site which provides opportunities to cooperate with VIMP creators and share experience.	Product creators, volunteer initiatives.
	To offer consultations on VIMP, as well as include further publications on innovative solution development tools, as well as introducing into home pages the parts which explain innovative solution development tools.	Innovation support institutions.
Lack of time to acquire a new tool	To offer solutions to introduce into organizations, offering one month free trial period or the representatives who can teach and introduce VIMP. To organise training (application trials) within the frames of different seminars and sessions.	Product creators.
Seems too complicated	To use direct sales for different informative materials which would show this tool user friendliness, for example, by developing advertising 'one minute step to million ideas', where it is possible to register and get access for one minute using the resources for free or also to develop short videos to present the process.	Product creators.
Offer does not satisfy	To make regular e-surveys (sending through e-mails and placing on home page), on what improvements the users (existing and potential) need.	Product creators.
	To research VIMP offer in Latvia and around the world. To cooperate with VIMP creators with definite needs and to find out if these needs can be met and what financial investment is necessary.	Product users.
Weak cooperation between parties involved in VIMP application	To inform on successful practice examples in cooperation sphere, for example, worldwide experience which is organized in a meeting once a year to award the most active VIMP parties, and so on.	Product creators.
	To make regular meetings (real and virtual), to organize additional forum in which to share experience and suggestions to improve cooperation within the frames of VIMP application process. Possibly try to develop VIMP user community elements.	Product users.
Perception barrier (unbelieving in oneself as in one who can create ideas – as an idea creative being)	Enhance the belief in an individual as an innovation creator by means of different creative sessions, and so on, for example creating a creative CV.	Product users.
	To popularize good practice examples, for example, *Academy of Ideas* opportunity to create idea portfolio which could be seen by other interested parties and even get a job offer. To organise meetings for idea creators, to develop informative materials on idea creators and their inspiration sources, allowing to see that there are creative people everywhere starting from universities and finishing with state institutions, they are of different ages, and so on.	Product creators.
	To do research and popularise the data of the research conducted on individual knowledge and power to influence the innovations.	Academic sector.
Lack of motivation for participation	Awards (possibly additional for those involved in VIMP process, for example, money awards for the best users, and so on), feedback, which is linked directly to participation process.	Product users.
	To popularize good practice examples in VIMP application when additional motivation events are used.	Product creators.
Innovation discouraging environment	To try to create the environment to enhance creativity. To develop organization structure mechanism which supports creativity (also if ideas are unsuccessful). To research good practice examples (through the internet resources, through literature, through seminars and other sources), how innovation environment is encouraged, to choose the most appropriate ways and to realize those.	Product user.
Finance	To search opportunities and popularise financial attraction through good practice examples.	Product users. To product creators.

5. INNOVATIVE SOLUTION DEVELOPMENT TENDENCIES AND VIMP PERSPECTIVE ANALYSIS IN LATVIA

To determine the situation in idea management sphere and VIMP opportunities in Latvia, 1111 survey and expert interviews have been undertaken. Research results reflect that there is potential for VIMP application in Latvia, since both entrepreneurs and society are willing to use them. Main conclusions about innovative solution development tendencies and VIMP perspectives are presented in Table 3.

Table 3

Innovative solution development tendencies and VIMP perspectives

Factor	Situation	Comments
General type of organizations after count of generated and realized ideas	Mainly there are organizations where a small amount of ideas are generated and small amount of them are realized.	It was concluded that only 4% of organizations create a lot of ideas and a big part of those are realised. These enterprises are recognised as innovation leaders. It shows that in these companies innovation processes, including idea management, are managed well.
Habits of idea generation in organizations	There is a tendency to create ideas within the frames of the same group of people.	Well- considered idea management system is in only 4% of organizations where works respondents of survey. 52% of respondents noticed that the general idea creators in their organizations are managers or specific department.
Innovative solution development methods	There are used different types of innovative solution methods, but the most applied are brainstorming and creative thinking methods.	It is concluded that 97% of respondents had experience of innovative solution development only in real environment, but in virtual only 3%. The respondents in innovative solution development generally are involved in it at their work places and only 3% outside work. Only four respondents (of 1111) admitted that they had used VIMP.
VIMP perspective	General respondents would like that organization where they work would use VIMP.	86% of respondents pointed that they would like this tool to be used at their organizations. Previous researches show that also entrepreneurs in Latvia would welcome the use of VIMP and use it to spread business opportunities, to enhance innovation and increase loyalty level in the organization (Mikelsone, 2012, 42.lpp.). 71% of the respondents pointed that they would like to apply VIMP because this is an opportunity to develop innovation process, 57% recognise that it is an opportunity to widen their knowledge, but 55% emphasize that it is an opportunity to apply their knowledge.
Motivating factors to use VIMP	Main motivators are immaterial awards and financial rewards.	The main motivator to become involved in idea management processes among the surveyed was immaterial award (79% of respondents marked as motivating force) and financial reward (76%).
Most perspective idea generators	Company managers, cooperation partners and employees.	The most appropriate idea generating sources in the survey were stated: company managers (92% of respondents noticed as appropriate), cooperation partners (87%), employees (81%) and customers (71%). In its turn, society was considered as appropriate by 52%.
Most appropriate types of organizations to involve society in idea management	Locals and state authority institutions, private enterprises.	Research results reflect that it is perspective to involve society in idea management with VIMP by different organizations- 61% of respondents marked as appropriate state and local authority institutions, higher education institutions- 31% and 60% of respondents as appropriate appointed private enterprises. Entrepreneurs in previous research as the most appropriate VIMP applicators noticed- information technology and communication, catering and accommodation service companies (Mikelsone, 2012, 49.lpp.).

Information and communication technology influence on innovation processes is undeniable (Oladipo, 2012). Following the situation and perspective evaluation, application and opportunity enhancement evaluation in Latvia has been developed. It was concluded that VIMP application is influenced by not only market situation and product marketing, but also by public, private and

academic sector activities. It is best reflected in "ICT Driven Triple Helix Innovation Model" (CGIAR Inter-Center Working Groupon INRM, 2000), in which information technologies and society mutually influence each other because all elements can be used and can directly or indirectly influence product application, popularity and so on. The model for private sector is presented in Figure 2.

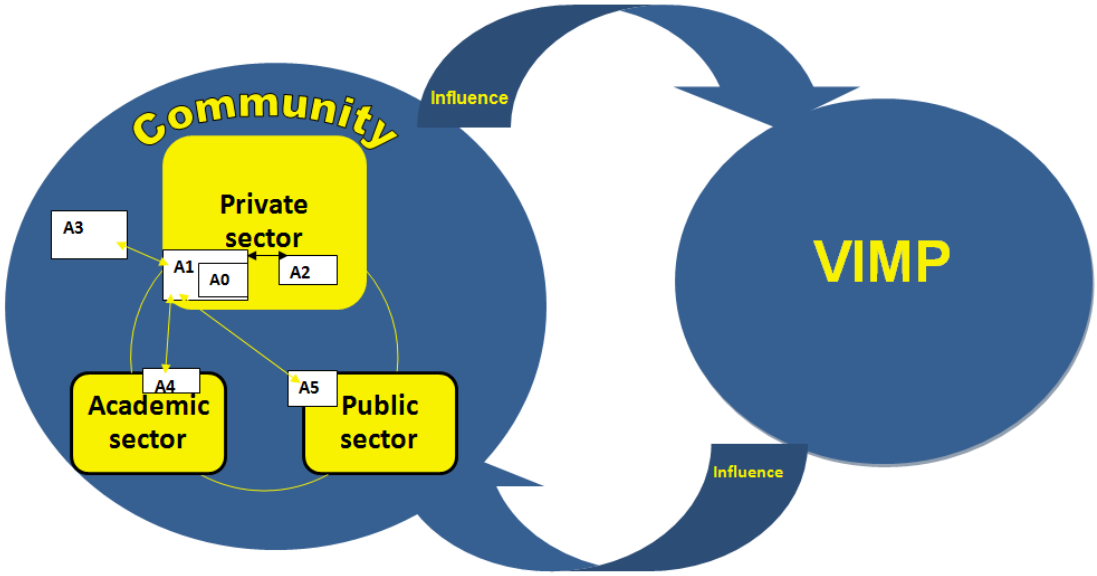

Figure 2. Opportunities to use VIMP in private sector
Source: Developed on the basis of CGIAR Inter-CenterWorkingGroupon INRM, 2000

A1→A indicates that it is possible to use VIMP inside the company as idea creator and evaluator by involving its employees. Such practice is widely spread in the world and it is becoming more and more popular in Latvia as well. A1A2 indicates that VIMP is possible to be used within sector frames, in cooperation with other sector representatives. A1A3 reflects commonly spread practice to involve society in idea management processes. A1A4 indicates the possibility to cooperate with academic sector representatives, but A1A5 with public sector representatives. The authors believe that private sector representatives have to evaluate what application opportunities are necessary to use for the company. The described sub elements show direct application opportunities between private sector representatives and definite possible idea creation source. There are possibilities and it is even advisable to develop a wider idea creation circle, for example, for a company (A1) to create ideas involving employees (A) and society (A2). There are many such possible combinations and they are different for every private sector representative who wishes to use VIMP, but the appropriate partners must be chosen. It should be emphasized that identical version is also possible in cases of public and academic sectors.

The authors have developed suggestions not only for potential application, but also for its enhancement in Latvia.

6. CONCLUSIONS

- VIMP application basis are made by three involved parties and four application process stages. The involved parties are VIMP, its user, idea/solution creators, but application process stages - appropriate VIMP choice, its practical application, application closing, benefits and its evaluation.
- The elements (parties) involved in VIMP application model have to be interested in it with clearly separated roles and determined objectives/results.
- There are potential opportunities for VIMP application in Latvia, since both entrepreneurs and society are willing to use them. Entrepreneurs see the opportunity to develop business,

enhance innovations in it, but the respondents-to develop innovation process, widen and apply their knowledge.

- Academic, public and private sectors can significantly influence VIMP use, by applying it both inside and outside their sector frames, and developing cooperation between sectors, enhance and promote innovative solution development tool application, as well as VIMP application.

7. SUGGESTIONS

To representatives of institutions of higher education: *to people responsible for research processes at academic institutions*: motivate academic forces and students to conduct research on VIMP and present the results, but to *faculty representatives* in programmes (on innovation, communication) to introduce topics on VIMP so that future specialists know those.

To VIMP creators in Latvia (''Ludere'' Ltd and ''Stakeholde.rs'' Ltd): to develop marketing strategy, including situational analysis on appropriate communication types for the parties involved to avoid wasting resources on inappropriate marketing activities; to develop personal offers to perspective customers; to found "Interaction Centre"-the platform on VIMP opportunities, application, tendencies-the site where one can contact with VIMP creators.

To VIMP users (in academic, public and private sectors): to create ideas not only within the framework of their own sector, but also to develop idea creation networks; to solve not only questions within marketing frames, but also questions concerning financing, procurement and so on.

To potential VIMP users (in academic, public and private sectors):

- To get acquainted with the developed VIMP application model, that way to understand essential factors of VIMP choice better.
- *To potential VIMP users (micro and small enterprises):* by applying VIMP to involve society in different innovative solution development, because they open opportunities to get access to additional creative resources since inner resource number within these enterprises is limited.
- *To potential VIMP users (educational establishments):* to use it for education linked solutions, as well as to draw the attention of the society to significant issues.
- *To potential VIMP users (non-governmental organizations and small enterprises):* to apply VIMP to involve a wider circle of idea creators (inner and outer), since idea creation process is not restricted by time or geographical borders.

REFERENCES

1. AKIVA (2013), ''Clients'', available at: http://www.akiva.com/Default.asp?id=1&l=1(accessed 7 March 2013).
2. Archibugi, D., Lundvall, B. (2002), *The Globalizating Learning Economy*, Oxford University Press, Oxford.
3. Bonfour, A., Edvinson, L. (2005), *Intellectual Capital for Communities: Nations Regions, and Cities*, Elsevier, Amsterdam.
4. Bothos, R., Apostolou, D., Mentzas, G. (2009) ''Information aggregation markets for community'', *Internet Research*, Vol.19, No. 1, pp. 26-41.
5. Bothos, R., Apostolou, D., Mentzas, G. (2012), ''Collective intelligence with web-based information aggregation markets: The role of market facilitation in idea management'', *Expert Systems with Applications*, Vol.39, No. 1, pp. 1333-1345.
6. BrainBankingInc. (2012a), ''Case study: IOC'', available at: http://www.brainbankinc.com/casestudy.aspx?case=ioc (accessed 7 March 2013).
7. BrainBankingInc., (2012). ''Case study: Bruce Power-Big Ideas'', available at: http://www.brainbankinc.com/casestudy.aspx (accessed 5 March 2013).
8. CGIAR Inter- Center Working Groupon INRM (2000), ''Report of the Center Directors Committee to CGIAR International Centers Week 2000'', available at: http://library.cgiar.org/handle/10947/1018 (accessed 5 March 2013).
9. Chesbrough, H.W. (2003), *Open innovation: The new imperative for creating and profi trom technology*, Harvard Business School Press, Boston.
10. Dahlaher, L., Gann, D.M. (2010), ''How open is innovation?'', *Research Policy*, Vol.39, No.1, pp 699-709.

11. Dawson, S. (1996), *Analyzing Organizations*, Macmillan Press, London.
12. DeBono, E. (1999), *Six Thinking Hats*, Brown&Company, Little.
13. Ekonomikas ministrija (2012), ''Eiropa 2020'' strategija'', available at: http://www.em.gov.lv/em/2nd/?cat=30360(accessed 7 March 2013).
14. Franke, N., Piller, F.T. (2004), ''Value creation by toolkits for users innovation and design: the case of the watch market'', *Journl of Product Innovation Management*, Vol.21, No.6, pp. 401-415.
15. Franke, N., Shah, S. (2003), ''How communities support innovative activities: An exploration of assistance and sharing among end- users'', *Research Policy*, Vol.32, No.1 pp. 157-178.
16. Goyal, A., Sampath, K. (2007), ''Institutionalizing innovation: look to employees for the next great idea'' *Ivey Business Journal*, Vol.71, No.8, pp. 27-32.
17. Iljinska, K. (2013), ''Piederigi pilsetai'', *Forbes*,Vol. 4, No.35, 37.lpp.
18. INSEAD. (2012), *The Global Innovation Index 2012*, WIPO, Geneva.
19. Karnitis, E. (2006), ''Informacijas sabiedriba- iespejas ikvienam'', available at: www.politika.lv/index.php?id=5590 (accessed 7 March 2013).
20. Kristensen, T. (2004), ''The Physical Context of Creativity. *Creativity and Innovation Management'', Vol.* 13, No.2, pp. 89-96.
21. Marjonovic, S., Fray,C., Chataway, J. (2012), ''Crowdsourcing based models: In search of evidence for innovation 2.0'', *Science and PublicPolicy*, Vol.39,No,3, pp. 309-332.
22. Mikel, Z. (2012), ''Technology Outlook as a tool for the management of innovation'', *Especial Innovation*, Vol.12,No.1, pp. 105-124.
23. Mikelsone, E. (2012), *Ideju menedzmenta tirgus Latvija: situacija un perspektivas*, Vidzemes augstskola, Valmiera
24. Nelson, R.R., Sampat, B. (2001), ''Making sense of institutions as a factor shaping economic performance'', *Journal of Economic Behaviour and Organization*, Vol.44, No.1, pp. 31-54.
25. Nevo, D., Chan, Y.E. (2007), ''A Delphi study of knowledge management. An overview of studies of innovation management'', *Technological forecasting and Social Change*, Vol.70, No.1, pp. 135-161.
26. Oladipo, O.S., Andrew O.D. (2012), ''Information and Communication Technology (ICTs) as a Tool for Innovation'', *Advances in Natural science*, Vol.5, No.2, pp 71-75.
27. Oster, S. M. (1999), *Modern Competive Analysis*, Oxford University Press, NewYork.
28. Phaal, R., Farrukh, C.J.P., Probert, D.R. (2006), ''Technology management tools: concept, development and application'', *Technovation*, Vol.26, No.1, pp. 336-344.
29. Rifkins, Dž. (2004), *Jaunas ekonomikas laikmets*, Jumava, Riga.
30. Rivette, K.G., Kline, D. (2000), ''Discovering new value in intellectual property'', *Harvard Business review*, January-February, pp. 1-12.
31. Shukla, M. (1997), *Competing through Knowledge: Building of Learning Organization*, Response Books, New Delhi.
32. Straples, D.S., Greenaway, K., McKeen, J.D. (2001), ''Opportunities for Research about Managing the Knowledge-Based Enterprise'', *International Journal of Management Reviews*, Vol.3, No.1, pp. 1-20.
33. Tidd, J., Bessant, J., Pavitt, K. (2001). *Managing Innovation*, Wiley, Chichester.
34. Vitols, A. (2006), ''Informacijas sabiedriba: veidosanas un butiba'', in Zelgalvis, E. (Ed.), *Ekonomikas un vadibas zinatne: Latvijas Universitates raksti*, Latvijas Universitate, Riga, pp.265-272.
35. Walcher, D. (2007), *Der Ideen wettbewerb als Methode der aktiven Kunden integration: eine empirische Untersuchung zu Eignung und Kunden verhalten mit Implikationen furden Innovations procezess*, Gabler, Munchen.