



Available online at www.sciencedirect.com

ScienceDirect

Procedia Manufacturing 3 (2015) 595 – 602

Procedia
MANUFACTURING

6th International Conference on Applied Human Factors and Ergonomics (AHFE 2015) and the
Affiliated Conferences, AHFE 2015

The World Innovation Stock Exchange- shared value for individuals, business and society

Evangelos Markopoulos^a, Hannu Vanharanta^{b,*}

^aEMPROSS SITC & Co, Maroussi, Athens, Attica, Greece

^bIndustrial Management and Engineering, Tampere University of Technology, Pori, Finland

Abstract

Innovation appears to be the new buzzword of the global economy, but things are not that simple. The critical questions are: What is innovation? Innovation for whom? and for what? Who can judge what is innovative, what is not, and why? Likewise, it is hard to define who is an innovator and who is not. The value of innovation is determined by the acceptance and the return it has in the society. The socioeconomic impact of innovation was and remains one of the most important issues in its definition and evaluation. What the world expects from insights, ideas and innovations are not new profit-making methods but most of all products and services with clear added value for the people, the economy and society. What the world also expects today is that a world wide web for insights, ideas and innovations could help people, companies and societies to create new added value for sustainable growth. This all means that somehow the demand and supply of insights, ideas and innovations should meet continuously and effectively on the commercial markets. The World Innovation Stock Exchange Organization (Www.InnovationStockExchange.org) is a state-of-the-art knowledge and innovation management initiative based on the concepts and theories of democratic innovation through freedom of knowledge expression. In this paper, we describe in detail how this organization operates and what kinds of possibilities it creates for people, business and society. The shared added-value created through the marketplace gives continuity to business as well as societies, based on individual capacity, skills, capability, creativity, know-how, competence, as well as different individual initiatives.

© 2015 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of AHFE Conference

Keywords: Innovation; Idea; Stock exchange; Shared value; Platform; Marketplace; Supply; Demand; Intellectual capital; Democratic, Initiative

*Corresponding author. Tel.: +358 40 826 2759;

E-mail address: hannu.vanharanta@tut.fi

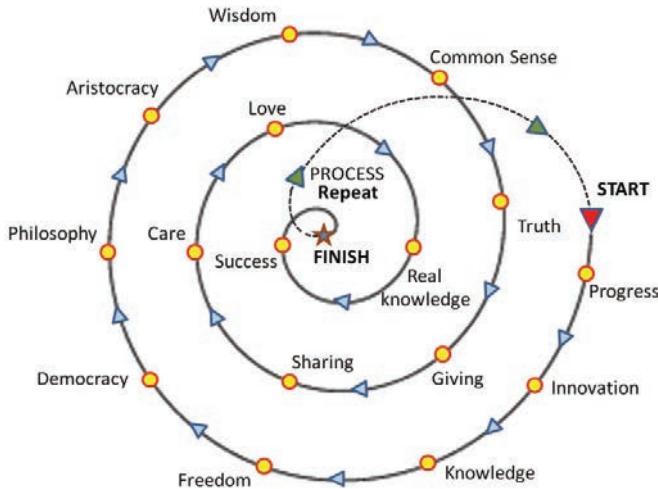


Fig. 1.The Archimedean spiral for true knowledge generation.

1. Introduction

It is said that knowledge is power, and power is freedom, in contrast to ignorance that may be characterized as slavery. Those who have knowledge are really free not only to reach for the truth but also to create through truth. Today, knowledge is the most democratic source of power. A society that fears knowledge is a society that fears itself. The worst enemy of knowledge is not ignorance, but the illusion of knowledge, and imperfect knowledge, as people are trained primarily to 'believe' and not to 'know'. Real knowledge brings Success, Success needs Progress, Progress needs Innovation, Innovation needs Knowledge, Knowledge needs Freedom, Freedom needs Democracy, Democracy needs Philosophy, Philosophy needs Aristocracy, Aristocracy needs Wisdom, Wisdom needs Common Sense, Common Sense needs Truth, Truth needs Giving, Giving needs Sharing, Sharing needs Care, Care needs Love, and Love brings Success. Real success inspires real knowledge and ignites a repeat of the process (Figure 1).

Today the world lives in a virtually democratic environment with no philosophy at all. This pseudo-democracy that we live in, hidden behind the virtual freedom of expression, is absolutely against real innovation, development and growth as the 'few' pre-reject what they fail to understand, or what they don't want to understand. Archimedes' words: 'Give me a place to stand on, and I will move the Earth'[1] lights the way towards intellectual freedom. Archimedes requested, metaphorically, only the opportunity to work; being confident of the result and the outcome of his efforts. In this globalized world, the need for the opportunity is greater than ever; the opportunity to generate real knowledge and share it with all, for all.

Knowledge, innovation and wisdom can be promoted through technologies operating under the democratic philosophy for the creation of shared value from all and for all. As time passes, and as technology can do things that could not be done without it, more opportunities arise, for those who have the knowledge, for those who want to help the world, and for those who want to express their intelligence, by sharing their competence with the society.

2. The World Innovation Stock Exchange

The World Innovation Stock Exchange (Www.InnovationStockExchange.org / here W.ISE) is a state-of-the-art knowledge and innovation management initiative based on the concepts and theories of democratic innovation through freedom of knowledge expression [2]. The W.ISE is not an ideas repository, nor an innovation brokerage mechanism, but a structured electronic organization based on intelligent systems, aiming to utilize and successfully and efficiently promote to the market the ideas deposited in it. Promoting innovation can be achieved by promoting not only developed business plans, research initiatives, patents or simply smart ideas, but also knowledge in various forms [3]. The W.ISE also identifies global needs and contributes towards maturing innovation in all areas, sectors

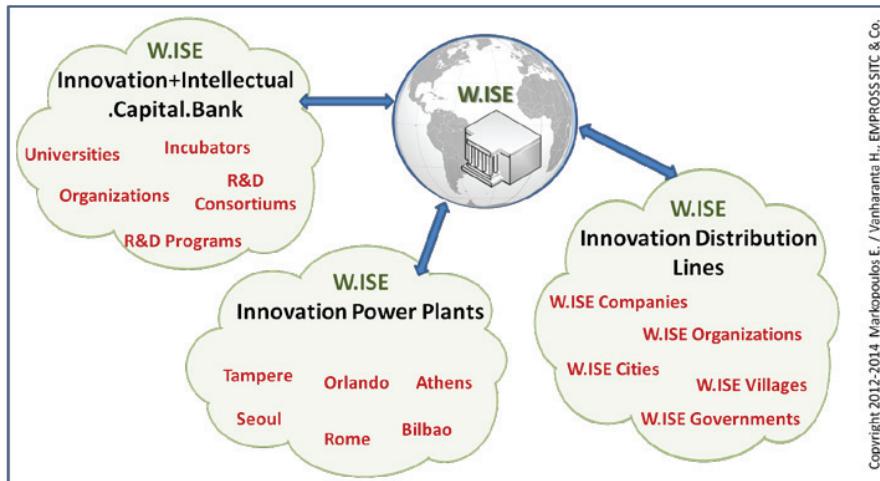


Fig. 2.The W.ISE framework for knowledge and innovation development.

and applications. The supply and demand platform created has a strong philosophical background. The human and ethical infrastructure is based on communicating the concepts of co-operation and co-evolution, understanding aspects of human behavior, developing the ethical bases to which all can contribute, and communicating the message of getting results together [4,5,6]. The shared addedvalue created through the marketplace gives continuity to business as well as societies based on individual capacity, skills, capability, creativity, know-how, and competence as well as different individual initiatives.

The overall engine of W.ISE technology operates in a similar way to the stock exchange concept/metaphor. WISE is one of its kind, a totally new concept based solely on intelligent operational models, very different from the typical innovation brokerage, technology brokerage and venture capital operations that exist today. Investors willing to invest in a specific technology, project or initiative can visit the W.ISE electronically and work independently, or with the assistance of the W.ISE innovators when needed, towards identifying projects, technologies, patents, ideas or any other form of innovation that suits them best. The W.ISE offers a secure and rewarding hosting facility for all types of innovations, at any maturity level, under any discipline, by any type of innovation contributor, anywhere in the world.

In order to be managed more effectively, the W.ISE world has been divided into three prime components, with each subdivided into more elements. However, W.ISE people see the W.ISE world as one environment, transparent, with no borders and barriers, where it is possible to visit and collaborate with W.ISE people in other components [7]. The three components of W.ISE are the W.ISE Innovation and Intellectual Capital Bank, the W.ISE Innovation Power Plants, and the W.ISE Innovation Distribution Lines (Figure 2).

The overall engine of W.ISE technology operates in a similar way to the stock exchange concept/metaphor. Therefore, investors with the capability to invest in a specific technology, project or initiative can visit the W.ISE electronically and work, either independently, or with the assistance of the W.ISE innovators when needed, towards the best possible collaboration to identify the idea or ideas that suit the investor.

3. The WhyNot Labs of WISE

The W.ISE platform extends its functionality and operational goals and vision towards supporting not only structured and well-defined, innovative initiatives, but also towards offering the opportunity to all who believe that they can be innovative to innovate with the same promotional benefits and support given to all W.ISE innovations. (Figure 3).The W.ISE WhyNot Innovation Lab (www.whynotinnovationlab.com) is an initiative of the W.ISE platform to support all those who may have brilliant minds of knowledge and innovation, but in their current humble, individual or small-scale status, they receive no attention, are given no chance to expose their work, and

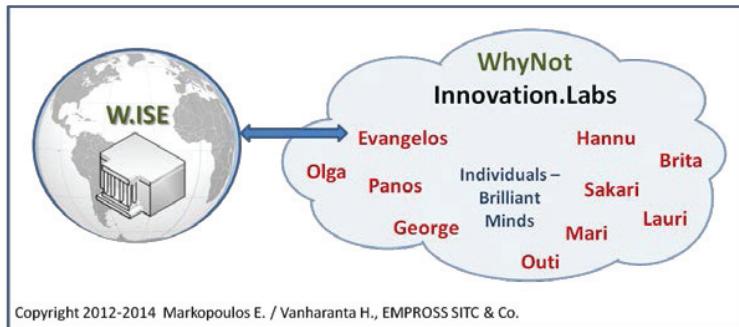


Fig. 3. The relationship of the WhyNot and WhyNotLabs to the W.ISE.

even if they manage to do so, usually receive negative treatment and results, as their size significantly affects investment decisions. The WhyNot Innovation Lab opens its doors to all those who receive too many questions about their innovative ideas and visions. Too many ‘Whys?’ usually result in a ‘No’, rejecting anything that does not meet the ‘innovation criteria’. If innovation had criteria, then it could be defined, and produced like any other product and service, but unfortunately this is not the case. Innovation is a free and open mind, a free spirit and open soul, and certainly without criteria. Only society, the markets and the people, democratically, and not selectively, can judge what is innovative and what is not. Therefore the W.ISE platform through the WhyNot Innovation Labs, comes to say ‘Why NOT’ out loud to all the innovative people who are told ‘Why’ or ‘No’.

4. The shared value concept

Shared value has been defined so that it covers the economic value creation inside a company as well as creating value for society according to its needs and challenges [8]. The target is to achieve economic success through company activities so that all the stakeholders receive their own share. In this way, shared value can also be seen as a creative means for meeting social requirements [9]. However, this activity needs a lot of insights, ideas, initiatives, and innovations to meet the outside risks, challenges and requirements of the changing world.

Shared value should be seen more as created added value so that the added value is delivered continuously as a shared value in the whole society. In this new way of thinking, there are two issues. First, who becomes responsible for adding the value? and also who creates the new added value needed? The main problem is how to motivate individuals so that such shared value can be created. One answer to this problem can be through the use of the workforce in a gradual way so that they really feel more respected and committed to their work, thereby achieving a high degree of motivation. It is important to see the balance between supply and demand against the needs of society in more detail. For this purpose there is a need for a sound way to educate and teach the workforce towards the understanding that everyone can reach new levels in organizational productivity, profitability and performance through co-evolution and co-operative ways of development. People have to understand business better and better and to contribute all together through democratic processes to meet the shared value requirements that originate primarily outside the organization for the organization, themselves and society.

5. Shared value of innovation

A major question in innovation is not how to innovate but why. Knowing the reason to innovate makes the innovation process much easier as there is a target that drives innovative thinking towards a specific goal. As innovation can be related to progress, the question now becomes for whom the progress is targeted. Innovation is accepted, rewarded, respected and supported greatly because innovative results make the world better, but another question is Whose world? and How better?

There are many such questions that consciously or unconsciously come up every time people try to move from point A to point B in a more advanced way, or to move in new directions, dimensions and towards new frontiers.

What drives people for the new or the best is usually their ego to contribute to the economy, society, and humanity for the benefit of others and themselves. Of course there are cases where innovation is achieved by silent contributions of people to humanitarian or societal needs [10]. In either case, innovation usually derives from the needs of society, regardless of the intentions of those who innovate. The shared value of innovation to its target group is a catalyst for the success and recognition of the innovation.

The degree of shared value and the need to create it have always been the inspiration behind innovation and the difference between innovating and improving. Innovation has been such a popular concept because it is associated with the shared value it returns to society and the economy through various forms or vehicles such as products, services, processes, initiatives, projects, acts, and others, regardless of whether they are profit-driven or not. The irony of course is that most innovations are profit oriented, meaning that innovations can serve, support, and help only those who can afford them. This is a significant contradiction between the real shared value that innovation provides to the economy, society and humanity, and the drivers for innovation.

The real shared value of innovation is not that which is achieved by solving a societal need through innovation, but the degree of the innovation's adoption in society with significant improvements to those affected by the innovation directly or indirectly, with or without cost.

6. WISE shared value

The World Innovation Stock Exchange organization strongly supports innovations in reaching the maturity required to be called shared added-value innovations. Ideas in the W.ISE are judged by the commercial markets and society, receiving value through their impact on the economy and society but also through those who seek applied and rewarding innovations.

The W.ISE shared value to society and the economy is achieved through the balanced co-existence of the three elements that compose the W.ISE philosophy (Figure 4), which are Innovators (Individuals), Business (Companies), and Society. The innovators are those who deposit their innovations in W.ISE. Business seeks innovation to create new products and services or solve existing problems and needs. Society is the inspiration for both innovators and business. The innovators are inspired by the needs of society to come up with state-of-the-art innovative contributions, while the business transforms society needs into business opportunities that can be realized with either existing innovations in W.ISE or with a request for new ones..

The triadic relationship of the W.ISE elements and philosophy is continuous and multidirectional. The innovators are inspired by society to develop innovations, while they give back to society solutions and contributions that can be used by any society elements such as business, government, or people. Business is inspired by society to seek business opportunities, while they give back to society new products and services. The relationship of the core WISE elements results in shared value creation, as society gets involved as the initiator of

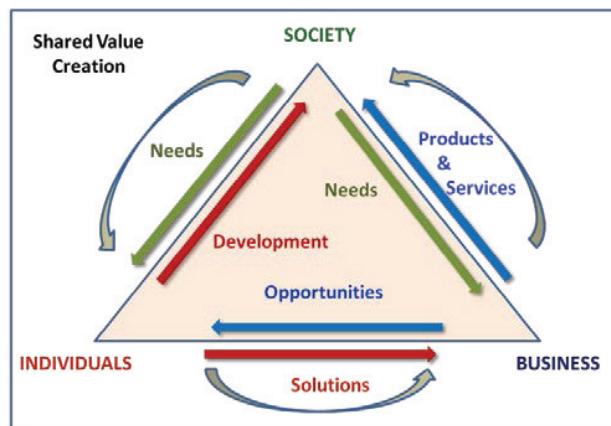


Fig. 4. The relationship of the W.ISE elements to shared value creation.

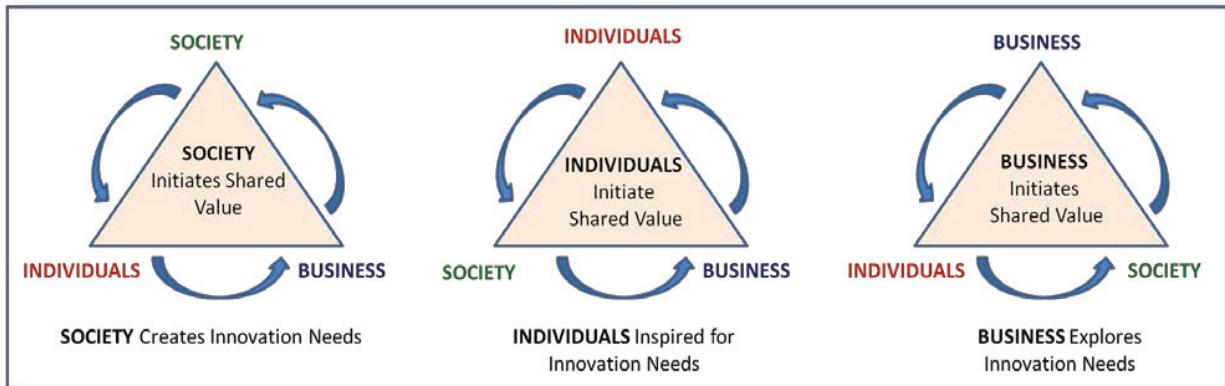


Fig. 5. Alternative triadic relationships of W.ISE elements for shared added value development.

innovations or the adoption of the innovation which derive from either the innovators or business. The critical role of society in WISE is what generates added value. W.ISE is not a repository of innovation or ideas but a platform that initiates, hosts and promotes innovations from all for all.

Regardless of who is the initiator of innovations in WISE, it is sure that W.ISE generates shared added value regardless of the role society can play in the WISE philosophy (Figure 5). In cases where Business is at the top of the pyramid, as the initiator of all innovations, then the business explores society needs and turns them into innovative products and services through WISE innovators, or existing WISE innovations. Likewise in cases where the innovators are at the top of the pyramid, then the innovators are inspired by the needs of society and develop solutions for business to promote in society (Figure 5).

7. The WISE co-evolutionary shared value philosophy

The WISE is characterized by a co-evolutionary philosophy where co-existence and co-operation drive the generation of shared value for all those involved in it. The relationship between WISE innovators (individuals) and Business, also called ‘Innovation Seekers’ in W.ISE, is very strong, constructive and interactive for the benefit of both sides with a return for society. In W.ISE knowledge flows from all to all. This brings innovators and innovation seekers closer to the market and the needs of society. WISE develops a triadic synergy between innovation creators, innovation seekers, and the real world. The WISE co-evolutionary and co-operative knowledge management and evolution methodologies clearly support innovations to grow, be enhanced, improved and shaped towards receiving the proper value to be considered effective and rewarding innovations, from all for all (Figure 6).

WISE is a continuous generation of innovation based on the needs of the society and the synergies between innovators and business. The innovators have the opportunity to either submit their own innovations or work with other innovators to create new innovations composed of their merged expertise. The co-operative framework offered by WISE to all innovators multiplies the number of innovations hosted in W.ISE and offered to business and society. In the same sense, innovators, or teams of innovators, can collaborate with business (innovation seekers) towards the development of the innovations requested by business or inspired by business either based on the needs of society or business opportunities. This concept of co-existence between innovators and business towards jointly responding to the needs of society is new, far from the typical supply and demand or client-seller relationship that other innovation management platforms offer. This innovative co-operation between individuals (innovators) and business can only benefit society as innovation creation, interpretation and implementation elements innovate for society needs, generating shared value directly and indirectly for all.

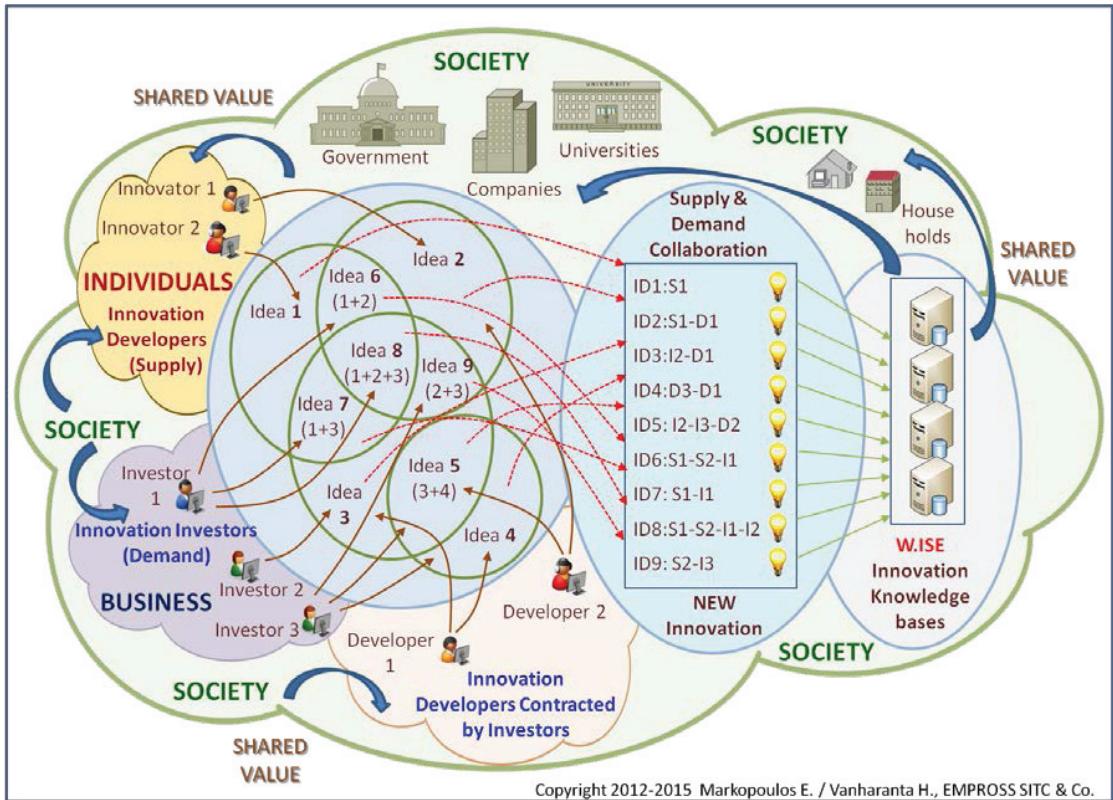


Fig. 6. W.ISE Co-Evolutionary shared value philosophy and framework between innovators and investors for innovation development

8. The socioeconomic impact of W.ISE

The world needs an innovation stock exchange W.ISE, where all these ideas can be stored, a place where the more processed and mature ideas can be kept, where innovations, prototypes, process models, algorithms, formulas, and even business plans can be stored, enhanced, and promoted to the market, the economy and society in a shared value philosophy through the utilization of human intellectual capital [11].

The socioeconomic impact of W.ISE can be considered as a holistic approach to the development of the economy and society. The innovators, individuals who can operate either through legal entities (companies, universities, organizations, etc), or on their own as freelancers or as simple individuals, can promote their innovation through WISE or the WhyNOTInnovation Labs. W.ISE does not restrict innovators, nor does it discriminate based on the value of the organization they represent. This is the significant social contribution of W.ISE as it welcomes innovations from all type of innovators, multiplying this way the intellectual capital it hosts, but also offering the capability to innovate to all. This broader definition of who is or can be an innovator, and what innovation is gives back to the economy, as the increase of the utilization of human intellectual capital can only result in more innovations that address societal needs, fund innovation, yet also support the economy and society to adopt the most mature innovations.

The co-opetition and co-existence of innovators and business in W.ISE for a common goal, will also contribute to the reduction of unemployment, the creation of opportunities for both sides, and the continuous support of innovation development in a unique co-evolutionary philosophy between supply and demand.

WISE does not integrate innovators with business for investment transactions but communities of innovators and business with society at local, regional, national, and international level. As society binds innovators and business in WISE, the socioeconomic impact of W.ISE can have multiple dimensions in outcomes that are rewarding for all.

9. Conclusions

The World Innovation Stock Exchange, i.e. W.ISE generates shared added value for the economy and society through the utilization of human intellectual capital [12]. This W.ISE philosophy is totally aligned with international trends in cognitive thinking, strategy, science and management. Over the last decades, people have achieved tremendous technological goals and created the infrastructure for achieving more. What has been left out of this development is philosophy, the base elements of every civilization. Goals cannot be targeted and reached without a philosophy and a reason for the people and society. It is we the people who move progress further for us the people, for all the people and not the few, in shared value frameworks composed from ethos, justice, prosperity and well-being. Innovation is the vehicle of progress and development. Striving for the new and innovative can only be directed from society, or given back to society. The W.ISE combines this philosophy in its operations and principles through the integration of individuals (innovators), who are the people, with business under society. This W.ISE equation [(innovators * business)/society] accelerates progress and development for all involved, utilizing human intellectual capital, boosting the economy, and creating shared value for society, which inspires and re-ignites in a rewarding-for-all, continuous iteration of this promising development model.

References

- [1] Dijksterhuis, E.J. (1987). Archimedes. Princeton University Press, Princeton
- [2] Markopoulos Evangelos, Vanharanta Hannu 'Frameworks and Paradigms for the World Innovation Stock Exchange and the WhyNot Innovation Labs', 11th International conference on Management and Innovation. Vaasa, November 17-19, 2014, Finland
- [3] Phelps C., Heidl R. and Wadhwa A. 'Knowledge, Networks, and Knowledge Networks: A Review and Research Agenda' Journal of Management July 1, 2012 38:4 1115-1166
- [4] Markopoulos E., Vanharanta (2014) H., 'Democratic Culture Paradigm for Organizational Management and Leadership Strategies - The Company Democracy Model', 'Proceedings of the 5th International Conference on Applied Human Factors and Ergonomics AHFE 2014, Kraków, Poland, 19-23 July 2014
- [5] Vanharanta H., Markopoulos E., (2013), "Creating a Dynamic Democratic Company Culture for Leadership, Innovation and Competitiveness". 3rd Hellenic-Russian Forum. September 17, Athens, Greece.
- [6] Kantola, J., Vanharanta, H. and Karwowski, W., (2006), The Evolute System: A Co-Evolutionary Human Resource Development Methodology. In the International Encyclopedia of Ergonomics and Human Factors. Karwowski, W. (editor), 2nd Edition, CRC Press, Boca Raton, Florida, USA.
- [7] Wong S-S., Violet T. Ho V.T., and Chay Hoon Lee C. H., 'A Power Perspective to Interunit Knowledge Transfer: Linking Knowledge Attributes to Unit Power and the Transfer of Knowledge' Journal of Management February 1, 2008 34:1 127-150
- [8] Porter, M.E and Kramer M. 'Creating Shared Value'. Harvard Business Review. January/February 2011.
- [9] Tsai1 W. and Ghoshal S., 'Social Capital and Value Creation: The Role of Intrafirm Networks', Academy of Management Journal, August 1, 1998 vol. 41 no. 4 464-476
- [10] Madhu Viswanathan M., Echambadi R., Venugopal S., Sridharan S., 'Subsistence Entrepreneurship, Value Creation, and Community Exchange Systems. A Social Capital Explanation', Journal of Macromarketing June 2014vol. 34 no. 2 213-226
- [11] Levy O., Peiperl M., and Bouquet C. 'Transnational social capital. A conceptualization and research instrument' International Journal of Cross Cultural Management December 2013 vol. 13no. 3 319-338
- [12] Hanna Lehtimäki H. and Karintaus K. 'Social Capital for Strategic Sensitivity in Global Business', South Asian Journal of Business and Management Cases December 1, 2012 1:2 91-104