West-Hungarian University

Faculty of Economics

THE NEW RESULTS OF VALUE ANALYSIS IN THE INNOVATION PROCESS

(Based on the Examples of the Pharmaceutical Industry)

PhD Doctoral Thesis

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1. Background and Objectives

This dissertation is researching the newest results of innovation using value analysis, with special regard to pharmaceutical research and development processes as well as patient compliance. **R&D processes are key factors of innovation**, which also derives from the special characteristics of the pharmaceutical industry. Using the methodology of value analysis, we could support those vital questions and decisions which define future steps even at the beginning of the research-development process. **Value analysis may reduce costs** at a relatively **early stage**; otherwise, some of these costs would later turn out to have no financial return.
It can generally be said of the **K+F** pursuits within the pharmaceutical industry that the various **stages** work **independently of each other**. They are also **costly**, **time-consuming** and yield profit almost always **in the long run**. The introduction of value analysis into the innovative processes may greatly increase the efficiency of the stages, supplementing various pharmaceutical innovation processes.

The dissertation is **examining** the best approach – and tools – to **improve on the innovative process**, and to **choose** and **optimize** the correct **medical therapy** in an industry where the marketing of the products require time, and high investment is combined with slow return.

It seems that the **following aims** have to be set: a drastic **reduction in the time and costs invested**. An especially important objective of the dissertation is to show that the

results of patient compliance have to be fed back to the pharmaceutical R&D processes.

The applicant is trying to find out whether it is possible to form **a new model** which is able to follow up all the required stages as well as able to support researchers in reaching their objectives.

The **basic aim of the research** is to **examine and justify** the following **hypotheses**.

H1.

A change of paradigm is required in the pharmaceutical industry as the current financers, the social security systems, are holding back more and more of their support, and the authorities responsible for medications are creating harsher and harsher regulations regarding new products.

Support is needed for innovation to ensure that the Hungarian patients may have access to the latest products and therapies through a sustainable long-term support system. We need fundamental changes and the complete re-structuring of the whole system because the present support mechanisms can no longer be maintained.

H2.

The total amount of medication support in Hungary has been reduced by an average real value loss of 1.9% in the last 20 years. For the year 2014, the currently planned cutbacks estimate 35% less real value support on medication than in the year 1994. The Széll Kálmán-Plan

earmarks a reduction of general medication spending which is not justified by the current health status of the Hungarian population, nor by any morbidity and mortality indicator.

The applicant claims as the second hypothesis that **new priorities have to be created, based on which the same innovation-friendly strategy may be formed between the state and the industry as the one already formed in Western Europe.**

H3.

The introduction of value analysis into the pharmaceutical and medical innovative processes would greatly increase the effectiveness of R&D stages. The third hypothesis claims that **the use of value analysis improves on the effectiveness of innovation.**

H4.

The new model formed by the inclusion of value analysis may present and connect all the R&D and investment processes as well as all required stages. **The use of a model which reaches over the whole research and development process may give effective support to pharmaceutical innovation**, which, in turn, may assist researchers in finding the areas which require further work for optimal results.

H5.

The current method of having separate and segregated research steps hinder proper research. A further difficulty

for researchers is that there is no centralized organization which may regulate and co-ordinate the various research stages and results.
The applicant claims in the fifth hypothesis that **the model formed with the inclusion of value analysis is only successful if the research stages are governed by a centralized organization.**

H6.
The basis of the sixth hypothesis is formed by the fact that patient compliance in Hungary is rather low. Based on data collected abroad, it can be said that patient compliance is better in more developed countries. Feedbacking the level of compliance into a model formed by value analysis is able to optimize or, if necessary, change the medical research process even during the various R&D stages.

The low level of compliance in Hungary leads to incorrect use of the medicine, which is a great problem to the medical industry. Firms do not get optimal profit due to insufficient compliance, while the social security system does not support medicines which they deem ineffective (either because it really does not work or because the patient does not take them properly). This phenomenon affects the firms' investments in research and development.

2. Content, Methods and Reasoning of the Research

The applicant has done the necessary research for the dissertation in the field of innovation, value analysis, pharmaceutical research and development and patient compliance.

The **research consists of two parts**: the **primary** and the **secondary research pursuits**.

The secondary research included the revelation of the theoretical background; this has been done by researching, processing and presenting the Hungarian and international literature, the findings of research institutes and congress materials. The applicant approached the problems from different angles, and she expressed her critical opinion regarding pharmaceutical research and development and patient compliance as well as the amount of Hungarian innovative investments.

In-depth interviews and **questionnaires** were conducted within the **primary research**. **Also**, the applicant's **previous research results** on the pharmaceutical industry and innovation were **included**, together with the **discussions** with **Hungarian** and **foreign experts**.

The **results of the primary and secondary researches** were summarized, and the **results** were **presented** in the dissertation after being analysed and processed with the method of **value analysis**.

3. Research Results

The research included the fields of innovation, pharmaceutical innovative research and development processes and Hungarian patient compliance. The results of the research show that the statements made at the beginning of the dissertation were right as they were partly or completely justified. It was also confirmed that the greater and greater time and financial investment in the pharmaceutical R&D processes present an ever increasing problem for the industry, which is why it is necessary to create a model which enables researchers to optimize their processes and costs.

The interviews made with product managers and researchers support the notion that even though they make huge profit, pharmaceutical factories will find it more and more difficult to finance development in the present age of economic regression and financial cutbacks. The interviews also showed that patient compliance is just as big a problem as costs as it eats into profits on the other end of the process. The research showed that the level of compliance should be taken into consideration during the research and development process if the ideal form and dosage of the medicine is to be achieved. However, the low level of patience compliance does not only affect pharmaceutical factories negatively, but also society as a whole; this growing problem is yet to be solved in our country.

The first hypothesis seems to be supported and supplemented by the results of the secondary research

and in-depth interviews: the key figures of the pharmaceutical industry feel and require the need to change.

Thesis I: a new outlook and practice has to be formed in the pharmaceutical industry in order to change the present acceptance and supporting system; this way, patients living in our country may have access to therapies which are available and applied in Western European countries.

The second hypothesis referred to the present situation of the industry and the government. The hypothesis was justified as there is no solution to the problems at the moment, and the low level of innovation – a product of the current bad economy – hinders the development of our country. The research results showed that support of innovation is inadequate, R&D is low and the GDP is around 1%. If we want to support innovation properly, an effective strategy is to be formed between the industry and the government. The current situation is dangerous because Hungary may be marginalized, and investors may not consider it as a potential target which would result in even lower profit and slower development dynamics.

Thesis II: in order to support local innovation, a new, adequate, strategy is to be formed between the industry and the government so that the new taxes

and cutbacks against the pharmaceutical industry may not involve an increase on the burden of patients, causing provisional problems and product withdrawal.

The methodology of value analysis can adapt to innovative processes, and it may greatly improve on research and development results as well. On the one hand, this is partly because value analysis processes often yield innovative results; on the other hand, it is a suitable tool to analyse long-term, cost-inducing projects. Value analysis can indicate at a relatively early stage whether the projects are to succeed or fail, when investment in them is still relatively low. The method is also suitable for modelling and analysing difficult and less transparent processes.

Thesis III: the use of value analysis may greatly increase the effectiveness of long-term, investment-heavy innovative projects. With the help of this model, the amount of the investment and the time factor can be reduced while the process itself becomes more efficient.

The fourth hypothesis examined whether there is a need and possibility of creating a new model which follows, connects and models the processes from the invention of the molecule through the investment stage to the marketing of the product.

The hypothesis was justified and accepted because the research of the innovative research and development

processes of the pharmaceutical industry showed that there was a need for a new and complex model. This model summarizes and presents the individual points of the process step by step. By following and analysing the steps, researchers and experts may gain important information concerning the direction of the research.

Thesis IV: The effective pharmaceutical innovation may benefit greatly from a model which oversees the whole research and development process; this model is created with the use of value analysis. The innovative model may show experts and researchers even in the planning phase the points where the research process has to be changed, or interference is required to optimize costs and the time factor.

The fifth hypothesis – which was also justified during the research – suggested that the model created for the R&D process will only be truly effective if it is coordinated by a central organization. At the moment, the various pharmaceutical researches are conducted independently of each other, and in many instances, the different research phases only communicate by transferring the documentation. The long-term nature of such researches alone may be enough to interrupt the research process without centralization. Besides a greater time factor, the disjointed processes may even cause extra costs for the pharmaceutical companies.

Thesis V: at the moment, the pharmaceutical industry has not yet recognised that the separated research

facilities may cause extra costs and an increased time factor. The inherent blocks in information flow and the disjointed research phases make the research process more difficult. It is necessary to create a centralized organization which joins and coordinates the researches of a given firm, and which organizes and supports the model created by value analysis in all research facilities and in all steps.

The sixth hypothesis attempts to observe the question of patience compliance, as well as its connection with pharmaceutical R&D processes. Insufficient compliance from the part of the patients will lead to insufficient medicine handling, which in turn affects the pharmaceutical R&D processes in a negative way.

The compliance of patients in Hungary is said to be very bad: an average 30%. In this respect, we do not belong to the more developed nations.

The research revealed the reasons for bad patient-compliance, and it also showed that the attempts at improving these figures had either no effect or they managed to achieve only minimal results in the long term. Health education is required; however, the pharmaceutical industry also has to reconsider its current practice. There is a need for a new marketing practice, registry and patient management programs, organizing patient recuperation and patient-education; all these factors are necessary in improving on patient compliance. The applicant considers the hypothesis proven, and she makes the following thesis:

Thesis VI: Insufficient patient compliance in Hungary leads to inadequate medicine handling. The financing social security systems and the pharmaceutical factories are all interested in mutually advantageous cooperation, which allows the social security system to be financially sustainable in the long run. An improvement on Hungarian patient compliance is unavoidable, and the creation of a health-conscious attitude requires state-level consideration and the complete reorganization of the present system if we want the modern medicines created by innovation to achieve their social and economic goals.

3.1. New Scientific Results

- The dissertation gives an overall observation, summary and analysis about the situation of Hungarian innovation. Following the processing of the Hungarian and international literature, it focuses on the fields of pharmaceutical research and development and patient compliance. The results of the summary of the available international literature were supported by the opinion of local researchers and experts.

- The dissertation presents the connection of value analysis and innovation in local pharmaceutical research and development as a new scientific result. Based on the opinion of the experts, the results can be used in pharmaceutical innovation.

- A new innovative model is formed with the use of value analysis. The model presented in this dissertation is formed this way – connecting R&D and investment pursuits – and its use can be of great help to researchers and pharmaceutical companies alike. The model is able to show experts the points where it would be beneficial – and necessary – to interfere if we want to reduce costs and research time. The model may help in re-structuring processes, create better transparency and able to form a completely new form of attitude and view. Researches proved that the centralization of R&D processes is inevitable within a company, and this can be helped by the new model, where the processes can be followed from the beginning to the end, from the invention of the molecule to the marketing of the product.

- The dissertation pointed out the importance of Hungarian patient compliance, as its results have to be taken into consideration during the pharmaceutical R&D processes. Using the results as feedback to the appropriate phases, the most appropriate forms and dosage of medication regarding patience compliance may be created more easily.

- A further important result of the dissertation is that it indicates the low costs of innovative investment, and, based on the suggestions made by the OECD study, it provides the pharmaceutical industry with a solution to

counter-balance low innovative costs and to optimize its research costs and the required research time.

4. Conclusions and Suggestions

- It is advisable that the government make it obligatory to use value analysis in the case of governmental grants over 500 million Forints.
- Currently, the local R&D grants are allocated based on the leftover principle. This should be changed as soon as possible, at least to 3% of the national income.
- Continuous feedback and examination is required in the individual stages of pharmaceutical research and development in order to create the most effective products for patients.
- The available innovative sources should be introduced in the field of pharmaceutical research and development to the greatest possible degree.
- Value analysis should be used to create a new innovative model, which may be applied in the pharmaceutical R&D and investment procedures. To reach the required objectives, the new model should be applied within a centralized organization.
- The Hungarian social security system should be revised to encourage health-consciousness in society.

- The medical support system should be reconsidered (in the case of both generics and original products), and the innovative products should be accepted by social security, which may boost the economy as well.
- Programmes which encourage and facilitate patient compliance should have more support on a governmental level.
- The education system should be changed, and new health-education programs should be initiated so that health-consciousness could be formed at an early age.
- Pharmaceutical companies should have greater social responsibility to manage patient compliance projects.

5. Publications in the Field of the Dissertation

5.1. Hungarian Publications

1. Vámosi, K., Nádasdi, F., Dr Gyulaffy Béláné Berényi M.: *Application of Case Studies and Case Games in Value Analysis* (Esettanulmányok, esetjátékok alkalmazása az értékelemzés oktatásában) Dunaújváros College, Day of Science. Dunaújváros, November, 2004467-473. ISSN 1586-8567.
2. Vámosi, K., Nádasdi, F., Dr. Gyulaffy Béláné Berényi M.: *Supporting Innovative Strategy*

Using Value Management (Innovációs stratégia támogatása a Value Management módszerével). Value Analysis Forum. Society of Hungarian Value Analysts. Budapest, 26th November, 2004.

3. Vámosi, K.: *Health Care in the Eyes of Value Analysis (the Prodigal Beggar)* (Egészségügy az értékelemzés tükrében (a pazarló koldus)). Scientific student conference. Sopron, 30th November.

4. Vámosi, K., Nádasdi, F.: *The International Experience of Value Analysis* (Az értékelemzés nemzetközi tapasztalatai). Science Day. 22nd November 2005. Dunaújváros College. Lecture and printed material, pp. 65-71. ISSN 1586-8567

5. Vámosi, K., Nádasdi, F.: *Supporting Investments with Value Analysis* (Beruházások támogatása értékelemzéssel). Value Analysis Forum. Society of Hungarian Value Analysts. Budapest, 6th December 2005. Lecture and conference material on CD.

6. Vámosi, K., Gyulaffy Béláné, Nádasdi, F.: *Sustainable Development as a New Challenge for Mankind* (A fenntartható fejlődés új kihívás az emberiség számára). 'Sustainable Development, Sustainable Society and Integration' Scientific Conference („Fenntartható fejlődés, fenntartható társadalom és integráció" c. Tudományos Konferencia). Komárom Days. Komárom, 28th April 2005. Hungarian Scientific Academy, Economic, Legal and Social Studies

Subcommittee of Veszprém Scientific Committee, Local Council of Komárom, Komárom-Esztergom County Committee of the Hungarian Legal Organization. Lecture.

7. Vámosi, K., Gyulaffy Béláné, Nádasdi, F.: *Sustainable Development as a New Challenge for Mankind* (A fenntartható fejlődés új kihívás az emberiség számára). 'Sustainable Development, Sustainable Society and Integration' Scientific Conference („Fenntartható fejlődés, fenntartható társadalom és integráció" c. Tudományos Konferencia). Komárom Days. Komárom, 28th April 2005. Hungarian Scientific Academy, Economic, Legal and Social Studies Subcommittee of Veszprém Scientific Committee, Local Council of Komárom, Komárom-Esztergom County Committee of the Hungarian Legal Organization. Lecture. Case studies, pp. 69-79. ISBN 963 9558 48 6.

8. Vámosi, K., Szekeres, K, Tarjáni, I., Tarjáni, I. (Mrs), Nádasdi, F. (ed.: Vámosi, K): *Value Analysis Projects* (Értékelemzési Projektek). Medic-Tour Ltd. 2000. Budapest, 5th July 2006. ISBN: 963229 341 X.

9. Nádasdi, F., Tarjáni, I., Tarjáni, I. (Mrs), Vámosi, K. (ed.: Nádasdi, F.): *The Bases of Value Analysis* (Az értékelemzés alapjai). Dunaújváros College Publishing Office. Dunaújváros, 2006.

10. Vámosi, K.: *The Application of Value Engineering in Minimally Invasive Surgery*. (Az

értékelemzés alkalmazása a minimálisan invazív sebészetben). Hungarian Science Week 2006. Knowledge Centre – Dunaújváros College, 13-18th November, 2006. Lectures. Dunaújvárosi Főiskola Közleményei, issue XXVIII. Dunaújváros, 2006. pp. 279-286. Lecture and comference material. ISBN 1586-8567.

11. Vámosi, K.: *Health Care in the Eyes of Value Analysis* (Egészségügy az értékelemzés tükrében). Budapest, December, 2006. Gyógyszertár, season V, issue 11-12, pp. 22-24. ISSN 1588-8231. and internet: http://www.moszinfo.hu/media/ujsag/2006/u_2006_11_12.pdf

12. Vámosi, K, Nádasdi, F., Kovács, T., Czinkóczi, S. Jr.: *Experiences of Value Analysis Teaching at Dunaújváros College*. (Az értékelemzés oktatásának tapasztalatai a Dunaújvárosi Főiskolán). Science Week at Dunaújváros College, 12-16th November, 2007.

13. Vámosi, K.: *How Can Value Methodology Help Make Innovation More Effective?* (Az innováció eredményei hogyan enyhítik a betegek szenvedéseit?) Dunaújváros College, Science Week. Dunaújváros, 2008. Lecture and comference material, pp. 55-60. ISSN 1586-8567.

14. Zarándné Vámosi, K.: *Value Analysis of Innovative Health-Care Procedure* (Innovatív egészségügyi eljárás értékelemzése). Dunaújváros College, Science Week. Dunaújváros, 11th

November, 2010. Dunaújváros. Lecture and conference publication.

15. Zarándné Vámosi, K., Dr. Nádasdi, F.: *Linking Innovation and Value Analysis in the Pharmaceutical Industry*. Dunaújváros College, Science Week 2011. Dunaújváros. Lecture and conference publication.

16. Vámosi, K., Dr. Nádasdi, F., Dr. Vágyi Ferenc, R. (ed.: Dr. Nádasdi, F.): *Economic Analysis and Value Analysis* (Gazdasági elemzés és értékelemzés). Sopron, 2011. University notes, pp. 161- 176. ISBN:978-963-89173-3-1.

17. Nádasdi, F., Tarjáni., I., Tarjáni., I. (Mrs), Vámosi, K. (ed.: Nádasdi, F.): *The Bases of Value Analysis*. (Az értékelemzés alapjai). Dunaújváros College Publishing Office. Dunaújváros, 2012. pp. 123-135.

5. 2. Foreign Publications

1. Vámosi, K., Nádasdi, F., Gyulaffy, M.: *Value Management in Health Care ("The Prodigal Beggar")*. SAVE International Conference. San Diego, USA, 25th June-1st July. Lecture and conference publication on CD.

2. VÁMOSI, K., Nádasdi, F.: *The Application of Value Engineering in Minimally Invasive Surgery*. SAVE International Conference.

Savannah, USA, 1st-8th June, 2006. Lecture and conference publication on CD.

3. Vámosi, K., Berényi, M., Nádasdi, F.: *How Can Value Methodology Help Make Innovation More Effective?* SAVE International Conference. Houston, USA, May 2007.

4. Vámosi, K., Nádasdi, F.: *Is It Possible to Reduce the Suffering of Patients by Means of Innovational Results?* SAVE International Conference. Houston, USA, May 2007.

5. Zarándné Vámosi, K.: *Applying Value Analysis in Innovative Pharmaceutical Researches - Is It Possible to Reduce Costs?* (Az értékelemzés alkalmazása az innovatív gyógyszeripari kutatások területén-avagy lehetséges-e a költségek csökkentése?) SHVA-SAVE International EGB, IX. International Value Analysis Conference. Budapest, 23-24th April, 2012.

6. Zarándné Vámosi, K., Bokorné Dr. Kitanics, T., - Dr. Nádasdi, F.: *Is It Possible to Reduce the Risk of Innovation Projects by Applying Value Methodology?* SAVE International Conference. Orlando, USA, 11-14th June, 2012.

7. Zarándné Vámosi, K., Bokorné Dr. Kitanics, T., - Dr. Nádasdi, F.: *Combining Innovation and Vale Analysis in the Pharmaceutical R&D Field*. SAVE International Conference, Orlando, USA, June 2012.

6. Other Publications

6.1. Hungarian Publications

1. Vámosi, K., Gyulaffy Béláné Dr. Berényi, M., Nádasdi, F.: *Improving Bank and Corporate Cooperation through Value Analysis* (Bank és cég együttműködésének javítása az értékelemzés alkalmazásával). Dunaújváros College, Science Day. Dunaújváros, November 2004. pp. 135-162. ISSN 1586-8567.
2. Vámosi, K., Gyulaffy Béláné Dr. Berényi, M., Nádasdi, F.**:** *Money Laundering and Value Analysis* (Pénzmosás és értékelemzés). Dunaújváros College, Science Day. Dunaújváros, November 2004. pp. 169-176. ISSN 1586-8567.
3. Vámosi, K., Gyulaffy Béláné Dr. Berényi, M., Nádasdi, F.: *Applying Value Management in the Governmental Budget* (Az értékmenedzsment alkalmazása az államháztartás területén). Value Analysis Forum. Society of Hungarian Value Analysts. Budapest, 26th November, 2004.
4. Vámosi, K., Gyulaffy Béláné Dr. Berényi, M., Nádasdi, F.: *More Competitiveness – Value Analysis* (Több versenyképesség –értékelemzés). 'City-Regional Inequalities in Europe, Renewal Crisis and Solutions' Scientific Conference („VÁROSTÉRSÉGI EGYENLŐTLENSÉGEK EURÓPÁBAN, MEGÚJULÁSI VÁLSÁG ÉS LEKÜZDÉSE" c. Tudományos Konferencia).

Komárom Days. Komárom, 28th April 2005. Hungarian Scientific Academy, Economic, Legal and Social Studies Subcommittee of Veszprém Scientific Committee, Local Council of Komárom, Komárom-Esztergom County Committee of the Hungarian Legal Organization. Conference material, pp. 107-116. ISBN 963 7385 80 0.

5. Vámosi, K., Nádasdi, F. Kovács, T., Németh, A.: *The Future of Leased-Line Services in Hungary Based on Economic Considerations* (A bérelt vonali szolgáltatások jövője Magyarországon gazdasági szempontok alapján). Hungarian Science Week 2006. Knowledge Centre – Dunaújváros College 13-18th November, 2006. Lecture series. Dunaújvárosi Főiskola Közleményei, issue XXVIII, pp. 297-303. Dunaújváros, 2006. ISBN 1586-8567.

6. Vámosi, K., Nádasdi, F.: *Supporting Corporate R&D with Value Analysis* (Vállalati K+F tevékenység támogatása értékelemzéssel). Hungarian Science Week 2006. Knowledge Centre – Dunaújváros College 13-18th November, 2006. Lecture series. Dunaújvárosi Főiskola Közleményei, issue XXVIII, pp. 272-278. Dunaújváros, 2006. ISBN 1586-8567.

7. Vámosi, K., Gyulaffy Béláné Dr. Berényi, M., Nádasdi, F., Kovács, T.: *Applying Value Engineering with Designer Shoes* (A Value Engineering alkalmazása a divatcipő gyártásánál).

Hungarian Science Week 2006. Knowledge Centre – Dunaújváros College 13-18th November, 2006. Lecture series. Dunaújvárosi Főiskola Közleményei, issue XXVIII, pp. 264-271. Dunaújváros, 2006. Lecture and Conference Material on CD. ISBN 1586-8567.

8. Vámosi, K., Nádasdi, F.: *Improving Competitiveness through Value Analysis* (Versenyképesség növelése értékelemzéssel). 'Regions beyond and within the Carpathian Basin' international scientific conference ("Régiók a Kárpát Medencében innen és túl" nemzetközi tudományos konferencia). Eötvös József College, Baja, 23rd March, 2007. Lecture and conference publication, pp. 232-237. ISBN 978 963 7290 52 7.

9. Vámosi, K., Nádasdi, F.: *Value Analysis: a Strategic Tool of Increasing Competitiveness* (Értékelemzés: a versenyképesség növelésének stratégiai eszköze). '4th European Challenges' international scientific conference („IV. EURÓPAI KIHÍVÁSOK" c. nemzetközi tudományos konferencia). Science-University of Szeged, Engineering Course. Institute of Economy and Country Development. Szeged, 12th October, 2007. Lecture and conference publication, pp. 521-526. ISBN 978-963-482-857-0.

6.2. Foreign Publications

1. Vámosi, K., Gyulaffy M., Nádasdi, F.: *Bank Cards in the Light of Value Management: Applications and Risks*. SAVE International Conference. San Diego, USA, 25th June-1st July, 2005. Lecture and conference publication on CD.
2. Vámosi, K., Gyulaffy B. (Mrs), Nádasdi, F.: *Can Value Engineering Save the Footwear Industry?* SAVE International Conference. Savannah, USA, 1-8th June, 2006. Lecture and conference publication on CD.
3. Vámosi, K., Nádasdi, F.: *Value Management and Design.* 40th Annual Conference of the Society of Japanese Value Engineering. Tokyo, Japan, 26th October-3rd November, 2007.
4. Vámosi, K., Nádasdi, F.: *May Value Methodology Enable Value Added Strategies?* SAVE International Conference. Reno, USA, 7-13th July, 2008. Lecture and conference publication.