The Society of Systematic Innovation
http://www.systematic-innovation.org

The 3rd ICSI & GTRIZ 2012
2012.07.10-12 e-mail: icsiGTRIZ@systematic-innovation.org

KATA
Korea Academic TRIZ Association

Using TRIZ for Technology Forecasting

Sergei Ikovenko, Dr-Eng, PhD, TRIZ Master

Director, GEN3Partners, Professor (adjunct), MIT

Biography of the Speaker:

Dr. Sergei Ikovenko is one of leading innovation consultants in the world.

He has conducted more than 700 courses on innovation and TRIZ for Fortune 500 companies worldwide. Dr. Ikovenko was the primary instructor to deliver corporate TRIZ training programs at Procter & Gamble, Mitsubishi Research Institute, Samsung, LG, Intel, Siemens, General Electric, Hyundai Motor and other world leading corporations. Dr. Ikovenko holds two doctorate degrees – a Ph.D in Industrial Engineering and Dr.-Eng. in Environmental Engineering and Sciences as well as a Master degree in Patent Law. He is the author of more than 97 publications, studied and taught TRIZ since 1986 and holds a certificate of TRIZ instructor from G. Altshuller, the founder of TRIZ. Dr. Ikovenko is a TRIZ Master and has effectively utilized his TRIZ expertise to receive 89 patents in various engineering fields. He is the President of the International TRIZ Association. Dr. Ikovenko is a Six Sigma Master Black Belt, QFD Black Belt and Lean Master-Practitioner. He is a professor (adjunct) of Massachusetts Institute of Technology, USA and an Honorary Professor of the University of Edinburgh, UK. Dr. Ikovenko is Director of Innovation Leadership Programs at a consulting firm GEN3Partners in Boston.

Abstract:

One of TRIZ powerful applications is using it for long-term technology forecasting. Traditionally it is considered that the only TRIZ part that is applicable for this purpose is Trends of Engineering System Evolution. It is true that Trends do play an important role in this TRIZ application however a number of other TRIZ tools can be efficiently used in technology forecasting projects as well.

A matter of ultimate importance for forecast projects is to predict future MPVs (Main Parameters of Value) of the product or technology. Function Analysis can be successfully used in the process of furure/latent MPV discovery that would highlight the direction of the forecast. In addition to that application of other TRIZ tools like Fearture Transfer, Function-Oriented Search (FOS), etc. has its specifics and nuances in forecast projects.

All these details make TRIZ forecast projects pretty different from usual TRIZ product/technology improvement application.