To: editor@triz-journal.com From: Freddy Pachys mail: amitec@netvision.net.il Date: 23-Janur 2005 Re: Comment: ON INNOVATION TIMING Darrell Mann, Systematic Innovation Ltd, UK

Dear Editor

My comment on: **ON INNOVATION TIMING** Darrell Mann January 2006 issue of The TRIZ Journal

In the abstract the author claims that "A prototype timing algorithm is presented. The algorithm distinguishes three main innovation timing answers; 'now', 'never' or 'at some point in the future'".

We can get the same inaccurate answer for this question from the S - curve.

Altschuller found that any system is evolving in a biological pattern, meaning that it will go through four main stages also known as: infancy, growth, maturity, and decline. These stages are plotted on the biological "S-Curve" as shown in Figure 1.

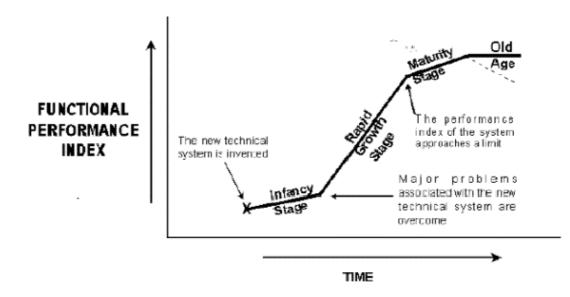
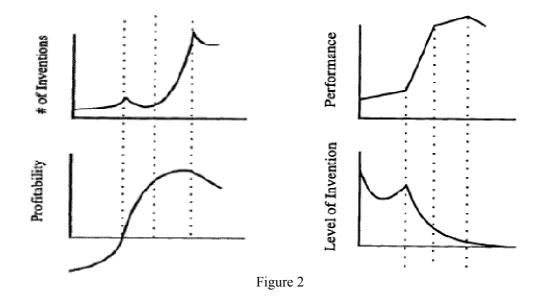


Figure 1

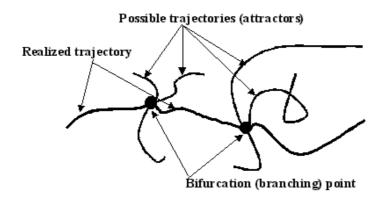
Four main descriptors are used to assess the life cycle stage (or technological maturity) of a technological system on its S-curve. They are 1) the number of patents per time period, 2) the level of innovation per time period, 3) technical performance per time period and 4) the profitability per time period. Each descriptor has a characteristics profile or shape as shown in Figure 2



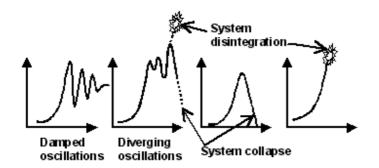
Application of TRIZ to Technology Forecasting Case Study: Yarn Spinning Technology. By: Severine Gahide (<u>http://www.triz-journal.com/archives/2000/07/d/index.htm</u>)

Zlotin wrote: Any organization and even humanity as a whole constitutes a non-linear system, the evolution of which is determined by three distinct types of processes:

- Smooth and predictable evolution, during which the principles of natural selection (market acceptance) are in action.
- Periodic crises, during which the system's behavior becomes unpredictable (although it can remain controllable). Each crisis ends with the (random) selection of one of the potential "paths" for further evolution, resulting in a change in the system's evolutionary trajectory.



• Periodic avalanche-like events caused by positive feedback (reinforcing loop)



• System structure depends on various flows passing through the system that can change its structure or destroy it (flows passing through the super-system can create the system). Specific flows that pass through and change/form our social system are transposition of people, goods, documents (instructions, assignments, orders), money, credits, bonds, information, services, etc.

Important assumptions related to the linkage between an organization, its business/cause/ mission and its stage of evolution

It is known that, in general:

- The majority of an organization's features are determined by the stage of its evolution along the S-curve
- The evolution of an organization strongly depends on the S-curve position of its main business
- At the same time, the business of an organization can be impacted (positively or negatively) by the S-curve position of an organization

TRIZ Beyond Technology: The theory and practice of applying TRIZ to non-technical areas. By Boris Zlotin, Alla Zusman, Len Kaplan, Svetlana Visnepolschi, Vladimir Proseanic and Sergey Malkin. (http://www.triz-journal.com/archives/2001/01/f/index.htm)

The question "when"? Is answered well by conventional strategy methods like Pest, SWOT, Porter's Five forces, ARC BCG, 7S McKinsey, ANSOFF, etc.

Triz tools can be only a complementary method to the strategy world, and to the "when" question. The answer '**now**', '**never**' or '**at some point in the future**''' Is a very poor answer and inaccurate.

S-curve method will give us the same results, with out complications.