Triz Implementation: The Views Of Real Users

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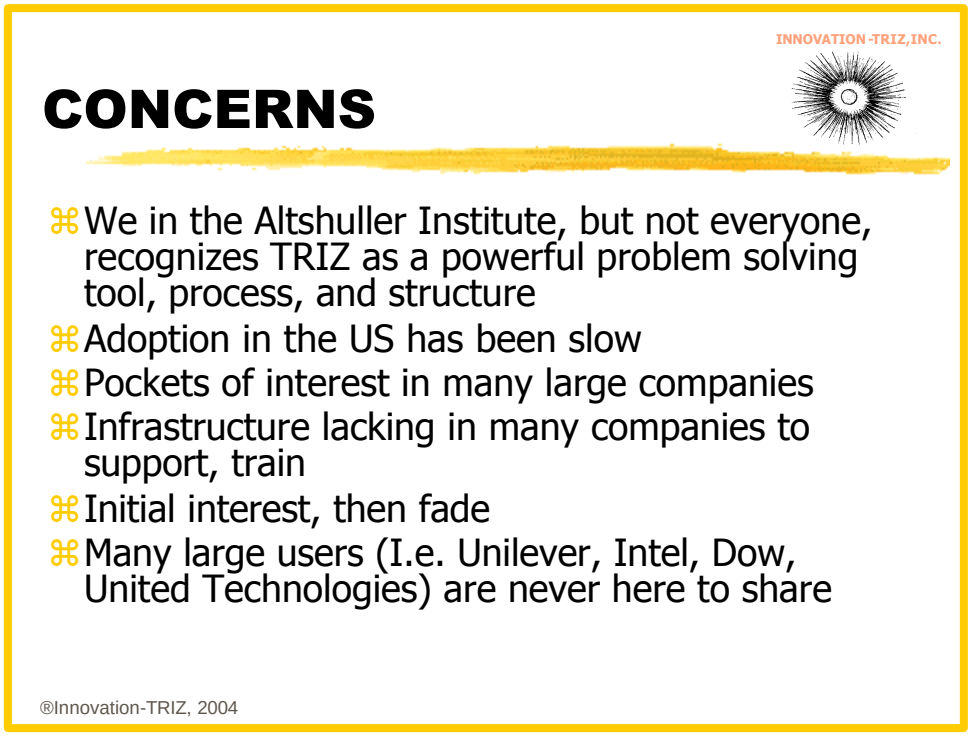
At the recent Altshuller Institute meeting, TRIZCON2004, a panel of TRIZ users from industrial companies was assembled by the moderator, Jack Hipple, to bring input to the TRIZ technology community regarding their learnings and lessons regarding their use and implementation of TRIZ. Participants in this panel discussion (left to right in the picture)

- Larry Ford (Ford Motor Co.*) and newly re-elected president of the Altshuller Institute—congratulations, Larry!*
- Kiho Sohn (Boeing)
- Doug Gundlach (S.C. Johnson Co.)
- John Spitznagel (Siemens Westinghouse)
- Adam Brostow (Air Products) *Not Shown*

These users' experience spanned a range from just starting to having used TRIZ for 4-5 years. In addition to the verbal comments made at the meeting, each participant was asked to summarize their thoughts and comments for publication in the TRIZ Journal. This article summarizes those thoughts. The session started with the statement of concerns from moderator Jack Hipple:



How does interest develop? Typically through:

(1) Individuals reading and web searching in the general area of invention and innovation (sometimes having heard about "TRIZ" from someone)
(2) Participating in a company TRIZ problem solving session to which they have been invited or
(3) Contact by a consultant previously known

Generic barriers to any new innovation program (independent of TRIZ). In this case, TRIZ is no different, at least initially: "this is how we've always done it", no interest in learning from other groups (either inside or outside the company), how to distinguish between TRIZ and all the other innovation and creativity tools available.

Barriers specific to TRIZ:

(1) Starts out typically as a part-time activity not integrated with any other organizational process or activity
(2) People are generally very busy and do not immediately see the value in learning a new tool or process vs. continuing to spend their precious time doing things the way they have always done them (this is analogous to the activation energy that must be overcome to initiate a run-away chemical reaction!)
(3) Failure to see value in the structure and up-front definition time involved in TRIZ problem solving
(4) TRIZ provides clues and concepts of solution, not specific problem solution designs, thus appearing to require even more additional work in addition to the problem definition effort already mentioned.

Ideas for improving the implementation and use:

(1) Use TRIZ or parts of TRIZ a little at a time without making a big deal out of it. Choose one of the tools in the tool kit and use it with co-workers who may then begin to ask, where did that idea come from? Some of the TRIZ spin-offs, like SIT, have used this approach
(2) Consultants and company "preachers" actually use the tool and not just preach about it
(3) Emphasize the need for practice. In this sense, TRIZ is no different than other tools also requiring practice to excel, but due to its complexity (in the sense of all of its tools), this is even more important
(4) Incorporate TRIZ into an existing, mandated, accepted organizational process such as QFD, Six Sigma, DFSS, brainstorming, CPS, Six Hats and Lateral Thinking, or Lean Manufacturing
(5) Use internal training to gain credibility. There's nothing wrong with consultants to start, but internalizing the skills is important long term
(6) Internal TRIZ champions should provide more examples of parallel industry applications to reinforce the concepts of generic problem solving principles
(7) Better integration of fundamental/principle training and problem solving use.
(8) Integration of aspects of TRIZ within the engineering curricula. This is being done here and there in specific schools by one professor, but certainly not in any integrated fashion.

This panel discussion provided a unique opportunity for the TRIZ community of practice to hear from some its customers and it is hoped that these thoughts and ideas can assist both users and consultants in the TRIZ community.

Thanks to Richard Langevin, Executive Director of the Altshuller Institute, for the photos.