

Translation of Inventive Principles to the "Soft Side" (II)

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Last month we reviewed some of the inventive principles contained in the TRIZ contradiction table and discussed how they could be translated into concepts useful in the business and organizational world. Let's continue that discussion.

As we said last month, when we first look at the contradiction table and the inventive principles, we are tempted to look at the words and not see how to connect them with business, organizational, and people problems and just say they aren't applicable. As we demonstrated, it's not impossible-- it just takes some mental effort and a little imagination. Recall also an excellent TRIZ Journal article reviewing the 40 principles and their "translation" into business terms can be found at the www.triz-journal.com web site. It's in the September 1999 issue.

Repeating the caveat from last month: Various versions of the contradiction table use different phrases to describe the various principles (nesting vs. Matroiska doll for example) differ and there no productive point served by entering into a debate about which is "correct". Principle # 7 is always principle #7 (except in the Creax expanded contradiction table, so beware when ~translating" to/from)! Use whatever phrase is comfortable for you and that makes the principle understandable to you.

Let's take a look at a few more of the 40 principles and their translation into "soft" situations:

Principle #21: Skipping: Ever heard of lean manufacturing? Eliminating approval steps in a management process? Do we really need to go through all the steps? The original context for this principle in the technical world was to eliminate time spent on hazardous operations to minimize hazards. When we eliminate excess steps in an organizational process, don't we minimize the consequences of delay? Get to market sooner?

Principle #22: Blessing in Disguise/Lemons into Lemonade: How can you turn customer complaints into valuable (free!) market research for product improvement? This is the technique used by Quicken to improve its popular budget and tax software.

Principle #23: Feedback: We're doing this all time now to get feedback on almost every service that is provided: car care, Internet services, and retail purchases.

Principle #24: Intermediary: Frequently, when a poor performer in a job has not heard feedback from their direct supervisor, a non-supervisory trusted friend is entrusted with a special off line conversation to communicate performance issues. Arbitrators in labor negotiations, acquisitions perform the same function.

Principle #25: Self-service: When was the last time someone pumped gas for you (only in New Jersey and Oregon is that required by state law!)? Are you using self service checkouts in stores such as Lowe's and Home Depot? The customer is doing auxiliary functions that were previously

done by someone else.

Principles #26-7: Copying/Inexpensive and Disposable Objects. Contract employees. This also illustrates a separation principle: separation in time or upon condition.

Principle #30-1: Flexible shells/thin films/porous materials: Protect new ventures and startups from the corporate bureaucracy. One way interactions-communicate out, but not in. Sift through business information for only what is relevant.

Principle #32: Color change. This is very powerful image for people. What is our current state of terror alert? Red, orange, yellow, and green tell us immediately. Conceptually, the same is true for business conditions.

Principle #34: Discarding and Recovering: Contract manufacturing. We only use it when we need it and both sides understand the limitations as well as the pros and cons.

Principle #35: Parameter Change: How often have we seen compensation system variable change in response to business conditions? Safety concerns?

Principle #38: Strong Oxidants: A surge in activity for a short period of time. An emergency drill. An artificial business crisis to test response. A one time quick bonus for particular results in a very short amount of time (car salesman commissions at the end of the month!)

Principle #40: Composite Materials: You know how composite materials improve the strength of many products. When we mix different types of people on a team, we get the same results-more diversity of ideas.

That finishes our discussion of translating the 40 inventive Principles into the business and organizational framework. As you can see, it's not all that difficult to "translate" the principles into another setting. With the translation of the parameters we discussed last month, you're now on your way to expand your use of TRIZ thinking on the soft side!

NEXT MONTH: Separation Principles in the Business World