

To the Editor, TRIZ Journal,

I came across TRIZ quite by chance late in 2003 when it was stated by an outside agency that, were they to be employed to assist our company in resolving some specific manufacturing difficulties, then TRIZ would be one of the tools they would consider applying. I immediately did some personal research, mostly on the web, to find out what exactly TRIZ was and became fascinated initially by the seemingly obvious route TRIZ offered to better and faster resolution of conflicts.

Initially I concentrated my attention on the basic contradiction matrix which on the face of it offered a universal look-up table giving immediate triggers for potential solutions to any problems! I soon discovered that, as with any other tool, some experience and understanding of how to apply it was going to be essential. I then attended, in March 2004, an excellent two-day basic introduction to TRIZ tools course with Oxford Creativity.
(<http://www.oxfordcreativity.co.uk/>)

I was captivated by the power of the tools even at this preliminary stage and I feel really stimulated and ready for action. I wanted to use TRIZ to make a real difference to me, in my home life and especially at work. Of course dealing with the former would be easy, I was likely to encounter less resistance to change certainly. Dealing with the acceptance of TRIZ at work I suspected would be altogether a different proposition.

On return from the TRIZ basics course, I was fired-up, full of enthusiasm and stimulated by seeing immediately the advantages that TRIZ could bring especially as it appeared to supplement many standard problem-solving tools I had experience of using. I immediately spoke with representatives of management and a senior director who was very encouraging and without hesitation supported further training. He requested that, on completion of the course, I gave feedback to a cross-section of employees in the form of a series of mini presentations. Accordingly this commitment was added to my prime objectives I was tasked with at my formal company appraisal which coincidentally was conducted around this time.

Arrangements were made to conclude TRIZ training within one month and in the meantime I busied myself by preparing some notes and slides etc. During this time also my further research led me to the TRIZ journal and the many intriguing and informative archived articles. One such article by Brian Campbell (Brian.campbell@creax.com) in TRIZ Journal April 2002 caught my attention. The article was related to introducing TRIZ into a company and provoked some interesting responses. In the clear knowledge that I was going to have to do just this I corresponded with Brian asking him if, 2 years on, he had been able to reflect further on the topic and could possibly advise me, as a new TRIZ convert, on how best to proceed. I told Brian some of my background in that I have worked for this same high technology company in the south east of England for over 34 years in design engineering, manufacturing engineering and manufacturing re-design, project management, quality and now held the role of Production Engineering Manager. I further said that I suspected that, with the right approach I may be able to convince a fairly new set of directors of the huge opportunities TRIZ could bring to the business. As the only employee in 1200 who was receiving training inputs on TRIZ I said I wanted to really make a difference quickly and hoped that Brian could perhaps offer some advice to help avoid some of the pitfalls and inertia problems I was sure I would encounter. His response was positive and encouraging.

He wished me luck as I started my TRIZ journey and suggested that the key thing was not to become a TRIZ bore and to concentrate on the benefits of TRIZ rather than the methods when talking to others. Also, he said, it helped to get the problem owners to solve the problem themselves with guidance.

Brian stated that his experience had shown that actually solving problems with TRIZ was relatively easy, finding the problem was harder. He had seen that as soon as one moved outside ones own work area there are potentially lots of issues that arise, many of a political nature. A little later I was pleased to receive a follow up message from Brian asking how I was progressing. When I responded to this, Brian felt that my early experiences I told him about would perhaps be of some interest to your journal readership and this is what has prompted me to write to you.

In conclusion Brian said that if you can show real cost-savings and effective solutions to problems the rest would follow.

When I was in the process of receiving my TRIZ training, an offshoot of the quality function at work, had put together a fairly conventional problem solving toolkit, which it was tasked to 'impose' throughout the company in an effort to try and unify the approach to problem-solving 'across-the-patch' in accordance with senior management wishes. On receiving a draft of this I responded by requesting that the company postpone introduction of this toolkit until I had been given an opportunity to report back following completion of my TRIZ training course with Oxford Creativity.

I spoke with one of the authors who helped put together the proposed toolkit and briefly explained that TRIZ could be applied to many types of problems where conflicts arose and the tools of TRIZ could well support more conventional problem solving routes to great effect. His immediate response could have been guessed. He said, "OK, if TRIZ is indeed capable of that, prove it, use TRIZ and tell me how to solve the problem of overcoming resistance of engineers to new ideas"?

(He actually said, "How do you force engineers to accept new ideas"!!!)

I am pleased to see that even with my limited TRIZ experience I was able to easily identify 'Versatility/Adaptability' as the feature to improve, and 'Complexity of Control' as being the worsening parameter.

With reference to Creax book '*Matrix 2003*' I identified key principles to employ and proposed my interpretation of these to the gentleman concerned the following morning. He was quite taken aback; even 'gob-smacked' you might say and went away gratefully (and graciously I must say) with new ideas and routes to follow.

I have now given a couple of mini-presentations to company employees and in arranging these I took on board some of the solutions I had proposed to our quality guy above. One such proposal was to 'employ' the services of hard nosed 'ex-cons' and mix these with a broad cross section of the 'rest of the population' to feed off each other in the same group.

For my first presentation I purposefully, with some considerable reservations, invited a couple of diehard sceptics who in the past had demonstrated to me on several occasions their reluctance to embrace any change. I also invited along a senior six sigma black-belt engineer and representatives from the Technology group within my company together with some young manufacturing engineering graduates.

I intentionally started my presentation by stating that if the audience was prepared to listen then I felt that I could introduce them to problem solving aids that would blow them away! I then asked for initial reactions to that statement and as expected I soon got from the sceptics responses demonstrating nicely 'psychological inertia'.

When my next slide showed what I had guessed their probable reactions to my TRIZ claim to be, and they saw that I had listed all of their comments and a few more, and furthermore suggested that this common reaction was to be expected but could be overcome if they were prepared to open up their minds, for a while, there were several wry grins and all the meeting attendees softened and they started to really listen.

It was a good moment!

The rest of the short presentation went well. I even made reference to the above example of the use of TRIZ to reduce resistance to change and I could see the points made hit home.

I do not know what the next steps are for the company. I hope we will be able to convince management to extend formal TRIZ training but I recognise that it would do my case good to demonstrate where TRIZ has been of benefit. Therefore, on the Production Engineering Group intranet site, we are immediately proposing to start a table of benefits obtained by the use of TRIZ with reference to specific examples and practitioners.

At this point in time I anticipate that I will be asked to champion the cause of TRIZ. I recognise that maximising benefits will come from group involvement and therefore I will concentrate on working with a few key individuals on the already plentiful problems in my local area in order to get our database off the ground.

I do hope that Brian was right and you appreciate this communication. I would be interested to know if you think that all or part of it would warrant inclusion in a future TRIZ journal.

Editor's note: Of course! Our readers all need ideas about how to get the TRIZ message across to their colleagues and managers in their organizations, and are always grateful when someone is willing to take the time to share experiences.

In my mind I feel that if more information is available regarding the practicalities of the introduction of TRIZ, some of the 'barriers to change' may be more easily overcome to the benefit many people in many industries.

Best Regards

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