

Systems Vs Solutions Dilemma for Advanced NDT

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I recently met quality and inspection engineers from a global engineering company and was prompted to write this article. This company has manufacturing facilities in many countries of the world including in India and the US.

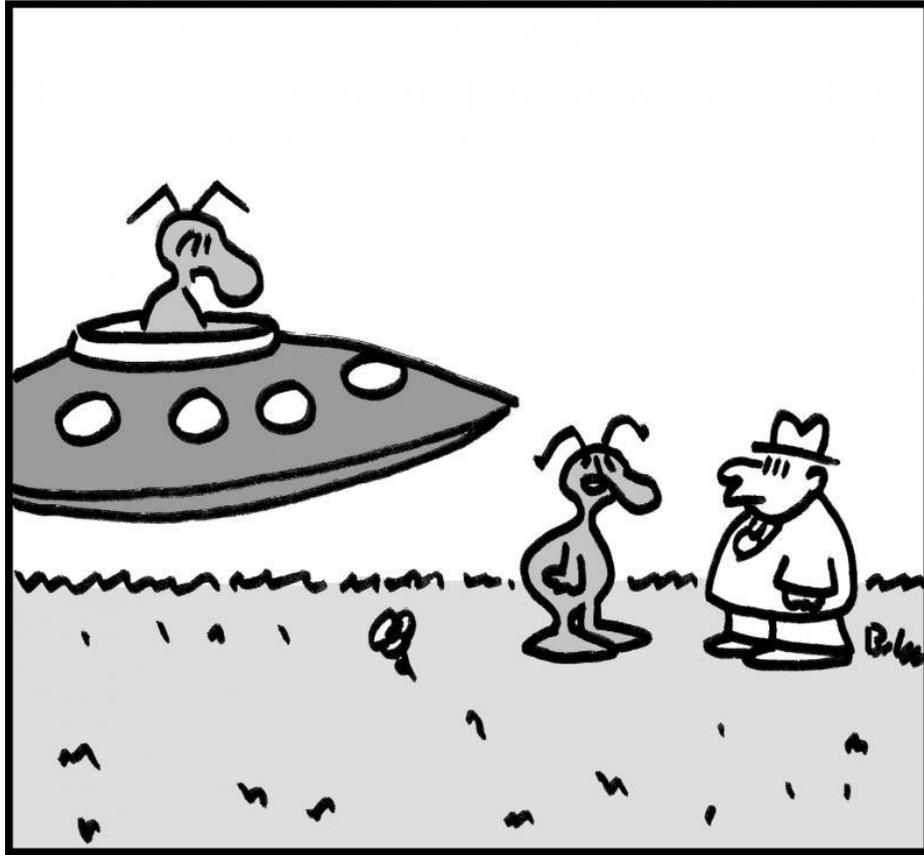


"Yes... in this company we pride ourselves on all the latest technology!"

The Indian operations had purchased some Phased Array Ultrasound equipment as this was the answer to their inspection issues. The PAUT systems were purchased a few years ago and a couple of days of training was provided to the Inspectors and Level 3. It all seemed very easy when the expert from the equipment company was demonstrating the system. The company then had difficulty in using the system for their inspection needs beyond the one part or component for which the equipment supplier had helped develop the inspection plan. Hence the quality team was not able to utilize the system despite having a need for it as production volumes had increased and quality had become a hot button issue. The greater surprise was that the factories in the US had bought several machines and were also unable to use them because of training and knowledge issues. One would expect issues of knowledge and training in India given that the Digital technologies are just being introduced and there is a shortage of experts and expertise but to have the same issues in the US was a revelation.

The engineers want a solution to their inspection problems rather than the system they had purchased. The system was capable of meeting the requirements but it needed more expertise than was available in the team. The engineers have conventional UT experience but are not competent to use the PA system. Is this lack of expertise hurting the adoption of new technologies? How long would it take for older engineers with conventional UT expertise or young inspectors with limited experience to come to grips with PAUT (using that as a generic example of advanced technology).

Would a solution approach benefit both users and equipment companies? This would involve selling a "weld inspection solution" or " composite inspection solution" which would include the PAUT system but all also the software, inspection plans and other tools required to get the job done?



“Gee, no — we were hoping you’d have the solution to all *our* problems.”