

Tires, Mops, and Hamburgers



One of the laws in TRIZ has to do with a system becoming more ideal in offsetting ways with time. A system or product starts out as something simple (remember old fashioned phones?) and then features are added which make the product or system more "useful" (at least in someone's mind). This addition of "useful complexity" usually adds costs, but frequently replaces the need for the use of more than one "thing" (today's printers for example). There can come a time, however, when this useful complexity gets too complicated or costly and the product or system is "trimmed" of one of its complicated parts, but the function is still retained. This oscillation between useful complexity and trimming is a continuous line of evolution and everyone needs to look at their product or system from both perspectives for improvement ideas.

In the past weeks, several items have crossed my desk illustrating both sides of the curve. The first is the continuous evolving of the Michelin Tweel® and its competitor, Big Tyre®, from Australia. See Machine Design's January 16 issue. This product eliminates the conventional tire as we know it and replaces it with rubberized spokes which are an inherent part of the wheel itself. The tire has been "trimmed" but its function is still performed. Then there's the new "triple action" cleaner from Ocedar (ocedar.com) which incorporates a sponge, a scrub brush, and a microfiber wave sponge in one piece of hardware, eliminating the need for several different cleaning steps and equipment. Will people pay more for this? Probably.

These concepts don't just apply in the technical and product world. In a Wall Street Journal (Jan 24, pB3), there is an article entitled "McDonald's Seeks Relevance" outlining McDonald's decline in sales volume and complaints from franchise owners about how complicated its menu has become, bottlenecking its kitchens, slowing customer service and failing to attract new business. McDonald's COO, Tim Fenton, said, "we overcomplicated the restaurants....we need to do fewer products with better execution". In other words, they need to "trim".

Which side of the curve are you on? How do you know? Think about it from both sides and ask yourself:

1. What could I trim from my product or service, but still obtain its FUNCTION with what's left? What business opportunities exist with a simplified product or service?
2. What useful complexity could I add that would replace something else that the consumer is buying? How much time could I save them? What's that worth? To whom? How could I do it?

Our next two public TRIZ workshops for ASME and AIChE are in Minneapolis (April 28-30) and Houston (June 2-4):

<https://www.asme.org/products/courses/triz-theory-inventive-problem-solving>

and a free public workshop on the "Soft Side of TRIZ", through the Altshuller TRIZ Institute:

<http://www.aitriz.org/triz-articles/soft-side-triz-public>

The latest book on TRIZ (and a part of the ASME/AIChE courses):

<http://www.aitriz.org/online-store/triz-online-store/books/ideal-result-detail>

Good luck in your thinking on both sides of the curve!