IoT and Engineering Integrity
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This has more to do with engineering than physiometry. But we have engineering here so...

We recently saw an advertisement for an LED lightbulb that had a WiFi/web interface built in, and so could be controlled (turned on and off) over the internet. Seriously? Are they hoping the general populace will go crazy over such a thing, along with the premium price? Sure the technology is there, but who outside of a small niche would want one?

Internet of Things; what even is that? A bucket of things, a box of things... The Internet has been 'things' for years.

Well, then we saw a picture in a magazine of an IoT empowered home, a big, tidy livingroom along with circles around maybe half a dozen IoT devices. Presumably, they could all talk to each other, and be internet accessible as well. Who has a job that will allow them to spend time managing all these devices during the day at work? Regardless what function they perform, do we really want to add that many failure points to our livingroom? And how much will this extra stuff cost? And how much more of a maintenance headache will they become? And we surely would need to have some contractor go through the agony of getting everything to talk together in the first place. We don't choose to spend our free time doing that! And sometimes connecting even the simplest of devices to our computer causes a lot of frustraton. We are wondering who in their right mind would buy this stuff. We remember 'much ado' when we could open and close our garage door with our cell phones. That sure caught on -- not! Then we recently saw a battery powered electric drill in an IoT promo picture. Wow, really? My cordless drill needs to be IoT? Why are we supporting this? And I read recently that IoT is in the disillusioned phase... Indeed...

We wonder if the engineering profession has lost its scruples. Granted, we often try to help people see the advantage of things we design. But it seems to us that sales (and maybe agenda) are increasingly more important than anything else now, even telling the truth! A number of recent high profile 'revelations' might support this perception.

Hybrids and electric cars are buzzed about a lot. But let's think a minute. Ok, so we used to look at miles per gallon in the old days. I guess this served as a fair figure of merit for many years. But with the rise of electric cars, MPG increasingly fails to supply the whole picture. TCO stands for total cost of ownership, pulling together both purchase price as well as ongoing (fuel and maintenance) costs. Trying to get at the big picture; this sounds reasonable. Let's posit TEU as Total Energy of Use. Energy use is the hot topic now, anyway. But why isn't ANYBODY talking about the energy it takes to MAKE every component in that car, then build the car to begin with? This probably sizeable amount of energy really should be added to the overall value of the TEU. (The only ZEV is the one that hasn't been built!) Why is this information (production energy) not 'out there' and a part of such discussions? We don't know, but can offer a few guesses. Maybe this would show that the energy costs to build a hybrid or electrice are (maybe quite a bit) higher than an ICE car. And this does not take into account dealing with the used battery sub-system at end of life. (The battery packs will likely end up in a 3rd world country for 'disposal' as the cheapest option.) Or maybe, looking at the overall energy balance, it may actually use less energy overall, to keep driving an older, but perfectly good car. That information might be really bad for the automotive industry however. Maybe that is why production energy is just not allowed to be a part of this discussion.

And self-driving cars, can we talk about them? A car without a driver -- that sounds like a radial saw without a blade -- safer maybe, but who would want one? When a huge company with no auto manufacturing background starts pushing something automotive, red lights go on for us. We suspect philosophy (agenda) driving this, pun intended! People can do dumb things while driving a car. Automated driving systems don't do that, so they are better. So we will do the driving for you and noone will get hurt. Hmm, I enjoy driving. Does that even matter? And, honestly, the thought of a sea of self-driving cars sitting at a red light downtown; a bus or two may be far more efficient, if you don't want to drive. Engineering is being forced onto this band-wagon at an alarming rate. So much more development for something people probably won't want? Time will tell. Maybe it will be forced on them... on us...

This kind of thing is not new. Low Flow has been all the rage for years as water is becoming scarce. Toilets have jumped light-years ahead in design as a result, and perform very well with much less water. But low flow shower heads? So now it takes 20 minutes to take what used to be a 5 minute shower? This has probably driven overall water use up. A careful analysis would have... Nevermind...

We know our pond is small, and these thoughts are based on our perceptions. But most of the source material is from the magazines we read -- engineering magazines. And if this is what the engineering world is thinking...