Lifetime Product Liability - A Model For A Future

by

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Our profession is in a particularly unique position. We have an opportunity to do something fundamentally profound to improve the quality of life on this planet. Some might say this is a weighty statement for a profession that is known for its struggle for simple recognition. I firmly believe we can make a material difference by altering our procurement behavior.

We as Americans enjoy the dubious distinction of having used, manufactured and destroyed more of the earth's productive capacity in the twentieth century than all other people in the prior two millennia. This I submit makes us as inhabitants of this earth, more accountable to the world and increases our need to act more responsibly.

The issue: we have a choice in our path to the future. We can chose to become proactive leaders and create a more sustainable society or we can be dragged there by tragedy, circumstance, student protest, regulation, uncontrolled rising costs and consultants.

I chose the first path.

This issue isn't really terribly complex, actually it is quite simple. We are redefining more and more of the earth's resources by taking material from the Earthcrust and converting it to our usage while wasting even more. We are also making more unnatural substances that will not degrade in a human scale timeline. We are doing this as individuals, families, businesses, governments, and institutions. We must alter this path.

It will take immense courage to undertake this odyssey! Yet, I am convinced we must go there. Why us, why now? Our profession is responsible for billions of dollars of purchases annually and as such commands the attention of many manufacturers. As higher education leaders in one of society's best regarded institutions, we have leverage and responsibility. Do we have the will to exercise this duty?

Allow me to pose some disturbing questions that will serve to vividly illustrate my basic premise. Have you ever considered where the pad and carpet you replace each year on your campus goes when you are done with it? Have you ever considered how long it takes carpet to break down in a landfill? Have you ever considered the number and nature of the chemicals manufactured to make your carpet, glue it down, and transport it to your buildings? Where is the ultimate resting spot for those chemicals? Have you ever wondered where your excess plastic laminated furniture ends up? And just what does happen to those fifty year old desks, picture frames, end tables and secretarial chairs displaced by the latest round of promotions? Now that you are aware of these issues, my basic premise is how our change in behavior can have a huge affect.

Unfortunately, we haven't seen in ourselves any responsibility for the consequences of our actions or inactions. Nor have we looked at these issues as ones that we could do anything about! I submit that you as a leader on your campus can make a big difference.

Fully aware that extraordinary claims call for extraordinary data please consider the following to compel you to read on. Since the invention of the automobile Americans have bought and thrown away 650 million of them. At a minimum this means 3.2 billion tires and wheels have been out there somewhere. And where is that? Who is paying for that method of storage? When will these materials revert to a state which is close to their origin?

How many gallons of gasoline were burned by those 650 million automobiles? Since you all know that gasoline is not consumed but simply converted from one state (liquid) to another (gaseous), have you considered where all of that carbon monoxide, carbon dioxide, sulfur dioxide and the nitrous oxide have ended up? What would the effluent look like if rather than a gaseous state it had turned into a solid state?

Our current economic model is the offspring of the Industrial Age. This model assumed an infinite wealth of natural resources and unlimited growth. This led industry to presume that the responsibility for creating consumer demand for its products resided with industry itself. So industry concluded that by whatever means were available to it demand would be the desired result. This has resulted in consumers adopting a mindset of built-in obsolescence, a need to be fashionable and mass marketing (one size fits all) in lieu of being at peace with the earth and sustainable in our use of the bounty it provides. Thus, *caveat emptor* reigns supreme.

Somewhere along the way the consequences and accountability for usage and disposal of the product was transferred to the consumer (buyer). The economic model also gave us the modern corporate organization where other transfers of consequence took place. The profits were privatized and transferred to the benefit of the board of directors and corporate officers and the risk was socialized and transferred to the shareholders and society. Society, having few recognizable methods of dealing with risks, chose government for its accountability transfer agent. Clearly the savings and loan debacle of the 1980's showed us how this all works. And the Super Fund clean up sites serve as a constant reminder.

It is time to begin to change the paradigm. Can institutions of higher education lead the way? The critical thinking in this newly developing arena is led by Karl-Henrik Rob \tilde{A} ©rt, Paul Hawken, Herman Daly, Amory Lovins and William McDonough. These trailblazers are trying to engage the world in a deadly serious dialog. The dialog is centered on how to alter our paradigm of material intense economies oblivious to the consequences to the natural world.

Each makes compelling logic for the movement toward the notion of more efficient use of materials, less waste and greater employment of human beings. None advocates the radical, immediate destruction of the current economic system. Yet each urges recognition of the necessity to reduce consumption to match the ability of the earth to satisfy basic

human needs. In each view the marketplace plays the significant role in the redefinition of economic model. In the journey two factors are critical. Affecting consumer choice is the role our profession can affect the most. The second factor in which our profession may assist is the degree to which governments and institutions can incentize certain behaviors.

Consumer choice is where we can make an important contribution and lead our campus and our communities. We can demand innovative leasing arrangements for carpet, furniture and personal computers. We can ask manufacturers to market remanufactured goods, insist upon manufacturers designing for disassembly and ask that they utilize green products. We can engage our vendors in dialog about their use of green products and their intentions on becoming green certified. We should be familiar with the **President's Council on Sustainable Development** and what the agreement means to our community.

As a profession we occupy a niche. With our purchasing power we can exercise our influence. We can move the marketplace dynamics from the traditional sell-buy paradigm, where we understand "price" but not "cost", to a cradle-to-grave or "put-take" paradigm, where the manufacturer owns the product and all environmental consequences for a lifetime. This is known as product lifetime accountability. The Germans have been doing this for three years with automobiles, and Daimler-Benz and Bavarian Motor Werks are still very healthy corporations. In the sell-buy paradigm the manufacturers have product liability post-sale only when people are harmed and the manufacturers are found liable by societiesÂ' juries (things-gone-wrong). Yet the product had environmental (societal) impacts as soon as it was conceived.

The "costs" incurred by the environment are not considered, or are assumed to be little more than nothing, trivial or immaterial. The ecosystem is not boundaryless and unending in its ability to accept more and more waste under the Law of Dispersion. Should we ask what is the value of the fossil fuel or forest products used and wasted in the manufacturing process and latent in the products we are buying? Should our communities know what they are going to pay for the disposal and handling of the manufacturersÂ' materials for the next thousand years in the landfill that came from our campus? Will the growth industry of the 21st century be mining America's landfills?

Even I, a technology freak must admit that this notion of sustainable development has one critical, underlying assumption; technology can not address the consequences of the deterioration of the natural environment. When we consider the fact that the world population will double sometime in the middle of the next century to twelve billion people, we all should become concerned about technologiesÂ' ability to solve this problem.

Think about it. Twice as many people on less than 50 % of the available arable land, further degraded by the actions of humans! How much of the earth's surface will be occupied by those people and the industries that employ them? None of that land will ever produce any food to support these new humans. How much of the earth's surface will become non-productive in the next fifty years? How much land have you seen become non-productive in the last ten, twenty, thirty, or forty years? Should we be concerned? Imagine the consequence on every natural resource if the developing world learns to consume and waste at the same rate as we Americans.

We have many corporations who are trying to make that happen under the global industrial

paradigm. A simple factoid. Chinese consumption of beer is three bottles per person per year. If that were to double to a six-pack per person a year, the world's entire surplus grain crop would have to be dedicated to this lofty objective. I doubt the Phillip-Morris or Anheuser-Busch folks would agree that we should question the goal. But what about the rest of the world, is there a higher purpose? Is this the wisest and best use of the world's surplus corn supply?

Since Pandora's box has been opened, how about this: Do you know that America throws away 3.5 billion pounds of carpet every year? That is 920 million square yards. Is higher education a very significant amount of that yardage? How do we feel about this? Further, do you know that carpet lasts about twelve years on our institution's floors but will last 20,000 years in the local landfill?

Our profession has a choice. We can ask carpet, furniture and personal computer manufacturers to change how they behave and thereby influence this marketplace. We can get long term lease agreements with carpet and furniture manufacturers. We can ask and get manufacturers to seriously commit to reduce, reuse, renew, remanufacture and recycle to alter the current behavior. I also think that we will pay more initially (price) in some instances but in the aggregate we will pay less (cost to the environment). The fact that we have ignored the environmental costs can not go on indefinitely. We simply must begin to understand our influence in a broader context.

We can also influence the speed with which manufacturers come to understand that a sustainable development model can become a competitive advantage if we begin to ask them to be more responsible.

Most of us have the same mental model. In that model we want our children, and our grandchildren to have a future with a physical and economic environment that is better than the one we had, or at least as good. Unfortunately our society, as well as the University, gets trapped in the "what's in it for me" mode. We must work hard to avoid that trap. Instead we should ask the question "what's in it for us?" Or better, "What's in it for every living thing?" should be the common paradigm.

We can argue endlessly about the degrees of this problem and the pressing immediacy of the problem. We can finger point, blame government, blame industry, or ourselves, but in the end, unless we engage in some creative thinking, this will turn into nothing more than a plausible deniability game.

We all have a choice, the question is are we willing to exercise this choice? I suggest the notion of product lifetime accountability as an alternative for you to seriously consider. I'll try it please join me? Do Great things!!!

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