Invention and Innovation:

The Need for A New Paradigm

by Loren Israelsen
President
LDI Group
Salt Lake City, UT

Invention is in essence the power of creation and destruction. Most breakthrough inventions create new industries and companies while destroying existing industries and companies. Innovation is the tool by which invention finds expression in commercial markets. Taken together, they are powerful forces and if contradicted can quickly bring even the most successful company or industry to its knees. Why is this? Innovation effects change in the established order using invention's creations. The established order (whether social, scientific or commercial) is a mosaic of patterns, working models and behaviors that enjoy a certain predictability and harmony. Thomas Kuhn in his classic work, The Structure of Scientific Revolutions[1], defined this order as a paradigm. When accepted scientific ideas or principles are invalidated by breakthrough discoveries, this is a "paradigm shift." Mr. Kuhn argues convincingly that a paradigm shift is inevitable and predictable in its effects.

Clayton Christensen, a professor of business administration at Harvard Business School, has restated Mr. Kuhn's logic in The Innovator's Dilemma[2]. Mr. Christensen's premise is simple. Innovation is either sustaining or disruptive. Sustaining innovation (SI) is typically seen as improved performance of existing products. It is incremental and safe. "New and improved" banners on cereal boxes and bathroom tissue come to mind. SI is the lifeblood of mature, slower growing markets. SI is predictable, conservative and risk averse.

Disruptive innovation (DI), on the other hand, creates new and conflicting value propositions at all levels and forces competitors and consumers to make reactive decisions. Mr. Christensen identifies key characteristics of DI's, which include the following:

- They emerge out of insignificant markets.
- They initially under-perform against established products.
- Few consumers want or think they need the new DI product.
- DI's lead to reduction in profit margins (within the old order).

Disruptive innovation products (DIP's) are initially harder to use or understand and seem clunky compared to the refined and fully developed sustaining innovation products (SIP's) they compete against. Notable examples of DIP's include the photocopier, the jet engine, computers and pretty much everything in the computer/software world. Market leaders, even when well managed and highly responsive to their customers' wants and needs, often stumble and miss the paradigm shift brought on by DIP's. The reasons appear to be found in the nature of innovation. Market leaders listen to customers who themselves do not want disruptive change and thus don't demand this from suppliers or customers. The more vested companies are in the status quo, the less able and willing they are to perceive the next disruptive innovation.

Nutraceuticals And Innovation: Past And Present

What does this have to do with the nutraceutical industry? Everything. Our recent history shows a period of deep conflict (1990-1994), profound change through DSHEA (invention) and subsequent disruptive innovation (1996-2000). This industry has gone through a major paradigm shift with the resulting deconstruction of established patterns and orders of commerce.

The inventive force was passage of DSHEA in October of 1994. This law "created" new product claims and new markets. Explicit benefit claims were the needed "passport" to larger markets where personal service and advice are largely unavailable. Product claims and advertising became the surrogate retailer. But this isn't enough. Broad consumer interest and knowledge is the predicate to mass market expansion. The sudden interest of the popular media in herbs, natural medicines and the like drove the new "natural health consumer" into the aisles of food, drug and mass merchants. It now seems clear that many of these newly minted natural health shoppers were more curious than committed. What appeared to be SI trends were in fact unrecognized DI trends. The old and stable marketplace of small stores who gave advice and charged specialty product prices was destabilized by sharp retail price reductions in the mass market and a mismatch of consumer expectations and product performance without the old retailing support system to act as a shock absorber.