## Farrah Haidar Writing Sample #7

## What came first - Design or Manufacturing?

"We've got this GREAT product." That is the start of many potential customer meetings. Usually, the product is really great. The engineering is slick, the features amazing and the manufacturing? Well, they just haven't thought about that yet.

In 2007, consumer electronics companies will spend an estimated \$10 billion on product design and manufacturing. A third of that will be spent on product redesigns and delays. Aside from the extraordinary expense, consumer electronic companies are also worried about speed to market. In the fast-paced world of consumer electronics, the ability to produce high-quality product quickly is valuable not only in capturing initial market share but also in attaining additional brand equity.

To remain competitive, consumer electronic companies have implemented many quality control systems – Six Sigma being the latest rage. The objectives are always the same –increase quality and reduce design time, especially re-design time. The most costly re-works happen in the transition from the design lab to mass manufacturing.

Product designers often build their product in a lab and produce prototypes by hand. This procedure often fails to take into account that what you can make by hand does not automatically translate into what you can manufacture. The result is extensive re-design work, longer time for product releases and additional expense which can easily be avoided with three simple steps.