Goldense on R&D-Product Development BRADFORD L. GOLDENSE | Contributing Technical Expert

Measuring Product Development Effectiveness



hat is "Effectiveness"? It is the degree to which something is successful in producing the desired result. Effectiveness in product development is

still elusive. Pharmaceutical companies believe they should get a larger percentage of trial drugs successfully through clinical trials. High-tech and consumer industries believe they should have better than a 90% failure rate. In general, should a company not have approved so that fewer died on the vine? As well, how much of the time spent on vine-dead products could have been reallocated to the rest of the products in the pipeline to assure their success? Were any of the vine-dead products caused by subpar engineering or designer skill sets? What if the company spent a few extra thousand on training and it resulted in an additional product being saved and launched? Doesn't that few extra thousand more than pay

industry average failure rates run around 40% to 50%. Yet, except for a small number of products where management just crosses their fingers, products approved into the pipeline are expected to create revenues. And, half or more of the time they do not.

Contrast this to current manufacturing

operations in this day and age. Most plants have been running close to perfection for the past 30 years. They count defects in parts per million; and a good percentage of the work force has Six Sigma Black Belts to assure this remains the case. How different is that from product development!

R&D, product development, product management, marketing, and select groups of other business functions are not yet mature enough to primarily focus on productivity. But, because of the success of this metric in mature business functions, senior management is forcing productivity metrics into every business function.

How much more should a company spend to "save" a product that will otherwise die on the vine due to an overloaded pipeline? That "saved" product more than pays for any additional (unplanned) monies spent because of the multiple. Backing further upstream, how many approved products

Effectiveness = Output Achieving The Intended Results for itself? Any of these scenarios will result in higher pipeline yield and lower failure rates. At 3 to 15x revenue multiples, it would be cheap money spent.

These are but a few examples of places where the effectiveness of product development could be significantly improved.

There are dozens more. Management will never ever reduce their demand for output. Therefore, because productivity is output divided by input, productivity in product development means reducing the input. Will less input cause product development to become more effective or more mature? Wouldn't spending a bit more unplanned money when needed actually increase output which, in turn, would increase both effectiveness and productivity at the same time given multipliers of 3 to 15x?

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