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New Products – Street Smart Ways of Winners

If you have a new product idea, how can you be sure it will be profitable? After a decade of experience in testing, developing, and commercializing retail service station equipment I can tell you this: There are “no sure things.” However, in this customer-driven marketplace there are ways to tip the balance in your favor.

Let's look at a recent success story that is shared by many in the equipment sector: In the mid 1970s, when California mandated vapor recovery, improvements to equipment were mostly evolutionary. Significant innovation was not commercialized until Amoco introduced bootless assisted systems in the St. Louis metro area in the late 1980s. The 1990 Clean Air Act Amendment mandated implementation of vapor recovery in most ozone non-attainment areas by November 1993. This resulted in an avalanche of new, innovative equipment utilizing bootless nozzles. The ultimate winner was the customer.

Win or lose – What distinguishes winners from losers? Probably the most comprehensive study of success factors in product development was published by R. G. Cooper¹, who developed case studies for 203 actual new industrial projects based on interviews with executives from 125 companies. He summarized critical success factors as follows:

■ Superior product with unique benefits to the user. It eliminates problems that customers have with competing products.

■ A well-defined product and project even before the formal development stage.

■ Quality of technological activities, such as preliminary specifications, prototype testing, pilot production and manufacturing start-up.

■ Technological synergy between project requirements and the company's

research, engineering, and manufacturing skills.

■ Quality of pre-development activities, such as strategic planning, detailed technical and market assessment and financial analysis impact project outcome.

■ Strong synergism among the project and marketing resources, such as sales and distribution, advertising, market research and customer service.

■ The quality of marketing activities such as consumer testing and the product roll-out.

While the most important success factor on Cooper's list is a unique and superior product, *the largest differential between winners and losers* was the quality and degree of effort during the pre-development phase.

Rules of the road – It is worthwhile to expand on Cooper's relatively short list for the petroleum equipment industry because product needs – while determined to some degree by customer demands – are largely influenced by regulatory mandates. In fact they determine the final form of many service station products. The two main areas of compliance are: codes administered by ASTM, NFPA, UL, SAE, ANSI/ISO, CARB; and requirements under the Americans with Disabilities Act, and under the Environmental Protection and Weights and Measures agencies at the local, state and federal level.

A thorough code review needs to precede any product development effort. Depending on the product, a patent and trademark search should be conducted, minimizing potential adverse impact of expensive litigation.

Other pre-development work should include inputs from diverse groups: customers; sales and technical service personnel; market research professionals;

and representatives from the manufacturing organization that you plan to use to develop your product. Cross functionality is the key to solving unanticipated problems early.

This group should also have major input in the strategic planning and positioning for the product. Details on how to analyze the competition and proper positioning of products have been described by a number of experts.^{2,3,4,5}

Finally, coordinate input for all departments early in any project in order to develop alternatives to problems. This is when potential losers need to be identified and eliminated before siphoning considerable corporate resources.

In today's complex world, good ideas are seldom commercialized unless there have been multiple iterations of defining and redefining by cross functional teams.

It is easy and takes little risk to kill good ideas, but it requires nurturing and some risk taking to become an advocate. Yet the rewards of a good idea can be virtually never ending.

References

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