Technology

Innovation: You still need right 'stuff' for a success

By Jay S. Mendell
and Henry Sarkis Jr.

Some questions every business owner should be asking:

- What was the last innovation attempted in my organization?
- If it failed, did I punish the innovator for the attempt?
- Should he or she have been rewarded for trying?
- What kinds of innovations are needed in this organization, and what can 1 do to spur motivation?

An M.I.T. professor, Donald Schon, has pointed out that for some companies, a major innovation is repackaging potato chips in a larger bag.

More enterprising companies try to develop new products from the laboratory every year. Still other companies emphasize non-product innovation, such as tighter quality control, stronger motivation of employees, and clever new methods of raising capital. And some extraordinary companies have a bias in favor of innovation and will try practically anything and everything.

A number of failures must be expected for every success. When laboratory discoveries are being brought through the R&D (research and development) cycle, with an eye toward marketing, hundreds of ideas may die for everyone that reaches consumer acceptance and market profitability.

Failures are accepted as a natural part of R&D, because one never knows if a lab discovery will "scale up" to a technically feasible pilot project, or whether the pilot project will "scale up" to a commercial project, or whether the commercial product will be salable.

The 3M company has developed more than 50,000 products and generates 25 percent of its annual revenue from new products (those introduced during the previous five years).

And 3M will be the first major non-aerospace firm to conduct research aboard the space shuttle.

Certainly 3M is one of our most innovative companies. What is its "secret',?

There is no secret: The company sponsors internal entrepreneurship and tolerates well-intentioned failure. Radical decentralization prevents bureaucracy from taking over.

Product managers at 3M are allowed wide latitude and, at the beginning of a project, the entrepreneurs are not expected to collect facts and figures to "prove" their baby will be a success.


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The company recognizes that this is the point of maximum ignorance, and therefore not the time for extensive planning. (Planning is done at 3M - before a product in launched. That's another 3M "secret. ')

Entrepreneurs at 3M don't have to prove that the product will work; instead, those opposed to the project are required to prove that it won't work.

The innovator has the benefit of the. doubt, and the relentless emergence of facts, rather than prejudice or speculation, detern1ines what lives or dies.

Success at 3M is rewarded when the product reaches the market; the product and its development team are covered with recognition -money and attention.

This reinforcement keeps the internal entrepreneurs from leaving to become external entrepreneurs.

Another spectacularly innovative company, Proctor and Gamble, has enjoyed double-digit growth in sales and a 15 percent - 18 percent return on capital. And it affirms the 3M philosophy of trying out ideas on a small scale, and advancing or retreating based on the facts discovered.

Innovations are sometimes killed just before the marketing stage is reached, after millions have been invested. And the would-be innovator comes right back a few months later with a new idea.

As a rule, however, the closer the innovator is to the market stage (the further from the uncertainties of R&D), the less tolerant you ought to be of repeated failures by the same person. Maybe he or she is not sufficiently close to the needs of the customers.

So far as internal innovations are concerned -computerization of a department, new methods of training employees -the question is not whether a technology can be developed or whether millions of consumers will accept a new product.

The question is whether the innovator can execute the program and lead and motivate the beneficiaries of the innovation.

Here the question is whether the innovator has the "right stuff' to carry out the innovation.

And, if the innovation fails, there is the question of whether the innovator and the company learned something from the failure.

There is never a question of whether to innovate. Instead, *there* is a question of what comprises reasonable forethought, and what comprises a signal that the project ought to be cut off.

Someone who exerts reasonable forethought and good judgment in recognizing and terminating a losing innovation may be rewarded under various incentive schemes.

One of the safest ways to develop a record as a strong innovator is to keep in touch with the customers and furnish what they request.

And remember to think big and start small.■