3m company



1. How the 3 M innovation process evolved from the time the company was found?

Answer:

- * The innovation process at 3M has typically been a focus area for the upper management. The company had taken a get-out-of-the-way attitude towards the product developers who in turn have worked accordingly towards innovation. Along with technicians each team had a process engineer to ensure that the product was efficiently made. The entire team did not face any risk if the product failed.
- * The product developers used to visit the factories and workplaces to talk to the workers to get ideas for products.
- * The developers were not given the share of product royalties as the company believed that innovation was driven by sheer love of it. But the developers were encouraged by various means like rewards for innovation and grants for innovative projects.
- * There was also a dual ladder approach that provided the senior technical persons with great career opportunities to advance without switching over to management.
- * In the 1990s as the innovation was stagnating, most of the innovations were extension of existing product lines, management came up with a protocol that 30% of 3M's revenue should come from innovative products that did not exist four years ago.

- * To meet the challenge the company's work force had to change its approach towards work. Some of the people in the Medical product's department switched over to a process called " Lead user research". After the process brought success to this division it was applied to other divisions successfully.
- 2. How does the 'Lead User' research process differ from and complement other traditional market research methods?

Answer:

The 'Lead User Research' is the process where we find out the people or organizations that have made radical innovations to suit their needs and which are well ahead of time.

In case of normal market research, information is collected from users who are at the center of the target market. This essentially involves the problem finding and recognition exercise, with the analysis of the research carried out post research to find out the solution. Typically the companies do focus group and analyze sales data and customer complaints and requests. The product developers then apply their own creative thoughts to come up with a new product.

In case of lead user research, the company collects information about both the problem and the solutions from the markets that face similar or near-identical problems, not necessarily the target market. The development team tracks down the innovators who have already come up with some kind of solution to the identified problem to add up to their business needs.

Instead of copying the idea of the innovator in toto, the developers come up with new product ideas that suit the manufacturer's needs based on ideas of a number of lead users and in-house developers.

The lead user research typically involves a smaller set of people, the innovators, as compared to the typical market research conducted over a larger set of people. The innovators might be derived from a market, which is not at all the target market decided on at the start of the process, as the case aptly shows; however the innovators are somehow related to the innovated product usage. The lead user research requires a lot of networking (to connect to the pioneers and the innovators of the field) as compared to the typical market research. Even the level of commitment and involvement is high as compared to the other.

The lead user can complement the typical market research to make the research process more holistic. The searching of the lead users cannot be undertaken without a market research of the problem itself. Hence the need of normal market research cannot be discounted. In fact, the lead user research method can step in at this research stage to unearth hidden problems that might have not been so imminent during the conceptualization of the market research problem, as 3M found out during their visit to hospitals in India.

This can lead to a better efficacy of the market research exercise. Rather than hunting in the wild for the solutions to the problems posed through the market research we can have a ready made solution from the lead user research or at least have an idea at hand which is already in existence.

Thereby we can work on the products and improve them rather than starting from scratch and come up with the solution in a shorter span of time, arguably. Hence lead user research user can complement the typical market research to make market research more effective and productive.

3. What should Medical-Surgical lead user team recommend to Dunlop - the 3 new product concepts or a new business strategy?

Answer:

We felt that Medical Surgical lead user team should recommend the new business strategy to Dunlop. It has been noticed that there was little room for growth in existing markets and the margin on existing products was declining. Hence the development of a new product is deemed absolutely necessary.

Moreover, 3M had a policy of 30% new products to be developed over a span of 4 years. The Medical Surgical Markets Division in charge of the surgical drapes was facing a stagnation of the product itself, despite having around \$100 mn of annual sales.

The alternatives presented after the lead user research have been qualified by us mainly on the basis of which provided a breakthrough innovation and weren't just line extensions of the existing product and technology itself. Hence we rejected the first three alternatives, they being mere line extensions and could have been produced with the existing 3M technology. They can never be considered a breakthrough innovation, despite being commercially viable and 3M getting access to \$2 bn market in the third

alternative. We need a radical innovation which can only be provided through the fourth alternative, where we need a change in strategy by " crossing boundaries". This alternative gives us that elusive breakthrough product that the business unit has been looking for one last decade.