Case study of innovation at 3m essay sample

Technology, Innovation



Introduction

Creativity & innovation is important for enterprises, especially high-tech corporations. In the trend of extensive globalization, it is almost impossible for any enterprise to survive in the business world without seeking help from creative innovations. The paper focuses on significance of creativity & innovation in the operation of a famous company—-3M. 3M is a manufacturing company that has a long history, it has a series of well-known products and brands. The first part of the paper will identify and discuss three issues in the case study of 3M, which intrigues me the most. In the next part of the paper, the creative innovation method used in 3M will be hypothetically applied to an electronic company in Hong Kong; the difficulty that might be confronted will be discussed. In the last part of the paper, the method of 3M will be applied to my own situation if I am manager of the company. Both strength and Challenges will be examined.

I. Creative innovation in 3M—-a case study

The case of 3M corporation is a very impressive enlightenment on the method of creativity and innovation in a company. The whole creative innovation system in 3M is a guarantee in the company's great success. In my point of view, the success of 3M by adopting creative innovation method is no co-incidence. From the emergence of creative ideas, to the development of them, and then comes to the application of these creativities into productions, from the fostering of innovations to the implementation of them, 3M offers a wide range of encouragement and incentives to its employees. In the following passage, I would like to discuss three issues that interest me the most in the creative innovation methods of 3M.

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First, like many other companies nowadays, 3M has been consistently supporting creative thoughts. It employs the people who has higher potential of creativity and is used to innovative thinking patterns. In the workplace, 3M allows the employees to have more free time and space on their own. 3M encouraged " bootlegging" employees working on innovative projects in their own time. Besides, the company also tolerate its employees to make mistakes, because as one of its most prominent CEO William McKnight puts it: " Mistakes will be made, but if a person is essentially right, the mistakes he or she makes are not as serious in the long run."

What impresses the most 3M's open attitude towards mistakes, this enlightened attitude owes to the company's corporate culture that respect is the foundation of the company spirit. (Flynn & Chatman, 2001) The employees are given the most freedom possible in developing their innovative thoughts and put them into practice. This distinguishes greatly from those bureaucratic companies where they punish harshly on employees' mistakes and would not tolerate on the employees' casual behaviors.

Often, employees in a highly bureaucratic company will face tons of specific rules and regulations. Employees under this kind of stressful working environment will gradually limit their thoughts, let alone innovation, their slowly get used to following their job in prescribed order and are afraid of trying something new. 3M's understands how important it is to respect every individual employee in the company. As respect and encouragement are the pre-requisites of promoting creative innovations among employees.

The second enlightenment in the experience of innovation management in 3M is the non-bureaucratic style of management in the corporation. According to the introduction in the material, the company permits the promotion of personnels straight to the management level if they make a great contribution to the technical innovations to the company. This means employees who are in charge of technical research and development are possible to be directly promoted to managers of the company, they do not need to transfer from technical positions to management positions to get a managerial promotion.

This is an invisible but effective way to stimulate enthusiasm for work. As it is observed that, many companies, especially nationalized companies in developing countries refuse to authorize power to their employees. In these companies, if a technical employee want to be promoted to the management level, he or she has to first made a submission to the senior management level about changing their position from technology to management, and then

he or she has to start from zero in the management field of the company and then slowly get promoted. Comparing to these companies, 3M has chosen a wise way to give its employees appropriate incentive by setting forth such policy. It is also a good example to show that the company respects its employees and is willing to provide them with opportunities to make their own occupational decisions.

The third point in 3M's innovation method I want to address in this paper is that the company's integration of its innovation creativity process and outcomes. According to the case study material, the 3M company figures out ways to involve its consumers in the innovation process, this indicates that the company looks upon to linking its innovation outcomes to the consumers' needs. (Figueroa & Conceicao, 2000) By inviting the consumers into its innovation producing process, 3M is better able to identify the what the consumers' needs and interact with them about how to apply creative ideas into products. What is more, the company can influence consumers' potential needs by including them in such process.

Many companies might have similar policies that modify its research and development focus according to the market situation, but few can reach up to 3M's level. 3M not only pays attention to the reaction of market and consumers, it also intends to affect the market or consumers needs by thorough interactions. This means that the consumers are not only able to share the innovation outcomes of 3M, but also involving in the innovation making process.

II. 3M's innovation method applied in a Hong Kong organization Hypothetically speaking, if 3M's approach is introduced in an organization in Hong Kong, China. Will it be successful or not? The situation might be very complicated. Because Hong Kong is part of China, though it adopted the capitalism system, it follows the many Chinese traditions. Especially since

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Hong Kong came back to China in 1997, many corporations and organizations there are under great influence from Mainland China, some of them are even nationalized. In these companies or organizations, the cultural atmosphere is distinctively from 3M. So, it is hard to decide whether the 3M

experiences can be successfully transplanted in Hong Kong.

First, the organizational structure and management in Hong Kong company may be more bureaucratic than 3M. The decisions and orders are passing through to the employees through many tiers of the organization. This is not good news for the implementation of 3M method, since innovative ideas will be difficult to get to senior level of the company and cause adequate attention from the managerial level. (Bharadwaj & Menon, 2000) As a result, the time from fully recognition of the significance of an innovative idea to the time it is applied in practice will be slow; the waste of time does not fulfill the requirement for efficiency in the business world.

Second, as it is mentioned above, if the corporate structure and management is too bureaucratic, it will be hard for the company to tolerate mistakes and casualness. Bureaucratic companies usually treat employees like machines rather than human beings; they give less respect to employees. They are not able to realize the importance of respect and encouragement to employees. Creative thoughts are easier to be aroused under more relaxed and respectful corporate culture. If employees have less pressure about making mistakes, it will be more confident for them to undertake challenging tasks and make more daring innovations. Third, according to the case study materials, the innovation of 3M is not without price, rather, the price of innovation method is really high. 3M invest a large sum of money into research and development innovations in contrast to other companies in the similar industry. (Hindo, 2007) If the innovation method of 3M is applied to a Hong Kong organization, the company will face great pressure from the company board. Because investment a great sum of money into innovation research and development will sure face oppose from its shareholders. The interest of shareholders will be greatly affected if the company invests too much into the innovation projects. For the shareholders, the company has to convince them that it is totally worthwhile for them to

invest this account of money for the corporation innovation because the outcome will be very rewarding.

In addition, it will be difficult for the Hong Kong organization to fully adopt the 3M innovation method for the reason because it will be hard for the organization to apply all the innovative technologies into all its production fields. 3M emphasizes the importance of using the innovation outcomes into its various production lines. The Hong Kong organization is limited in the corporate scale, so it is not possible for it to apply the technical breakthroughs to all its products. So, normally, in order to avoid waste of money,, time and human resources, the Hong Kong organization obtain its technical support from institution in the society of in the universities. In this way, the Hong Kong organization has the access to many advanced technology achievements as well as less investment into its own innovation research and development center.

III. How to better apply the experience of 3M

The experience of 3M is really an inspiring one for other companies to learn from, especially high technology companies. The insights and learnings from the case of 3M that I consider could be applied to my own hypothetical situation will be discussed in the following statement.

First is the discussion of how I will apply these insights and learnings of 3Minnovation method to my future endeavors as a manager. Generally speaking, I will apply the whole system of its innovative management style. That means I will not merely copy the forms or specific steps of its innovative methods. More importantly, I will focus on the essence of 3M's success. The key aspect that contributes to the company's success is that the company has the spirit of innovation, besides, it create a corporate culture that cultivates such creativity and innovations. I would like to stress once more here in this passage about the degree of freedom and respect 3M has given to its employees.

It can be illustrated that the company treats all its employees in a very respectful and humanistic way. I will certainly learn from 3M in this and fully respect all my employees. Because employees in a company are better able to perform well if they have been given more authority and freedom to make their own choice on innovation and how to use them in practice.

Secondly, I will learn from 3M that innovative idea will need the support from a consummate management system for the innovations to develop. If any employee is hit by creative thoughts or inspirations, the company will make sure that his or her idea gets to the senior level as fast as possible, this insures that the time interval between the happening of innovation to the application of innovation is short and effective. Besides, if the innovative idea is proved to be relevant and valuable, the person who initiates it will get fund or other financial aid from the company to help them carry their ideas out. (Tushman, & Nadler, 1986) If the innovation ideas turns out to be a big success that help boost the performance of the company, for example, products that used this innovation are popular on the market and sell well, the inventor of the idea and those who help in carrying the ideal out will get considerable reward from the company.

Thirdly, I will learn from the experience of 3M that it links to its innovation with the market or the consumers. As the manager of the company, I will have my employees making feedback forms on the company website for any consumer who purchases the innovative product from our company. These forms are designed with a series of questions on the consumers' experience when using out innovative products, what are their suggestions to our future innovative products, what other possible solutions they can provide to consummate our current innovative products. By reviewing of such feedbacks from consumers, the company will be more targeted in its future innovation reforms.

The strength of my company is that it is a company that is been set up after 1990s in China. This is a great time for innovative companies in China, as the country has many incentive policies on the companies' innovation progress. The government offers many innovation perks and taxation discount to innovative companies or innovative projects launched by the companies.

Under this context, my company will be equipped ambition and material foundation for the above innovation improvements. However, there is some limitations as well. Since my company is a nationalize one, nationalized companies in China are often very bureaucratic both in the corporate structure and the corporate management, let alone corporate culture. It is hard to fully adopt all the innovation experience from 3M in my company.

The innovative reforms will confront with a lot of obstacles from both the inside and outside of the company. In order to change this situation and to make a better environment for the innovation improvement in the company. The most urgent need is to carry out reforms on the bureaucratic corporate culture; many of the approval and discussion procedures can be left out in order to create efficient and effective working styles. The senior level should learn to trust on the subordinates and authorize more power for employees to make innovations. In additions, the company should have more financial incentives on the innovative ideas.

Last but not least, for the sake of money saving and promotion of productivity, it is better for the company to cooperate with other organizations on the innovation process. For example, the company can set up fund to financially support innovations from the university students if the company can utilize the innovations. This will be much cheaper than directly invest the money in the company's innovation research and development center. Furthermore, the company should not arrange separate office areas and canteens, because this will cause a sense of distinction and

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discrimination among employees, and it will not help to build a respectful and free corporate culture.

Conclusion

Concluded from the above statement and analysis, the experience of innovation method of the 3M company is worthwhile for other high-tech companies to learn from. 3M has a free and respect culture that help cultivate innovations in the company, it has a whole consummate system to help carry out all the relevant creative innovations. The achievements of its innovation method are effectively applied in its production. However, there are difficulties for a company to fully take on the 3M's way, especially when the cultural situation for the company is very different, like company in China. Still, there are ways to deal with these difficulties. References:

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