Another Significance of R&D Reform

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The word "reform" has been a popular buzzword in society for some time now. With few exceptions, organizations need to have some association with society in order to justify their existence. Ongoing reform is essential if organizations are to continue to prosper. Organizations must evolve and adapt to changes in social systems and environments in order to address or avoid current and potential future issues. Today, in light of rapid technical innovation and dramatic changes in social environments, any reform must take account of possible future trends.

Although reform is inherently a positive, productive action, the current static condition of many of our economic and social activities makes it inevitable that reform will also involve some negative aspects. Furthermore, certain reforms will be embraced to greater or lesser degree, depending on the extent to which different people perceive benefits or disadvantages in a particular action. What drives reform in this situation is the prospect of the benefit it will bring in due course.

When it comes to R&D, different companies are likely to seek reform for different reasons. Of course, the overriding objective of reforming a company is to improve its profitability. Those engaged in R&D tend to evaluate services and systems in terms of what they can do (seeds-oriented R&D). This tendency leads to R&D inefficiency and the emergence of the "Valley of Death" and "Darwinian Sea*1" syndromes. Clearly, developers should adopt a needs-oriented approach. However, it is often difficult to identify the specific approach that should be taken, especially when developers are pursuing revolutionary technology or looking to introduce a service whose objective is the development of an entirely new market. It is not always easy to speculate on user needs, which may alter dramatically in the event of a radical change in the social environment. Thus, it is important to predict future changes in social environments and anticipate future needs. This calls for marketing approaches based on wisdom in different disciplines; above all, it requires that developers be enthusiastic about creating technology and/or products that will contribute to making life better—innovations that they would like to see being used by their spouses and children, even if they cost slightly more. I believe that such adjustment of mindsets is one of the reforms that we should be pursuing with respect to R&D.

It is not sufficient for R&D in a private company merely to produce something new: it must also enhance the company's profitability. Unfortunately, this concept is sometimes distorted into a belief that anything goes as long as it produces profit. Such a misconception would appear to be central to some of the social disorders we currently face. R&D people who are exploring technology and products for a better future must take due responsibility for the ways in which the products they develop will be used. It is unforgivable for a developer to be aware of potential adverse effects of his or her products on people's lives and fail to take any measures to mitigate them, or to proceed with total disinterest in how such products will be used. Therefore, we must persist in our efforts to reform the mindsets of the people and organizations concerned, so that they will engage in R&D with a heightened sense of responsibility for future ramifications.

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^{*1 &}quot;Darwinian Sea" syndrome: A concept proposed by Professor Lewis M. Branscomb of Harvard University in which the struggle for an invention to survive in a "sea" of competition after entering the market is likened to Darwin's theory of evolution and named accordingly.