

Managing Innovation for Sustainable Development: Measuring Issue

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Abstract Management can not be performed properly without measuring the object due to the fact that executing at least planning and control functions seems impossible without using metrics. The paper employs both scientific and empirical approach on the measurement of innovation process in a company assuming that innovation is a necessary element of enterprise's sustainable development. It presents the idea that a balanced approach is to be used in measuring innovation and the results of innovation process are to be analyzed from strategic but not short-term positions. The paper draws a conclusion that metrics used for innovation process are to include indicators dealing with all sides of company activity.

Key words innovation, sustainable development, metrics, balanced approach

1 Introduction

In the modern world it seems there is no need to prove that firms need to use innovation for sustainable development. At the same time business is complaining, that innovation is not giving the expected feedback in terms of revenue growth, cost reduction and customer satisfaction. One of the reasons for that as we believe is the problem of innovation measuring. The measuring problem, due to the fact the one can only manage what he could measure, leads to innovation mismanagement.

Let's see what measuring instruments are used by business in terms of innovation. According to the research, carried out by Boston Consulting Group, the main instruments are: revenue realized from projects launched in past three years, projected results versus actual performance, total funds invested in growth projects, allocation of investments across projects, average development time per project, market share the company has due to innovative and a few more. The answer to the question: "What metrics does your company use to assess the specific components of innovation and innovation return?" is the following. 82% choose profitability, 62% time to market, 61% idea generation and select, 56% overall health of innovation portfolio, 51% chooses research and development effect and efficiency. All of those metrics can be used as well for any project results measuring and most of the CEO's believe the metrics of innovation and regular products should match. At the same time most of them are not satisfied with the quality of measuring instruments which also comes out of the mentioned research, as well as by the report made in January 2008 to the US Secretary of Commerce and from the materials made out by different companies from different parts of the world putting time and money into innovation.

2 Main Text

Let us put the question of measuring in the following way. What is the aim of bringing innovation into company product portfolio? Is it really a short-term aiming as the selected metrics point out? The business history is telling quite the opposite: most of the time innovation was giving a feedback in 5 to 20 years. Also business leaders consider that the mission of the company normally can not be fulfilled without innovation. Speaking not of a particular innovation but on overall terms they agree that the innovation most desired feedback is keeping company on the top and a stable or growing market share in long-term perspective which not seems to be possible without innovation when the competitor are dealing with the new products, processes, services, structures and so on. Now one can see the contradiction: the strategic issue is measured mostly in short-term metrics which leads a conclusion that innovations are not profitable.

If we move farther this way we may come to the decision that innovative processes should be strictly limited or even cut down especially if the company faces problems. The result of such business approach is now seen in Russian national economy. For twenty years business here had "other things to do" than to invest money into innovation (of course there were exceptions). As a result the products are made on the equipment which is at least 30 years old (not to mention that almost on every plant there is 70 and 80-year-old equipment), the cost of energy is sky-rocketing because of 60 to 80% losses during transportation, and the 0,6% profitability in production is considered normal. The result of it is that all the native products need tax protection to be compatible with foreign ones. Even in resource production (the basement of Russian economy) produces are facing the need to cooperate with companies which

can provide innovative technology in order to be able to fulfill the client's needs. And still when we the CEO are offered to invest into innovation they look at the business plans containing short-term metrics mentioned above and decide that they are too expensive or take too long for return of investments.

Of course we are not saying that the above mentioned metrics should not be used at all. We are just pointing out that due to the said facts we think that innovation measurement should be produced from the position of alternative cost also. So the innovation should be measured not only by straight metrics but also by comparison of the said metrics in the situation when the innovation was not introduced. For example, one should not just measure the market share the innovative products hold but the overall market share the company has in case of introducing innovations and no such introduction. The point is that if the company is shifting towards producing ecologically friendly products its overall sales increase due to today's client orientation.

The other point in measuring innovation is that the expected results should be set as a part of a strategy and are to be measured by the indicators which company uses for the strategic issues, and not the ones ought to be used for regular business projects. Also the metrics used are to be balanced since it is the only way to guarantee company's sustainable development. Now let us look once more at the metrics used for innovation process by business today. It is profitability, efficiency, market share, idea generation and selection. If we put this into Norton and Kaplan's balanced scorecard we would assume one element missing – the one deals with education and development. That means that today's businesses are normally not measuring innovation in terms of their growth and development which we think is a mistake. The effect innovation has on a sustainable development of a company is not just the matter of finance, customer relation and internal processes. It is also the matter of acquiring personnel which will act to achieve company's constant development. That staff is to be eager to deal with innovation and that issue should also be measured for example with the metrics used in a company to measure the quality of human capital.

3 Conclusions

In the 21st century the sustainable development of the companies seems to be impossible without making innovation the part of company's activity. But at the very moment most of the companies are not satisfied with the results they gain from innovations. We think that is due to the management mistakes made in managing innovation. First of all the problem is in measuring innovative processes. Until the object is not measured it cannot be managed properly. According to that fact we suggest on one hand to measure innovation using strategy metrics and comparison metrics which will highlight the importance of innovation. On the other hand we suggest a company to develop balanced metrics scorecard for measuring innovation and to pay attention on including the education and development measuring element into it since this is the one which is missing in today's innovation measuring system of most companies.

References

- [1] Innovation Measurement. Tracking the state of innovation into American economy. A report to a Secretary of Commerce. January, 2008: 6-15
- [2] BCG report. Measuring innovation 2007. A BCG senior management survey, 2007: 3-12.
- [3] O'Dell C. Fostering innovation: Measuring what matters. Capitol hill briefing, April 3, 2008: 6-7.
- [4] Robert S. Kaplan, David P. Norton. Strategic maps. Converting intangible assets into tangible outcomes, 2005: 261-285 (in Russian).