Innovation theorists downgrading


The report, based on responses from 19 members of the council, highlights the short-term perspective of many Australian managers by downgrading the importance of technological change for individual firms.

Innovation, which was originally a term that referred to the implementation of new inventions, is now broadened to include any type of change undertaken by a firm.

In Changing Paradigms, innovation is virtually synonymous with corporate strategy, and the respondents make it clear that they regard new technologies as a minor component of change.

Instead, innovation as redefined centers on any type of managerial response to market signals. Although the report is unclear, it also appears to argue that most inspiration for innovative activities originates from within a firm, without much reference to what is happening in other parts of the economy.

At the level of a firm, this definition may make sense, especially in a stable environment in which change through the addition or subtraction of bells and whistles can offer strategic advantage even if only on a short-term basis. At the level of a whole sector or of the entire economy, however, or when a firm's environment is changing, technology deserves much more attention.

Analysis and policy-makers should be reluctant to base decisions on the behavior of individual firms because it is clear that the experience of no single company is really representative of the economy at large.

Strategic activity of the type described by Howard Partners may be vital to the short-term competitive fortunes of particular firms, but it will not lead to economy-wide growth.

While change in any particular sector may be modest over a period of a few years, other sectors will be undergoing substantial changes. Because these sectoral bursts of innovation are not synchronized, the economy as a whole is constantly changing in important ways even though many managers perceive that their own environments are stable.

The Howard Partners report can be
which cause 90 per cent of genital wart cases.

"Frazer and Zhou did their initial work with HPV16, which is the most important serotype." Cox says.

"Subsequently, when they completed their patent a year later, they included further data on HPV6 and HPV11, which are the two dominant causes of genital warts in humans."

The provisional patent filed by Frazer and Zhou in 1991 and a subsequent paper

Schiller says, "Frazer and Zhou reached the erroneous conclusion that L1 alone does not assemble into virus-like particles. Both of the vaccines soon to be licensed are based on L1-only VLPs."

Also, to clone a gene, you need a start codon and a stop codon. These codons inform the cell how long to make a protein.

Cox says, "The reason why Frazer and Zhou succeeded for the first time was that they made

"He also says, "I've had a fair bit of publicity for it in Australia."

"I'll be the first to admit that that has helped the cause of medical research in Australia no end at all. The money will come in large measure to Australia and that's also good, because it helps to argue a case for more funding for medical research in Australia."


interpreted as being, at least in part, consistent with Patterns of Innovation in Australian Business 2003, issued by the Australian Bureau of Statistics earlier this year. This report, however, offers deeper insights.

Based on a much larger and more varied sample of firms, the report (written by the Department of Industry, Tourism and Resources using data collected by the ABS) agrees that organisational change is an important contributor to innovation in Australia. But it also shows why and how product and process innovations contribute to Australian welfare.

According to the ABS and the department, firms of all sizes value technological innovation as a competitive weapon. In particular, firms are able to improve their efficiency through greater process innovation.

In fact, given the relatively low unemployment rates that Australia has enjoyed for several years, it is entirely likely that labour shortages would have generated increased inflation and brought growth to a standstill if there had not been sustained and widespread process innovation.

Thus if innovation is regarded primarily as a matter of rearranging or tweaking existing resources, no matter how imaginatively, the long-run result will be stagnation.

The only way to achieve real growth and development, and higher levels of welfare, for Australia as a whole, is to shake up existing practices by introducing productivity-enhancing new technologies.

Furthermore, most important advances for the long-term prosperity of particular firms will not arise internally.

Managers may fancy themselves as the main source of intellectual and creative firepower in their firms, but in reality they need to keep a sharp eye on what their competitors, suppliers and customers are doing, and they need to keep abreast of what is happening in other sectors and other countries. This is a tall order because it requires a considerable commitment of scarce resources, particularly time. But if Australian firms want to remain competitive in an international economy in which others are using new technologies as a strategic weapon, they cannot expect to prosper by emphasising stability and gradual change.

Australian firms in all industries, whether high tech or low, need to open themselves more fully to radically new ways of doing things. To judge from the responses given by the firms surveyed in Changing-Paradigms, this may require a substantial modification in how Australian managers view the world.

Fortunately, the ABS/DITR report on innovation shows that many firms are ready to meet the challenge.

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