

THE ECONOMIST'S VIEWPOINT

**Breaking the mould**

How to make innovation happen depends on how top corporate civil servants are willing to ignite new ideas.

By Eric Ng Ping Cheun

**I**nnovation has suddenly become the new theology of the different stakeholders in Mauritius. On the occasion of a two-day national innovation summit last week, many of them referred to innovation in the same rhetoric language as they once spoke on productivity. If the National Productivity and Competitiveness Council (NPCC) were renamed National Innovation Council, the thinking would be the same. Invariably, breakthrough innovations require a fundamental rethink, for they often come from dusting off ideas that failed to make it in the past. The problem is that thinking out of the box is an exercise that will fall through because of the same men and women who remain at the helm by just moving from one organisation to another. New ideas arise with change, the root of all innovation.

Innovation accounts for any growth that cannot be explained by increases in capital and labour. Thanks to its leveraging effects, innovation helps developed countries, in spite of lower GDP growth rates, run ahead of developing countries. In Mauritius, the contribution of capital and labour to the 5.1 per cent growth in GDP between 1993 and 2003 works out to 87 per cent. The remaining 13 per cent, representing the contribution of qualitative factors such as training, management and technology, is a paltry amount.

**W**hat precisely constitutes innovation is hard to say, let alone measure. The NPCC defines it as *"an action giving rise to a new idea, process or product for which there is a useful application"*. But innovation could just as easily be the substitution of a cheaper material in an existing product, or a better way of marketing, distributing or supporting a product or service. Entrepreneurs who are successful practitioners of innovation rarely examine how they do it. Most of them simply create value by exploiting some form of change in technology, materials, prices or taxation. They thus generate new demand, or a new way of exploiting an existing market.

Opening a new hamburger counter is not innovation, but strictly a business venture. On the other hand, an existing hamburger restaurant innovates when it designs entirely new cooking procedures and trains its employees in such a way that they can prepare and deliver a high-quality hamburger sandwich just-in-time, in hygienic surroundings, at a knock-down price. In a nutshell, giving customers something they had never enjoyed before is innovation of the highest order.

**T**he NPCC also defines innovation as *“a process of reflection, planning and implementation that... answers a need or brings improvement”*. In fact, new ideas travel in roundabout ways. Innovation is anything but orderly and planned: it must break the mould. Coming up with mould-breaking innovations is totally different from making incremental improvements. Important as they are, improvements to a company's product do not conquer new markets, nor do they guarantee survival. While successful firms might just be interested with sustaining technologies that deliver improved product performance, they could ignore disruptive or transformational technologies at their peril. Especially in the equipment industries, the downfall of leading world manufacturers was caused by some disruptive innovation from an upstart outsider.

True, disruptive technologies may be initially costly and uncompetitive with respect to established products in mainstream markets. However, they constitute breakthrough innovations offering other features that can be appreciated by some fringe or new customers, like being cheaper, simpler, smaller and easier to use. When the ranks of those niche customers swell, they flood the traditional market. The personal computer was probably the greatest disrupter of all time: dismissed initially as a gadget, it destabilised the mainstream computer industry, shaking even the mighty IBM. For its part, Microsoft redefined markets and toppled market leaders with WordPerfect.

**O**ur private sector would say that they see innovation as the key to increasing profits and market share. However, the best yardstick to measure their lack of inventiveness and creativity is their dependence on state protection. They keep alive anxieties about national competitiveness to bring pressure to bear on government to guard firms against competition by raising tariffs on foreign goods. Since unemployment remains the bogy of government, they ensure that public money be pumped into inefficient firms to stop job losses, which is politically expedient rather than principled. As inflation is the least of their worries, they always speak ill of the Bank of Mauritius so that the latter maintains its export-biased monetary policy. Clearly, our traditional private sector shows little interest in innovation. A risk-taking culture must be present to start with.

Innovative firms do not wait for handouts from government. They themselves make innovation happen in their midst. First, they promote employees who are internally motivated, whether by money, power, fame or the need for personal achievement. Innovative firms are good at churning out well-trained young people with all the skills their industries need. Second, they do not leave innovation to chance: they chase it systematically by actively looking for change. They do not doze off: they remain wide awake to find winners. Perhaps all this comes down to history, culture and respect for learning and professional competence within a society.

Innovation has to do neither with serendipity, nor with lonely pioneers pursuing their vision against all the odds, nor with start-up entrepreneurs seeking venture capital. In fact, most successful innovations are born, bred and brought to market entirely within well-established organisations, mainly large companies. In-house innovators are not so much entrepreneurs as intrapreneurs. Intrapreneurship relates to the ability of a company to continually re-invent itself. The first thing to do is to create the right conditions to allow radical ideas to blossom and to prevent overlooked ideas from slipping away. Innovation has to be built into the company culture.

**C**ompanies willing to innovate must bear in mind that innovations need to be championed and nurtured for long periods. In the race for acquiring competitive intelligence, companies now devise schemes which give recognition or rewards to employees for hawking good ideas around. Intrapreneurs have to start with hundreds of bright ideas to end up with a few plausible programmes for developing new products in order to get just one winner! They must get not only time off to pursue these ideas, but also money to support the development work, buy equipment and even hire people. Their objective is to create new combinations of knowledge from expertise that already exists within the firm.

To stand any chance of success, real innovations have to be transferred as concepts embedded in people's heads. Successful intrapreneurs are those who, first, have the ability to explain clearly to all employees, at every level, just how crucial the project is to the company's future. Second, they set next to impossible goals for those involved. Third, they target only domains where there are still plenty room of improvement. And fourth, they move people regularly between business units to make them fully understand the needs of the marketplace.

Foremost, intrapreneurs must have the personal backing of the board to persevere against all the odds. They should not get penalised for failure. It is necessary that the environment in which intrapreneurs work is culturally, if not physically, well apart from the corporate headquarters. Better still, intrapreneurs should be encouraged to break company rules wherever necessary. The aim is to lighten the heavy hand of corporate management and to value freedom from bureaucracy. While our big companies have enough financial muscle and sales clout to bring new products to the marketplace, they must become less bureaucratic to incubate new ideas. Intrapreneurs should even be given the freedom to transform their projects into small businesses without having recourse to the parent company's production and marketing departments. This can suit companies which need to break into leaner and meaner business to survive.

**G**overnment, of course, plays an essential role in making Mauritius a place conducive to innovation. Instead of provoking controversy on statistical measures, which leads to nowhere, government will make itself useful if it creates the right climate for innovation. It is worrying to hear a government

repeatedly reassuring people that it gets "*the economy back on the rails*". As Joseph Schumpeter saw it, a normal and healthy economy is not one in equilibrium, but one that is constantly being "disrupted" by technological innovation. Only a wave of fresh innovations which destroy the old way of doing things can create the conditions for a new upswing. The entrepreneur's role is to act as a ferment in this process of "creative destruction".

Started in the United States in the late 1980s, the fifth wave revolution based on semiconductors, fibre optics, genetics and software might approach maturity by 2020. There is still time to catch the wave, but laggards like Mauritius need to hurry as this new industrial revolution is altering the economic balance between countries. Economies with strong service sectors are well placed. They do not have to be big – witness Estonia and Israel – but an abundance of talent is essential to their success.

For that, the Mauritian government must see to it that it stops the brain-drain and lets in a continuous flux of brainy foreigners to fill the gaps. Tax breaks will induce firms to invest in their employees' knowledge and skills. Good bankruptcy laws that allow entrepreneurs to learn from their mistakes and try again will be supportive. Sweeping away unnecessary regulations and loosening bureaucratic restrictions will pay dividends. Helping small firms without proper research facilities identify future trends in markets and technologies will be of service to them. Bringing big company know-how to innovative little firms will have an invigorating effect on the country's industrial competitiveness.

Innovation takes time, money and insight. It requires patience, commitment and risk beyond any ordinary sort of investment. Innovations must move markets, carve out wholly new niches, yield far higher returns on investment than ordinary business ventures, and change the way the country works. There is no single recipe for producing innovations to order: they come out with the pragmatic search for opportunity.