

Singapore's Innovation Journey

by Patrick Lambe

Innovation, like SPRING, is in the air. Creativity is all the rage. Entrepreneurship is on every agenda. But what does it all mean for how we run our organizations, and how do all these different ideas connect to each other? We don't actually want too many people running around with too many crazy ideas, nor do we want unfocussed fragmentations of our core businesses by over-enthusiastic entrepreneurs. In this article we'll look at the core capabilities that generate innovation. The experience of Singapore itself in its radical transformation and remarkable success over the past four decades, and research conducted by Straits Knowledge into perceptions of innovation among Singapore managers will serve to guide us along the way.

The Innovation Story

Like all stories, the innovation story has a beginning, a middle, and an end. The journey starts with an idea, for which you need creativity. Next, the organization must build a reliable process for turning the idea into repeatable, consistent products or services. Finally, the entrepreneur punches the innovation into new markets. Why new markets? Because for an innovation, every market is a new one: the biggest barriers to innovation success are not necessarily the generation of ideas or the successful building of a prototype. The last and most important hurdle is getting the market to understand and adopt the innovation.

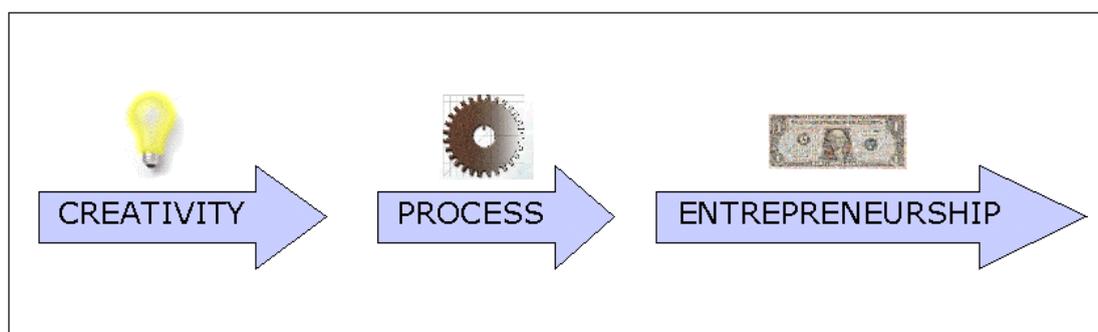


Fig.1 The Innovation Journey: From Idea to Market

© Straits Knowledge 2002

Innovation Capabilities

Looking at innovation this way very usefully helps us identify the core capabilities that organizations must possess if they are to successfully innovate. They need environments that foster *creativity*; they need strong *process* design skills; and they need keen *entrepreneurial* instincts and experience.

It's not enough to be strong in any one or two of these capabilities: creativity without process means frustration because ideas go nowhere. Process without entrepreneurship means failure because innovations never get to generate financial returns in the marketplace. Process and entrepreneurship without creativity are powerful machines in the service of last year's fashion – good enough if your

organization aspires merely to be a follower, very dangerous if your survival depends on staying ahead of the pack. Process on its own leads to arid bureaucracy.

But even having all three capabilities is not quite enough. *They must talk to each other.* Creative idea generators must be able to communicate the idea to their colleagues who develop the projects and the processes that turn them into reality, and they must have their trust. Process managers must be able to understand and transform ideas into real things by designing new systems and running productive development projects. Entrepreneurs must be able to straddle the two horizons of innovative idea creation and market perception, sense, seek out and seize opportunities, and communicate the essence of an innovation in powerfully persuasive ways.

The essence of innovation lies in communication, as the idea is passed from brain to process to successfully adopted product. Like a relay race, the baton must pass successfully from creator to process manager to entrepreneur and finally, to customer.

How Does Singapore Fare?

It's often thought that Singaporeans cannot innovate because they are conditioned to be followers rather than creative idea generators. When I was interviewed by the BBC recently on innovation in Singapore, the London-based interviewer threw me a question that spoke volumes about how Singapore is perceived: "Is it true that Singaporeans have difficulties with innovation because of their lack of freedom?" I confess I was stumped, though I should have expected this angle of attack.

Freedom to suggest, challenge and give new ideas a try with great spontaneity is indeed a characteristic of creative environments. But innovation must also marry with that freedom the discipline of process and the courage of the entrepreneur. In fact, you should rarely attempt to generate a common environment for innovation – you actually need three quite different environments, for three quite different types of people. Only at the idea generating stage and in the entrepreneurial endeavour do you want people who can flirt successfully with risk. When it comes to process, seated at the heart of successful innovation, the key idea above everything else, is *remove risk*.

It was Edison who is reputed to have said, "Invention is 5% inspiration and 95% perspiration". Perhaps 10% of innovation is about encouraging risk taking – 5% in generating ideas, and 5% in seeking opportunities in the entrepreneurial marketplace. 90% of the work lies in systematically removing risk of failure and risk of quality variance in your production and delivery processes. Nobody likes an innovation that works 5% of the time.

On that scoreboard, Singapore ought to rank highly. If we consider the history of independent Singapore, we can characterise it as an enormously ambitious project in innovation: the creation of an independent city state without economic hinterland, in the heart of a Malay archipelago but dominated by an ethnic Chinese commercial elite, with no resources except its people, and no domestic market to speak of.

The mechanisms by which it did that, served to bind the three core capabilities of creativity, process and entrepreneurship into a still-enduring combination in the service of the state.

Creativity - The education system was heavily geared to stream, spot and cultivate creative talent from an early age. The public service was supported by talent grooming policies that invested in growing, resourcing and placing people with ideas into positions of leadership.

Process - And the rest of the public service and the political arena were geared towards performance, implementation and process: creating systems, structures and rules that would align the doers with the creativity of the thinkers, and ensure that the country produced the visions generated by the idea elites. You could get by – and you could even prosper – by following the rules. Classic survival strategies reigned: if you didn't follow the rules, bucked the system, and compromised the Singapore Innovation Delivery Process, you got into trouble or found life more difficult and costly.

Entrepreneurship – Finally, entrepreneurship itself was placed at the service of the state, in the appointment of talented public servants to create, grow and drive the development of the government linked corporations – GLCs. As late as 1993, GLCs were creating up to 60% of Singapore's GDP, and while the government has been pursuing a vigorous divestment of GLC assets over the past decade, in the drive to internationalise them and release them from bureaucratic constraints, they are still thought to influence upwards of 20% of the Singapore economy.

In theory, then, Singapore's innovation credentials are quite sound. Her difficulty is, however, in the mix of capabilities as traditionally defined and how they now communicate.

In a more diversified, transparent and necessarily adaptive economy, a centrally directed innovation machine is both less responsive and less globally aware. If Singapore is to survive in the high risk volatility of the global economy (and where else can it really compete?) it must have much more pervasive idea generation skills throughout the population, more diffuse competencies in designing as opposed to defending processes, and many more entrepreneurs who are experienced in big global markets.

While the selective grooming of talent in the service of the state worked beautifully for Singapore's initial development, now it must needs scatter more widely the seeds of creativity, process and entrepreneurship among its population, and loosen the ties that bind non-state-influenced enterprise.

There is still a long journey to travel. Straits Knowledge found in its recent study on *Innovation in Singapore Organizations* that middle managers have real problems in managing the link between creative idea generation and new process design. The GLCs in particular, originally the backbone of Singapore's entrepreneurship machine, show signs of losing their way in managing the connections between talent, ideas, process and opportunity. SMEs feel keenly their lack of access to resources – both financial and human – in pursuit of the innovation agenda.

This is why education reform is so important to Singapore's future, why the role of GLCs needs to be substantially redefined, and why the access of SMEs to real talent,

Singapore's Innovation Journey

capital and opportunity is so critical to Singapore's future. But in the midst of all these quite substantial challenges, it's worthy of note that Singapore has proven its innovation credentials already, and has all the core capabilities it requires. Its only issue is, how does it realign and re-connect those capabilities to work in the new environment of the globalised, connected economy?

Patrick Lambe is Founder of Straits Knowledge (www.straitsknowledge.com), a Singapore-based consulting and research firm specialising in knowledge management, e-learning and innovation. His articles can be found at www.greenchameleon.com

This article was first published in *Education Magazine*, April 2002