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STRATEGIC MANAGEMENT FOR ECONOMIC DEVELOPMENT:
REMAKING THE SINGAPORE ‘MODEL’

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ABSTRACT

The dynamics of international economic competition have far-reaching policy implications for both
developing and developed countries. Established industrial and trade policy regimes in most countries are
under tremendous strain, and this applies even to the dynamic Newly Industrialising Economies (NIEs). The
outward-oriented development strategies of the Asian NIEs, which once seemed unbeatable, have run up
against protectionist barriers in the developed countries, and increasingly, against competitive pressures from
other up and coming developing countries. Governments in these NIEs have had to re-examine accustomed
policies and strategies, and search for alternative strategies and programs, in order to re-position their
economies for the future.

This paper is weighted towards the experiences of one of the Asian NIEs - Singapore - and its search for new
and innovative strategies to meet the challenges in the international economic environment. This paper sets
out Singapore’s strategic response to these fundamental changes in the international economic arena, and
offers some insights on the strategic thrusts which the government has "engineered" to gear up the city-state
for an enhanced role in the global economy. A brief historical backdrop serves to introduce these
developments.

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INTRODUCTION

*Singapore’s Economic Development (1959-1989)*

Singapore attained internal self-government in 1959, inheriting a slew of severe problems; not just economical, but social and political as well. The most immediate were economic problems. The Singapore government’s initial strategy to deal with them, working on the assumption that there would eventually be a ‘Malaysian common market’, was to launch an industrialisation program to attract manufacturing industries to Singapore, emphasizing import substitution, instead of export promotion.

Singapore’s separation from Malaysia in 1965, however, created an urgent need for precisely such export promotion. Without the Malaysian economic hinterland, industrial policies, of necessity, shifted towards creation of exports to generate income. The further constraint of a small domestic market, coupled with the impending announcement of a complete British military withdrawal by 1968, led the government to adopt an export-oriented (EOI), labour-intensive industrialization strategy, spearheaded by foreign investments (Mirza 1986; Pang, 1987; Rodan, 1989; Huff, 1995; Murray and Pereira, 1995; Peebles and Wilson, 1996).

To achieve this, the government adopted an interventionist approach. Strong political, social and economic measures were introduced to ensure a favourable investment climate for the foreign investment-led EOI strategy. Institutions were reorganised, tax incentives revised and expanded, development of industrial estates accelerated, labour legislation introduced to improve industrial relations, the educational system restructured to emphasize technical education, and industrial training programs expanded; radical changes made possible by constant government attention (Rodan, 1989; Regnier, 1991; Huff, 1995; Low, 1998; Yeung, 1998; Pereira, 2000).

This switch in industrialisation strategy was accompanied, fortuitously, by a marked improvement in the international economy, with rapid expansion in world trade and in multinational investments in export platforms. The EOI strategy, thus, proved remarkably successful; full employment was achieved by the early 1970s. This created pressures for wage increases, which initially sparked plans for a new development strategy to shift the economy from low-skill, low value-added, labour-intensive economic activities to higher value-added activities; this initial effort at economic restructuring, however, was effectively shelved following the oil crisis and world recession of the mid-1970s. Exports, and labour-intensive investments, remained the driving force behind Singapore’s economic growth throughout the decade.

By the late 1970s, however, Singapore’s export-led economic growth had led it to a virtual impasse. Rapid growth had brought to the fore deep-seated strains in the internal economic structure, most notably labour shortages due to Singapore’s small population, and prospects of declining productivity growth. There were also serious concerns over the deterioration in the international economic environment, particularly concerning increasing degrees of protectionism in the developed countries against its traditional, labour-intensive manufactured exports. And even in those same labour-intensive exports, Singapore was beginning to lose the comparative advantage to other countries with cheaper and more abundant labour, and with steadily improving technology and quality of production. These numerous external and internal constraints on Singapore’s further economic growth prompted the government to embark on its much-publicised economic restructuring program in 1979 (Singapore Ministry of Trade and Industry (MTI), 1981).

The magnitude and complexity of the restructuring process, as well as the short time frame in which it had to be implemented, led the government to adopt some aggressive – even ruthless – measures. A 3-year wage-correction policy designed to phase out low-skill, labour-intensive activities spearheaded a host of other deliberate restructuring initiatives. New fiscal incentives were introduced to encourage industries to shift into technologically more sophisticated activities; R&D efforts were actively promoted; manpower developer programs were stepped up – and at the same time, the same incentives that had previously encouraged the growth of lower-end industries were being withdrawn (Yeoh, 1988). This carrot and stick approach worked remarkably in the early 1980s, and the target of 8-10% growth per annum set in the Economic Development Plan was achieved.
This was not to last; the Singapore economy stumbled into a severe recession in 1985. An Economic Committee was formed to examine the causes of the recession, identify new growth areas and chart new directions for the Singapore economy (MTI, 1986). Remedies were promptly proposed and undertaken (Singapore Economic Development Board (SEDB, 1988). The economy turned around; GDP growth rates rebounded above 9% by 1987. However, it was clear that, for Singapore, growth could no longer be sustained through just more and faster production of yesteryear’s products. Singapore had to look to new economic products and services to sustain growth into the 1990s and beyond. Singapore businesses had to either move into higher value-added segments of established industries, or move into more sophisticated industries and services which would require higher skills and technology, and justify its higher cost structure. Competing on quantity was no longer possible; quality became the new focus for Singapore (Krause, 1987; Lim et al, 1988).

**CHALLENGES IN A CHANGING ENVIRONMENT**

A broad vision was laid for Singapore in 1984, by Mr Goh Chok Tong, then Singapore’s Prime Minister to become a developed nation by 1999 (Vision ‘99). This strategic intent was clearly articulated in the 1986 Economic Committee Report:

> "By the 1990s, we must aim to become a developed nation. We must aspire to be as good as any developed country in terms of education and skill level, range and sophistication of our economic activities, capital invested per worker and productivity per worker." (MTI, 1986).

New strategies and initiatives were developed to work towards this aim. The main ideas were set out in the document, Gearing Up for an Enhanced Role in the Global Economy (SEDB, 1988). The 1990 Global Strategies Conference added new dimensions to these deliberations (SEDB, 1990).

**Strategic Economic Plan (1991)**

Vision ‘99 underwent an evolution. Singapore’s strategic intent was now to join the first league of developed nations within the next 30 to 40 years, as spelt out in the document, The Strategic Economic Plan (SEP) - Towards a Developed Nation (MTI, 1991). The SEP also set out a series of ‘strategic thrusts’ to upgrade Singapore’s capabilities, so as to realise this enhanced vision. Strategic thrusts 1 to 4 were formulated to strengthen Singapore’s economic fundamentals; strategic thrusts 5 and 6, to nurture the development of industry clusters and business niches; and the last two strategic thrusts, to enhance Singapore’s economic resilience amidst uncertainties in the international environment. An overview of these initiatives is set out in Table 1.

**Strengthening Economic Fundamentals**

Arguably the main thrust of the SEP, encapsulated in the first four strategic initiatives, was devoted to the reinforcement of Singapore’s basic economic resources – which, for the most part, referred to the island-state’s human resources. Strategic Thrust 1 was devoted to the enhancement of human resources through a multi-pronged approach involving the upgrading of the existing workforce, expanding education programmes in tertiary institutions and, in a move that would set the course of immigration policy for years to come, increasing the talent pool through selective immigration as required. Strategic Thrust 2 was to promote national teamwork between labour, business, and government, and aimed to do so through both the formation of an administrative-level Economic Panel to create a forum for discussion on major issues, and the promotion of mega-conferences to facilitate better understanding between the different sectors. Strategic Thrust 3, centred on the enhancement of Singapore’s infrastructure, particularly its soft infrastructure, in which the city-state was lacking at the time, so as to better operate in the global marketplace and tap on global resources, technology, and talent. The ‘soft infrastructure’ was upgraded through attention to human resource and cultural development; through the development of networks-of-excellence, or resource/expertise hubs; and cultivating the perception of the world as Singapore’s hinterland. More significant, perhaps, was Strategic Thrust 4, which aimed to create a conducive climate for innovation; although the measures proposed, namely, modification to training and education systems to encourage initiative, relaxing of regulations, and recognition of creativity through public commendations, were later found to be less than effective, this was a clear sign of the Singapore government’s recognition of innovation as a necessary quality.
Developing of Industry Clusters and Business Niches
Another aim of the SEP was to enhance Singapore’s long-term economic viability through the development of world-class industry clusters, targeting specific niches due to the limited ability of the island-state to support multiple such industries. Strategic Thrust 5 attempted to achieve this by creating an environment conducive to the emergence and growth of such niches, and through the identification and development of industry clusters within which these competitive niches could evolve. The clusters selected for priority development included commodity trading, shipping, precision engineering, electronics, information technology, petrochemical, construction, heavy engineering, finance, insurance, general supporting industries, tourism, international hubs, and other domestic industries, with investment in the necessary core capabilities and/or incentives to accelerate development to be provided by the government. This was to be supported by Strategic Thrust 6, the spearheading of economic redevelopment of the economy outside the key industry clusters, which was lagging behind, through such methods as the creation of strategic alliances among local companies to exploit scale economies and synergise said companies, and the free dissemination of relevant market information to the same.

Enhancing Economic Resilience
Drawing on the lessons from the 1985-86 recession, the Singapore government placed renewed emphasis in improving the island-state’s capacity to withstand uncertainties in the international economy, as well as the periodic adjustments necessary to keep the SEP on track. Any erosion of international competitiveness could well have led to another such recession; thus Strategic Thrust 7, which aimed to heighten awareness of the need to monitor Singapore’s competitiveness, by putting in place improved indicators of short-, medium-, and long-term competitiveness. Singapore’s high dependence on international business for both domestic investment and employment, as well as for overseas markets, was also identified as a possible weakness, given its small, open economy; Strategic Thrust 8 was to attempt to reduce this vulnerability through a limited diversification effort, one which, on one hand, attempted to encourage multinationals to treat Singapore as a home base, and on the other, attempted to accelerate the development of promising local enterprises (PLEs). The former was to be achieved through strengthening ‘home base’ characteristics as defined by Porter (1990). Strategies such as the promotion of more sophisticated technical functions, and of regional marketing functions, and the active encouragement of multinationals to identify with the ‘made in Singapore’ label, and of top management to ‘localise’ by employing more locals, were set in place. This, however, was constrained by the objectives of said multinationals, and by social and political sensitivities relating to their home countries. By contrast, the development plans for PLEs that were to achieve the latter objective faced fewer constraints; more meaningful support was now to be provided, specifically, a more positive mindset on the part of government agencies in assisting local enterprises to compete for contracts, and an intensified effort by relevant agencies to reach out to local enterprises and accelerate their growth.

Singapore Unlimited (1995)
Singapore’s strategic intent evolved in tandem with the impressive economic performance achieved in early 1990s. The time frame for joining the first league of developed nations was shortened, albeit on a moving target basis, to 2000. This enhanced vision was succinctly spelt out in the document, Singapore Unlimited:

“Singapore will become a Global City with Total Business Capabilities. It will become an international hub for high value-added businesses and a flourishing international centre for culture and the arts. Its manufacturing sector will be re-defined by highly profitable industry clusters. It will have a highly skilled and educated workforce. Singapore will become an Intelligent Island, a global centre of excellence for science and technology, a high value location for production and a critical strategic node in global networks of commerce, communications and information.” (SEDB, 1995a, p.4).

New strategic programs were put in place to hone Singapore’s capabilities profile, and to realise its vision of becoming a first-league developed nation by the turn of the century. An overview of these strategic programs is set out in Table 2.
Manufacturing 2000 Programmes (M2000)
Continuing the Singapore government’s emphasis on the island-state’s manufacturing sector, M2000 formulated action plans – using the cluster development approach – for major sectors, including aerospace, petrochemicals, chemicals and pharmaceuticals, electronics, heavy, precision, and marine engineering, and light industries. Using value chain analysis, M2000 identified capability gaps in existing industry clusters and proposed new strategic initiatives to close these gaps, among them specific R&D activities and the strategic upgrading of supporting services; this was envisaged to bring about lower total landed costs of final products. The programme also focused on the manufacturing of key modules in Singapore, for assembly into end-products in target markets; a combination of strategies that aimed to enable Singapore-based companies to leverage resources, and markets, in regional economies, while upgrading the manufacturing capabilities of regional sites. (Appendix: Figure 1) With a total of S$3 billion committed by the Singapore government to two separate funds (the Cluster Development Fund and Research & Development Fund), and with the supporting National Technology Plan and National Information Technology Plan in place, it was sufficiently obvious that at this point in time, manufacturing was still very much seen to be a mainstay of Singapore’s growth.

International Business Hub 2000 Programme (IBH2000)
The island-state, however, had no intention of remaining completely reliant on its manufacturing sector. The IBH2000 programme aimed to develop services as a twin pillar of the Singapore economy; seeking to make Singapore more attractive for investors in such service-related industries as the financial, communications, and technology sectors. (Appendix: Figures 2 to 5) This was to serve two main purposes; to enhance Singapore’s role as an economic hub in the Asia-Pacific region, and to bring resources and markets in service industries such as finance and information to Singapore’s doorstep. Under this programme, a broad-based supportive infrastructure (both hard and soft) was developed to enhance Singapore’s ability as an interface for outward investments into the region; configured mainly to complement, and give impetus to, another major aspect of Singapore Unlimited, Singapore’s regionalization efforts.

Local Enterprise 2000 Programme (LE2000)
Efforts to establish a Singaporean presence in the MNC pool also continued, with the LE2000 programme, structured to build up local enterprises to support, and become key players, in the M2000, IBH2000 and R2000 programmes. These enterprises were encouraged to adopt strategic growth plans, develop new capabilities and products, and regionalise their operations; very much in line with the other three programmes under Singapore Unlimited. The Singapore government put together a comprehensive, multi-agency administered package of initiatives to enhance the MNC-local enterprise nexus (Appendix: Figure 6); the ultimate aim being to nurture promising local enterprises into home-grown Asian MNCs (SEDB, 1993b, 1993c; 1995a).

Regionalization 2000 Programme (R2000)
In what would come to be known as one of the more significant economic policy decisions made by Singapore, the R2000 programme focused on developing Singapore’s external economy (or, ‘second wing’) by tapping on the dynamism of other Asia-Pacific economies. The strategic intent of the programme was to create the external economic space for local and Singapore-based multinationals to redistribute their resource-dependent operations, while upgrading their operations in Singapore to higher-end activities which require Singapore’s unique set of competencies. A continuation of the transborder cluster development approach discussed earlier, this variation of the ‘shakkei’ approach allowed regional sites to leverage on each others’ resources, technology and markets; ensuring that the development of regional economies, and sites, would lead to positive complementary growth for Singapore.

The strategic thrust of R2000 was the establishment of flagship projects in the region, to create a Singapore-styled business environment in emerging economies for local companies and Singapore-based MNCs (Perry and Yeoh, 2000). The Singapore Inc. approach was adopted here (Zutshi & Gibbons, 1998; Okposin, 1999); the Singapore government taking the strategic initiative to identify and develop provinces and sites in the region, and to use these Singapore-developed sites as locations to access resources and markets. These regional sites, when developed, were to enhance Singapore’s own competitiveness as a high-value investment site with strategic linkages with the region, as well as the competitiveness of Singapore-based companies that re-distributed resource-dependent operations to these sites. At the same time, Singapore was to lend its competitive strengths (e.g. core competencies in infrastructural development and management) to these regional sites to enhance their competitiveness. The government-to-government project to develop an
integrated industrial township in Suzhou Province in China – the now well-known Suzhou Industrial Park (SIP) – was in many ways the exemplar of this initiative. In other instances, the Singapore government was to have taken on the role of a “business architect” and “knowledge arbitrageur”; identifying business opportunities, and bringing together the private sector and commercial segments of the public sector in Singapore with foreign companies with specific competencies to undertake large-scale investment projects in the region. Examples of this mode of regionalization can be seen from the consortia developing the Batam Industrial Park, Bintan Industrial Estate, Bintan Beach International Resort, Karimun Industrial Complex in Indonesia (Yeoh, et al, 1992), the Wuxi-Singapore Industrial Park in China, the Bangalore IT Park in India, and the Vietnam-Singapore Industrial Park (Yeoh, et al, 2004).

R2000 was to have positioned Singapore as a value-adding bridge for private sector-led regionalization; broad-based government-to-government agreements, as well as substantial incentives, grants, and loans were made available to facilitate these strategic alliances, and it was envisioned that Singapore's local companies, with their regional know-how (including the ever-nebulous ‘guanxi’) would be able to add value to Western companies venturing into the region. The eventual fortunes of the SIP – and, indeed, the other industrial parks – have been well-documented. These R2000 projects, while certainly successful in a qualified way, have met with unforeseen difficulties, not the least of which, was the occasional incompatibility of Singapore's vaunted regional know-how with actual socio-political realities in the partnering countries, and the general failure of Singapore businessmen to adapt readily to said realities. This, along with other events (discussed in the next section), was to place into the spotlight the need for adaptation and innovation in Singapore.

**Remaking Singapore (2001 to present)**

Singapore’s economic growth barrelled ahead through most of the 1990s. By 2000, however, clouds began to appear on the horizon. The impact of the 1997 Asian Financial Crisis and the emergence of China as Asia’s new economic powerhouse had relegated Southeast Asia to a second-choice destination for many foreign investors. In 2000, Southeast Asia only absorbed about 10% of foreign investment in Asia, down from the commanding 60% it once absorbed in the early 1990s. China, in the meantime, leaped from 20% to 30%, with the remainder flowing mostly to Northeast Asia. Already MNEs were showing a distinct attraction towards China’s huge domestic market and lower costs; and technologically, too, China was catching up to the rest of the world – and to Singapore – at an exponential rate. As one senior economist at JP Morgan & Chase Singapore puts it, ‘China [was] catching up faster than Singapore [was] leaping ahead’; as were, indeed, India and other rapidly developing potential economic superpowers. Singapore’s regionalization drive proved prescient, allowing the island-state to prosper from rapid economic development in China, India, and others. However, these developments underlined a central weakness of Singapore’s economy; a lack of, as Mr Lee Kwan Yew, then Senior Minister of Singapore, put it, ‘entrepreneurial talent’. Adaptability and innovation were the new elements of long-term economic survival and prosperity; elements, it was felt, Singapore was severely lacking in. Mr Lee candidly summarized the situation:

"We have to start experimenting. The easy things - just getting a blank mind to take in knowledge and become trainable - we have done. Now comes the difficult part. To get literate and numerate minds to be more innovative, to be more productive, that's not easy. It requires a mind-set change, a different set of values." (Institutional Investor, Jun 2002).

In December 2001, therefore, an Economic Review Committee was given the task of drawing up a blueprint for the ‘new Singapore’ (MTI, 2003a). Simultaneously, a ‘Remaking Singapore’ Committee was convened for the purpose of exploring the social and political changes associated with and/or required to achieve the aims of the ERC. Together, the two committees proposed a series of recommendations and initiatives which aimed to, through not just the economic, but also the political and social dimensions, foster higher quality of service and a greater degree of diversity and entrepreneurship, without losing the efficiency and orderliness that have been the cornerstone of Singapore’s growth for decades. The vision proposed by ‘Remaking Singapore’ was, quite mellifluously, this:

“...a leading global city, a hub of talent, enterprise and innovation. Singapore will become the most open and cosmopolitan city in Asia, and one of the best places to live..."
and work. In another decade and a half, Singapore will connect China, India and Southeast Asia, and beyond. We will become an Asian centre of choice for global talent, attracting skilled technicians, managers, entrepreneurs and creative people from all over the world. We will be a creative and innovative society, always eager to try out new ideas and change for the better, with a culture that respects achievement in the sciences and the arts."

(Economic Review Committee Report, Executive Summary, p. 5)

Taken holistically, then, the economic dimensions of the strategic thrusts under the Remaking Singapore program can be broadly classified into three areas:

**Quality and a Global Reputation**

In one sense, Remaking Singapore aims to complete a paradigm shift that has been constant throughout all of the island-state’s previous economic strategies, viz, the move away from simple efficiency, towards an overall higher standard of service – to focus on quality, instead of quantity. Under Remaking Singapore, however, the Singapore government aims to go one step further; to build a global reputation for being a world leader in various industries. Among the areas of focus are healthcare – Singapore being already a popular destination for upmarket health care – and academic services, with several top American and European universities offering courses jointly with local colleges or with mini-campuses in Singapore. Through creating this reputation, Singapore hopes to create a culture of quality, one that will constantly allow it to improve itself, and one through which it will be known; a combination of adaptability and advertisement.

Several social initiatives are at the fore of Remaking Singapore’s efforts to create this global reputation. Education is now to be promoted as a lifelong process, a continuous journey of self-improvement and adaptation; a journey which, it is hoped, will lead to the greater degree of vibrance and innovation needed to achieve the continuously self-improving high standard of quality Remaking Singapore aims to achieve. In line with the global element, two other initiatives stress, separately, the importance of integrating ‘new Singaporeans’ – i.e. foreign talent – into Singapore society, to generate a free flow of talent into Singapore that will help to keep the island-state constantly at the forefront of technological developments; and the development of ‘a global network of Singaporeans’ through the impression of a greater sense of national identity, and allowing greater representation of foreign-based Singaporeans, among others – this for the purpose of replacing the much-discussed ‘brain drain’ with ‘a brain circulation’, with Singapore’s many foreign-bound professionals becoming, instead of ‘quitters’, ambassadors of a sort; spreading Singapore’s influence, and reputation, wherever they go.

**Encouragement of Greater Diversity**

This enhancement in quality and development of a global reputation, however, is quite clearly not limited to Singapore’s traditional financial and manufacturing powerhouses. One of Remaking Singapore’s main goals is to encourage a greater diversity in both individual talents, and in collective choices of industries; more specifically, for the latter, in the fields of ‘exportable services’, such as healthcare, education, biomedical services, financial services, and even the arts. This move, needless to say, represents a huge shift from the hitherto single-concentration tendency of Singapore’s economic strategy, which saw periods of intense development in individual ‘hot’ industries. The idea behind this is to encourage diversification and, therefore, a culture both less reliant on any one industry, and more used to adapting to and innovating in any and all new industries, or even creating new industries of its own – both advantageous factors for an economy’s long-term growth and relevancy.

Greater encouragement of alternative careers in general, as well as individual programs designed to promote so-called ‘niche’ industries such as the arts are amongst the main strategies employed by Remaking Singapore at the industry level. At the social level, a host of mainly education-oriented initiatives have been, or are to be, undertaken to change the system to one more friendly towards those with talents other than the traditional knowledge-based; to harness and nurture the diverse talents that will serve to diversify Singapore’s economy in the future. Several of these initiatives include the creation of national arts and sports schools, and the introduction of integrated programs that conduct the entire education process for students under them. Most significantly, perhaps, one of the strategies outlined in the policy document (MTI, 2003b) is to ‘broaden the definition of success’, to change the collective social mindset to one where it is recognized that people
choose their own yardsticks of success. This, to be sure, is a revolutionary social move for the historically achievement-driven island-state indeed.

*Nurturing the Entrepreneurial Spirit*

Even in the two above areas, it should be quite evident that the ultimate aim of Remaking Singapore is, of course, to nurture the ‘spirit of entrepreneurship’ which the Singapore government admits the city-state tends to lack. A large number of the strategic thrusts of Remaking Singapore are aimed, directly or indirectly, at addressing this lack; the abovementioned ‘harnessing of diversity in talent’ has a clear element of revising the traditionally achievement-driven social structure, and other initiatives under the program aim to encourage participation by Singaporeans, and to enlarge space for free expression and for experimentation – largely by relaxing a significant number of the many rules placed on such activities in the first place.

As noted in the previous sections, however, this is not the first time the Singapore government has attempted to spark greater creativity by relaxing regulations; all previous attempts, though, met with limited success. A study by the Global Entrepreneurship Monitor (Wong, et al, 2003) offers the conclusion that, in Singapore’s case, the greatest barrier was never antipathetic regulation, but rather an unsupportive culture, one less than tolerant of failure and overly satisfied with maintaining the status quo. Under the Remaking Singapore program, the Singapore government attempts to address this by a broad social initiative to promote a more gracious, compassionate, and cohesive society; to gradually change social mindsets to be more accepting as well as more adventurous, both through a wide range of programs designed to change the perceptions of the general public through inundation, and by example. Many of the initiatives mentioned previously also fulfil this purpose; changing the education system to ‘broaden the definition of success’ is clearly a key initiative towards achieving this, as is the greater integration and acceptance of overseas Singaporeans. These initiatives, however, are most definitely for the long-term – while signs are cautiously promising, only time will tell how successful this proves to be in changing the mindsets of Singaporeans.

**CONCLUSION**

Singapore is, once again, at a crossroads in its economic development. The 1997 Asian Financial Crisis exposed structural strains in the economy which had been masked by prior economic growth; more recent events and the rise of China have highlighted a fundamental lack of innovative and entrepreneurial capability in the island-state’s economy. Through the years, Singapore has re-positioned itself to add depths on research and development in niche sectors, and enhanced its industrial and technological base; through its cluster development industrial strategy and ‘enterprise ecosystem’ efforts at building an international business hub, Singapore provides a stable and pro-business environment, first-rate infrastructure and high quality workforce for businesses, as well as quality of life and standard of living for executives. To maintain this, however, the island-state must now improve its innovative and adaptive capabilities; the last step, perhaps, towards achieving its vision of being a premier hub for headquarter activities, with a strong network of business support linkages and global connectivity. The fundamental changes that will be required to achieve this, however, will not be easily implemented.

Singapore’s current success, however, is a testimony of a nation’s determined efforts at strategic management for economic development. Singapore's achievements are the outcome of the unique combination of strategic forecasting and planning, and the strategic implementation of appropriate strategies in an ever changing, and competitive, global environment. Adaptability, it seems, is not something which the island-state lacks on the national level; the challenge before it now, then, is to apply that adaptability to, so to speak, changing mindsets of Singaporeans, to promote greater innovation and entrepreneurial capability. The signs in this direction are fairly positive – the eventual results, however, are not yet obvious. One thing, however, is for certain; that the socio-economic and socio-political changes, and challenges, in the global environment leave no room for complacency. Like a chess player, Singapore must plan – and stay – several steps ahead of the competition.
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<th>Programs</th>
<th>To be implemented by year</th>
<th>Co-ordinating agencies</th>
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<td>Enhance human resources</td>
<td>Implement international manpower programs</td>
<td>1992</td>
<td>EDB</td>
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<tr>
<td>Promote national teamwork</td>
<td>Establish MTI Economic Panel</td>
<td>1992</td>
<td>MTI</td>
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<td>Develop international orientation</td>
<td>Get Singaporeans to work abroad</td>
<td>1993</td>
<td>EDB</td>
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<td>Promote Growth Triangle and regional alliances</td>
<td>1993</td>
<td>EDB</td>
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<tr>
<td></td>
<td>Develop information infrastructure internationally and at home</td>
<td>1993</td>
<td>NCB</td>
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<tr>
<td>Create innovation-oriented climate</td>
<td>Review government rules</td>
<td>1992</td>
<td>NPB</td>
</tr>
<tr>
<td>Develop industry and service clusters</td>
<td>Implement cluster-based development plans</td>
<td>1992</td>
<td>Cluster agencies</td>
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<td>Hold cluster workshops</td>
<td>1992</td>
<td>Cluster agencies</td>
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<td></td>
<td>Improve employer-employee ties</td>
<td>1992</td>
<td>MOL</td>
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<tr>
<td></td>
<td>Improve labour supply and demand situation</td>
<td>1992</td>
<td>MTI</td>
</tr>
<tr>
<td>Redvelop domestic industries and services</td>
<td>Set up multi-agency taskforce</td>
<td>1992</td>
<td>EDB/NPB</td>
</tr>
<tr>
<td>Maintain international competitiveness</td>
<td>Form competitiveness monitoring groups</td>
<td>1991</td>
<td>MTI</td>
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<tr>
<td>Reduce vulnerability</td>
<td>Form scenario analysis group</td>
<td>1992</td>
<td>MTI</td>
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<td></td>
<td>Inculcate positive mindset in government agencies towards local firms</td>
<td>1992</td>
<td>EDB</td>
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<tr>
<td></td>
<td>Review institutional support for local firms</td>
<td>1992</td>
<td>EDB</td>
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<tr>
<td></td>
<td>Identify and monitor medium and long-term economic performance indicators</td>
<td>1992</td>
<td>MTI</td>
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<td></td>
<td>Encourage multinational firms to set up home base in Singapore</td>
<td>1993</td>
<td>Cluster agencies</td>
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Notes
NCB: National Computer Board
NPB: National Productivity Board
MOL: Ministry of Labour

Source: Singapore Ministry of Trade and Industry
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</table>
| **Manufacturing 2000**          | **Manufacturing and ...**  
   To sustain the manufacturing sector's contribution to Singapore's economy at more than 25% of GDP, and employment share at more than 20%.  
   **Technology**  
   To achieve R&D spending of 2% of GDP in the medium and long term. | Cluster Development Fund  
   Research & Development Fund  
   Tax incentives  
   Research Incentive Scheme for Companies  
   Product & Process Development Assistance Scheme  
   Research & Development Assistance Scheme  
   Technology Development Fund  
   R&D Incubator Program                                                                                                                                 |
| **International Business Hub 2000** | **Trade and communications**  
   To develop Singapore as a premier international trade and communications hub, and a global gateway for goods, services, people and information.  
   **Tourism and lifestyle**  
   To enhance Singapore's economic development and to improve the quality of life of Singaporeans by positioning the republic as an attractive tourist destination, a tourism business centre, and a tourism hub in Asia with a vibrant tourism and lifestyle industry. | Headquarters and business services  
   Tax incentives  
   Operational Headquarters (OHQs)  
   Approved Royalties  
   Approved Foreign Loan Scheme  
   Export of Services Incentive  
   Warehousing and Servicing Incentive  
   **Trade and communications**  
   Approved International Trader  
   Approved Oil Trader  
   Approved International Fair  
   Approved International Shipping Enterprise  
   Aircraft Licensing Scheme  
   **Tourism and lifestyle**  
   A comprehensive package of incentives is being put together under the National Tourism Plan framework.                                                                                                                                 |

Table 2
Singapore Unlimited: An Overview
## Table 2 (continued)
Singapore Unlimited: An Overview

<table>
<thead>
<tr>
<th>Program</th>
<th>Strategic Intent</th>
<th>Government Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Enterprise 2000</strong></td>
<td>To develop an internationally competitive local enterprise sector by improving the performance of local small and medium-sized enterprises. To nurture promising local enterprises (PLEs) in the manufacturing and services sectors to achieve a target of 100 companies with at least $100 million in sales turnover in the next 10 years.</td>
<td>Broad-based assistance: more than 60 government development assistance schemes (EDB (1993c), p.23) Industry-level assistance (e.g. infrastructural support, cluster development, etc) Focused assistance (i.e. nurturing PLEs to become home-grown Asian MNCs)</td>
</tr>
<tr>
<td><strong>Regionalization 2000</strong></td>
<td>To increase GNP through Singapore based companies participating in the dynamic growth of the region. To increase GDP through economic spin-offs derived from overseas investments to the domestic economy.</td>
<td>Business Development Scheme Cluster Development Fund Double tax deduction (overseas investment development expenditure) Franchise Development Assistance Scheme Local Enterprise Finance Scheme (overseas) Market and Investment Development Assistance Scheme Overseas Enterprise Incentive Overseas Investment Tax Incentive Regionalization Training Scheme Regional Venture Funds Incentive</td>
</tr>
</tbody>
</table>

Sources: Economic Development Board Yearbook, 1994 and Singapore Unlimited, 1995
### Table 3
Remaking Singapore: An Overview

<table>
<thead>
<tr>
<th>Theme</th>
<th>Strategic Thrusts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Home For All Singaporeans</td>
<td>Enhancing Identification With The Ideals Of The Nation</td>
</tr>
<tr>
<td></td>
<td>Strengthening Cohesion Between People Of Different Races, Languages And Religions</td>
</tr>
<tr>
<td></td>
<td>Enhancing Our Ability To Integrate New Singaporeans</td>
</tr>
<tr>
<td></td>
<td>Developing Global Networks of Singaporeans</td>
</tr>
<tr>
<td></td>
<td>Education – Harnessing Diversity In Talent</td>
</tr>
<tr>
<td>A Home Owned</td>
<td>Enlarging Space For Expression and Experimentation</td>
</tr>
<tr>
<td></td>
<td>Encouraging Participation</td>
</tr>
<tr>
<td>A Home For All Seasons</td>
<td>A Gracious, Compassionate and Cohesive Society</td>
</tr>
<tr>
<td></td>
<td>Enabling the Full Participation of All Segments of Society</td>
</tr>
<tr>
<td>A Home To Cherish</td>
<td>Promoting Equal Opportunities</td>
</tr>
<tr>
<td></td>
<td>Strengthening Families As The First Line of Support</td>
</tr>
<tr>
<td></td>
<td>Preserving Memories, Building Shared History</td>
</tr>
<tr>
<td></td>
<td>Improving the Environment For Participation and Fun</td>
</tr>
</tbody>
</table>

Source: Singapore Ministry of Trade and Industry  