

# Framework for Dynamic Governance: Institutionalizing Culture, Capabilities and Change

In a world of uncertainty and change, current achievements are no guarantee for future survival. Even if the initial chosen set of principles, policies and practices are good, static efficiency and governance would eventually lead to stagnation and decay. No amount of careful planning can assure a government of continuous relevance and effectiveness if there is insufficient institutional capacity for learning, innovation and change in the face of ever new challenges in a volatile and unpredictable global environment.

But can government institutions be dynamic? The typical government institution is not usually regarded as a dynamic, entrepreneurial organization, but a slow, stodgy bureaucracy that consistently and, sometimes, mindlessly enforces outdated rules and sticks to procedures without any care or concern for individuals or businesses.

Can institutions ever be dynamic? Dynamism is characterized by new ideas, fresh perceptions, continual upgrading, quick actions, flexible adaptations and creative innovations. Dynamism implies continuous learning, fast and effective execution, and unending change. Dynamic institutions can enhance the development and prosperity of a country by constantly improving and adapting the socio-economic environment in which people, business and government interact. They influence economic development and social behavior through policies, rules and structures that create incentives or constraints for different activities.

Dynamic governance is the key to success in a world undergoing accelerating globalization and unrelenting technological advancement. If institutions can evolve and embed the cultures and capabilities that enable continuous learning and change, their contributions to a

country's socio-economic progress and prosperity would be enormous. The lessons from their efforts in institutionalizing culture, capabilities and change would be useful for achieving similar outcomes in other types of organizations, such as business firms and volunteer groups. If bureaucratic public sector institutions can learn to be dynamic, the lessons from their efforts could provide meaningful and valuable insights for transforming organizations in other contexts. This is our primary motivation for writing this book.

This book explores how dynamism is created and sustained in public sector institutions that exercise the functions of governance. It explores how a supportive institutional culture and strong organizational capabilities result in continually improving rules, policies, incentives and institutional structures that enhance governance. It seeks to understand how such a supportive culture evolves and how enabling capabilities develop. It explains why and how policy choices are made and executed, and how policy improvements, innovations and adaptations become embedded into the Singapore governance system. It synthesizes major principles and lessons that may be applied in other contexts.

## 1.1 Need for Dynamism in Government

Government institutions have significant impacts on the economic competitiveness and social development of a country. They define the relationships between the government and people of a country. They set the tone for how society and business interact. They create the conditions that may facilitate or impede sustained development and growth. They influence the business environment and competitiveness of a country, and can make it more or less attractive to foreign investors. A nation's competitiveness is no longer primarily based on static factor advantages but in "providing an environment in which firms can operate productively and continuously innovate and upgrade their ways of competing to more sophisticated levels, thereby allowing rising productivity."<sup>1</sup> Although government cannot directly

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<sup>1</sup>Michael Porter (1998). *On Competition*. MA: HBS Press, Chapter 6, "The Competitive Advantage of Nations," and Chapter 7, "Clusters and Competition: New Agendas for Companies, Governments, and Institutions."

create competitive industries, it can act as a catalyst and a challenger in shaping the context and institutional structure that stimulates businesses to gain competitive advantage.

But government institutions are not usually known for dynamism. Many government agencies function as monopolies and do not face the discipline of market competition in the delivery of their outputs and services. There are often no established market prices for their services, which may also be provided free-of-charge or at highly subsidized rates. They are funded through budget allocations that are often subjected to political influences. There are no objective measures of managerial performance and there are few incentives for improvement and change. They are not subjected to financial discipline from investors who demand an adequate financial return for the risks they take. Public managers tend to become highly conservative as they learn from experience that visible mistakes are often punished while personal achievements may not be rewarded. Is dynamic governance possible in this environment?

Our study of Singapore's government institutions highlights how a foundation of cultural values and beliefs can work synergistically with strong organizational capabilities to create a dynamic governance system that enables continuous change. Institutional culture can support or hinder, facilitate or impede dynamism in policy-making and implementation. Institutional culture involves how a nation perceives its position in the world, how it articulates its purpose, and how it evolves the values, beliefs and principles to guide its decision-making and policy choices. In addition, strong organizational capabilities are needed to consider thoroughly major policy issues and take effective action.

We conceptualize and discuss three critical governance capabilities: i) *thinking ahead* — the ability to perceive early signals of future developments that may affect a nation in order to remain relevant to the world; ii) *thinking again* — the ability and willingness to rethink and remake currently functioning policies so that they perform better; and iii) *thinking across* — the ability and openness to cross boundaries to learn from the experience of others so that new ideas and concepts may be introduced into an institution. The “Workfare”

policy announced in the 2006 Singapore Budget and institutionalized in the 2007 Budget is an example of how these dynamic capabilities work in public policy making and implementation.

As Singapore's per capita income (and business costs) grew and even exceeded those of some developed countries, it had to *think ahead* to ensure that it maintained its competitiveness in the global economy. However as it restructured to compete in the new economy where knowledge and ideas had become the crucial factor inputs, it became clear that there were segments of the population that were lagging behind because they did not have the necessary education and skills to be employed in the new jobs that were being created in the new knowledge and high technology sectors. *Thinking ahead*, government officials realized that, going forward, economic growth per se would not be sufficient to lift all segments of the population; unlike the earlier years, structural unemployment was likely even when the economy grew strongly.

The government thus had to *think again* its approach to welfare. Historically, public assistance had been set at very low levels to induce unemployed persons to seek employment in the belief that their existing skills and experience was enough to make them employable. If they were not employed, it was probably because they lacked motivation or were irresponsible. But in the face of a permanent mismatch between the skills of the unemployed and the requirements of the jobs being created, a different approach was needed. At the same time, there developed a new strategic objective to strengthen the emotional ties of citizenship as more Singaporeans became globally mobile. This involved positioning Singapore as a land of opportunity and engaging citizens to actively participate in the country's development. The presence of a significant segment of society which did not have the skills to contribute substantively to the country's new developmental path or seize the new economic opportunities presented a challenge to Singapore's policy makers.

To obtain ideas on how to address this issue, public sector policy-makers had to *think across* boundaries and learn from the experiments and experience of a work-based welfare program called Wisconsin Works in the US. But the outcome was not a blind imitation of the

Wisconsin practice. The Wisconsin framework was thoughtfully adapted and adjusted to fit local circumstances and re-oriented to achieve the desired national goals for worker retraining, family responsibility and social mobility. The new approach involved providing financial support that was tied to work or efforts to find work, incentives for the unemployed to retrain for new jobs, and family support to ensure that their children's education was not compromised so that the next generation had the means to escape the poverty trap. These are multi-dimensional policy objectives appropriate to a more sophisticated and complex society.

"Workfare" was a fresh and innovative approach to the low-wage worker and structural unemployment issues. The unions' response to the implementation of the Workfare policy in 2006 was positive and in 2007 the government adopted it as a long-term feature of a new social policy that seeks to ensure social cohesion and industrial peace as Singapore transits to a more innovative economy to compete globally. Details of the Workfare program and the process of search, evaluation and adaptation are in Chapter 6.

The new Workfare policy is an example of the dynamism of governance in Singapore — the main theme for this book. Dynamism in governance is the result of new thinking and learning and is manifested in new paths, revised policies and restructured institutions. Even as we write this book, current policies continue to be reviewed and changed, and new ideas evolve into tentative policies to deal with emerging issues. Although we will refer to many examples of policy and institutional changes, this book is not intended to be a comprehensive examination of Singapore's social and economic policies. The policy and institutional changes are illustrations to help explore and explain why a dynamic governance system is important, how it works and how it may be developed.

This chapter provides an overview of the major themes of our study. We will discuss the concept of dynamic governance and why we choose a study of Singapore's government institutions. We then present our conceptual framework and discuss the flows and interactions of a dynamic governance system. The rest of the chapter discusses institutional culture and organizational capabilities — the

two components of a dynamic governance system. We elaborate on the three elements of institutional culture and the three major constituents of organization capabilities that work together to generate dynamism in policy-making and implementation. We look at what dynamic governance capabilities are, why they are important, and how they were developed in the context of the Singapore public service. The rest of the book explains how culture and capabilities emerged, evolved, were energized and became embedded in the Singapore government institutions. We conclude by discussing the challenges and potential risks in the Singapore governance system, lessons that may be learnt from the Singapore experience, and how these principles and lessons may be applied in other contexts.

## 1.2 Concept and Importance of Dynamic Governance<sup>2</sup>

Governance plays an essential role in modern economies and societies by providing rules and institutions to facilitate exchange, and by offering opportunities to improve the outcomes of market failures arising from imperfect information, public goods, and externalities.<sup>3</sup> While market forces are widely accepted as the cornerstone of an efficient economy, a country's economic performance is determined largely by the quality and kind of institutions that support markets. As Nobel Laureate Douglass North said, "Institutions form the incentive structure of a society and the political and economic institutions, in consequence, are the underlying determinant of economic performance"<sup>4</sup>, "if we are ever to construct a dynamic theory of change... it must be built on a model of institutional change."<sup>5</sup>

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<sup>2</sup> This section gives an overview of the concept and importance of governance that is adequate for understanding the findings of our study and how they may be applied. A more detailed discussion of the concepts of governance, institutions and capabilities as they have been developed in the research literature is given in Chapter 2.

<sup>3</sup> Joseph Nye (2004). "Governments, Governance, and Accountability," *Ethos*. Civil Service College, April 2004

<sup>4</sup> Douglass C North (1993). "Economic Performance through Time," Nobel Prize Lecture, 9 December 1993.

<sup>5</sup> Douglass C North (1990). *Institutions, Institutional Change and Economic Performance*. NY: Cambridge University Press. p. 107.

Governance is “the relationship between governments and citizens that enable public policies and programs to be formulated, implemented and evaluated. In the broader context, it refers to the rules, institutions, and networks that determine how a country or an organization functions.”<sup>6</sup> It is “the manner in which the government, working together with other stakeholders in society, exercises its authority and influence in promoting the collective welfare of society and the long-term interests of the nation.”<sup>7</sup> Governance involves choices regarding rules, policies, institutions, and the resultant structures that collectively provide socio-economic incentives and constraints for different activities. Governance becomes dynamic when previous policy choices can be adapted to current developments in an uncertain and fast changing environment so that policies and institutions remain relevant and effective in achieving the long-term desired outcomes of a society. It is more than making a one-time change or recovering from a setback. It is about on-going sustained change for long-term survival and prosperity.

The importance of good governance and having honest and competent public sector institutions for a country’s economic development and standard of living is widely accepted. The World Bank’s director for global governance, Daniel Kaufmann, states that countries that improve their governance effectiveness raise their standard of living, as measured by per capita incomes, by about three times in the long run.<sup>8</sup> “Poorly functioning public sector institutions and weak governance are major constraints to growth and equitable development in many developing countries.”<sup>9</sup>

Even so, sustained development and improving standards of living require more than the mere adoption of good practices. Governance structures adopted at a particular time, even if optimal,

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<sup>6</sup> Gambhir Bhatta (2006). *International Dictionary of Public Management and Governance*. New York: ME Sharpe Inc.

<sup>7</sup> Andrew Tan *et al.* (2004). “Principles of Governance: Preserving our Fundamentals, Preparing for the Future.” Special Study Report prepared by a group of Administrative Officers led by Andrew Tan.

<sup>8</sup> Quoted in *The Straits Times*, 17 September 2006. “Singapore Scores High on Governance.” Singapore Press Holdings.

<sup>9</sup> World Bank Report (2000). *Governance Matters*.

may become dysfunctional as the environment changes. Past experience and beliefs may not be good guides for future decisions. Good governance that stays relevant and remains effective must therefore be dynamic. Continuous learning, dynamic adaptation and innovative change results in “adaptive efficiency”<sup>10</sup> — a country’s effectiveness in creating institutions that are productive, stable, fair, broadly accepted and, importantly, flexible enough to be changed or replaced in the face of shocks to effectively deal with a changed reality.

Dynamism in governance requires continuous learning that enables a deep understanding of the future developments that may affect a country, a willingness to review rules and policies that may be out-dated as circumstances change, and an openness to adapt global knowledge to the unique contexts of the country. Dynamic governance is the ability of a government to continually adjust its public policies and programs, as well as change the way they are formulated and implemented, so that the long-term interests of the nation are achieved. Dynamism in governance is essential for sustained economic and social development in an uncertain and fast changing environment, and in an increasingly demanding and sophisticated society where citizens are more educated and more exposed to globalization.

### 1.3 Study of Public Sector Governance in Singapore

Our study<sup>11</sup> is based on Singapore’s government institutions,<sup>12</sup> i.e., public sector agencies including government departments and ministries in the civil service and statutory boards<sup>13</sup> that together

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<sup>10</sup> Douglass North (2005). *Understanding the Process of Economic Change*. NJ: Princeton University Press, p. 6.

<sup>11</sup> Data was collected through interviews with past and present public sector leaders. The authors were given access to data and documents in several government ministries and agencies as part of this study. In addition, over the years the first author has interviewed close to 200 public sector leaders and staff in relation to other studies and projects.

<sup>12</sup> We excluded political parties and government-owned for-profit corporate entities which are governed under the Companies Act legislation.

<sup>13</sup> Statutory Boards are public not-for-profit entities created by specific government legislation. They reported to a parent Ministry and performed specialized public roles and functions such as investment promotion, tourism development, and specific planning functions. They have their own governance structures such as Boards, and have more autonomy than their parent ministries in finance and human resource functions.

employed about 120,000 people in 2006. Good governance requires that both the political leadership and public sector work together to achieve important economic and social objectives. The political leadership sets the policy direction, agenda, tone and environment for the public sector. If the political leadership is corrupt and ineffective, the potential of the public sector, no matter how competent, would be severely hampered. Indeed, much of the published work on the Singapore governance system has focused on the political system and leadership,<sup>14</sup> including the popular two-volume memoirs<sup>15</sup> of its founding Prime Minister, Lee Kuan Yew, which have now been translated into many languages. Very little has been published on the public sector. Thus the focus of this book is on the dynamic governance capabilities developed by the public sector. However, we have included discussions of the political system and leadership where their choices and decisions have influenced dynamic governance in Singapore, and when they have had an impact on the development of the public service. The impact of the political leadership has been particularly evident in the values and principles of governance discussed in Chapter 4 and their strategic view of public sector leadership discussed in Chapter 7. These were the values and beliefs of the founding political leaders which have significantly influenced the paths taken by the Singapore public service.

Though Singapore's government expenditure is small relative to many other countries, accounting only for about 14–18 per cent of GDP in recent years, its public institutions consistently have been rated to be among the best in the world.<sup>16</sup> Singapore was ranked among the top ten nations in the world in governance in the 2006 World Bank's

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<sup>14</sup> Some examples include:

Raj Vasil (1992). *Governing Singapore*. Singapore: Mandarin.

Michael Hill and KF Lian (1995). *The Politics of National Building and Citizenship in Singapore*. London: Routledge.

Diane Mauzy and RS Milne (2002). *Singapore Politics: Under The People's Action Party*. Singapore: Oxford University Press. Ho Khai Leong (2003). *Shared Responsibilities, Unshared Power*. Eastern Universities Press.

<sup>15</sup> Lee Kuan Yew (1998, 2000). *The Singapore Story*, and *From Third World to First*. Singapore: Times Edition.

<sup>16</sup> See the EDB website at [www.edb.gov.sg](http://www.edb.gov.sg) for an updated and more comprehensive list of Singapore's international rankings.

“Governance Matters” Report.<sup>17</sup> Singapore’s institutions were ranked first in a sub-index of the 2006 Global Competitiveness Report,<sup>18</sup> in which Singapore was ranked the overall fifth most competitive nation in the world. It was rated highly for its speed, meritocracy and incorruptibility. In a June 2006 study by the Hong Kong-based Political and Economic Risk Consultancy (PERC), Singapore was rated as having the lowest level of red tape and bureaucracy and the highest standards of corporate governance in Asia. In 2006 PERC rated Hong Kong and Singapore as the top two nations in Asia for the overall quality and integrity of the judiciary system, including the consistency in the application of laws. The World Competitiveness Yearbook 2006 ranked Singapore among the top three out of 61 countries in terms of legal framework, and top 15 in terms of justice. Transparency International ranked Singapore as the fifth least corrupt nation in the world in their 2006 study of 163 countries and economies. In referring to Singapore’s economic culture, Professor Lester Thurow of MIT’s Sloan School commented that “the ability to adjust rapidly was more important than economies of scale... no country comes closer to having a corporate culture and to being run as a corporation where economic growth replaces profits as the explicitly defined goal.”<sup>19</sup>

The public sector’s efficiency and effectiveness have contributed significantly to the creation and sustenance of an environment that is conducive for business and a good quality of life. In 2006, the World Bank rated Singapore as the world’s easiest place to do business.<sup>20</sup> The Economist Intelligence Unit ranked Singapore as having the sixth best business environment in the world for 2006–2010.<sup>21</sup> IMD rated Singapore as having the second most attractive environment, after the US, for highly-skilled foreigners.<sup>22</sup> A 2005–2006 study by Mercer HR

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<sup>17</sup> *The Straits Times*, 17 September 2006. “Singapore Scores High on Governance.” Singapore Press Holdings.

<sup>18</sup> Published annually by the World Economic Forum.

<sup>19</sup> Lester Thurow (1996). “Forward.” *Strategic Pragmatism*, by Edgar Schein. USA: MIT Press, pp. vii and viii.

<sup>20</sup> *Doing Business 2007: How to Reform*. World Bank.

<sup>21</sup> *Business Environment Ranking for 2006–2010*. Economist Intelligence Unit.

<sup>22</sup> *2005 World Competitiveness Yearbook*. Switzerland: IMD.

Consulting identified Singapore as the best place in Asia to live, work and play, and placed it 34th in the world.

Public sector agencies in Singapore stood out even when compared to private sector firms. For example, the majority of the winners in the competitive Singapore Quality Awards, the local equivalent of the Malcolm Baldrige Awards in the US, and the Singapore Innovation Awards have been public sector agencies. In a study of one of Singapore's best known public agencies, the Economic Development Board, MIT Professor Edgar Schein concluded that "the EDB runs as if it were a private company with all the concerns for efficiency, productivity, and service that one associates with a well-run organization."<sup>23</sup>

How have Singapore government institutions been able to achieve both administrative efficiency and policy innovation? What enabled them to change in response to environmental change, and often in anticipation of change? A dynamic governance model was not explicitly articulated or documented by the Singapore public service but rather was implicit in the minds of the leadership, and constantly refreshed with keen observations and thoughtful reflection. The process of learning was iterative and the management effort to adapt and change was sustained over an extended period, resulting in cumulative and cascading effects throughout the entire system. In our study, we looked for patterns in their actions, programs, and strategies and synthesized them into an overall conceptual framework that explain the manifestations and sources of dynamic governance in Singapore.

#### **1.4 Framework for Dynamic Governance: Culture + Capabilities → Change**

Dynamic governance does not happen by chance, but is the result of deliberate leadership intention and ambition to structure social and economic interactions to achieve desired national goals. It reflects the leaders' deliberate efforts to "shape their future... to try to structure human interaction — the alternative is anarchy and chaos. However

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<sup>23</sup> Edgar Schein (1996). *Strategic Pragmatism*. MA, USA: MIT Press. p. 174.

imperfectly they are bound to do it... The issue is how they do it."<sup>24</sup> Sustained economic and social development takes place when there is leadership intention, cognition and learning which involves continual modification of perceptions, belief structures and mental models, particularly when confronted with global developments and technological change.<sup>25</sup> The two main impediments to dynamic governance are the inability to comprehend the changes in the environment and to make the institutional adjustments necessary to remain effective. The first is a function of culture since it acts as a filter to perceiving and interpreting evolving developments that may have future implications. The second is a function of capabilities, of the ability to identify current issues, to learn from the experience of others, and develop policy responses to deal effectively with the change.

Our framework of a dynamic governance system shown in Figure 1.1 depicts a supportive institutional culture interacting with proactive organizational capabilities to produce adaptive paths that incorporate continuous learning and change, which in turn result in the continual evolution of rules, policies, incentives, and structures to meet new challenges resulting from environmental uncertainties and technological developments. Dynamic governance is the outcome of the capacity to develop adaptive paths and policies, and their effective execution.

### 1.4.1 *The Elements of Dynamic Governance*

The desired outcome, *dynamic governance*, shown on the right is achieved when *adaptive policies* are executed. The foundation of dynamic governance is a country's *institutional culture*, shown at the base of Figure 1.1. The three dynamic capabilities of *thinking ahead*, *thinking again*, and *thinking across* that lead to *adaptive policies* are shown in the middle section. There are two main levers for developing dynamic governance capabilities, *able people* and *agile processes* and these are shown on the left of Figure 1.1. The external environment

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<sup>24</sup> North (2005), p. 51.

<sup>25</sup> North (2005).

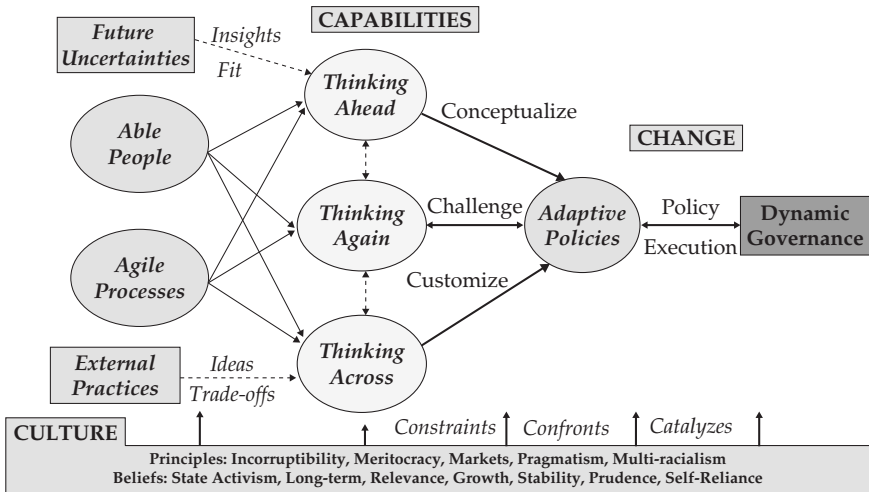


Figure 1.1. Framework for Dynamic Governance System

affects the governance system through *future uncertainties and external practices* that are shown as rectangles on the left.

Dynamic governance achieves current and future relevance and effectiveness through policies that continually adapt to changes in the environment. Policy adaptation is not merely a passive reaction to external pressure but a proactive approach to innovation, contextualization, and execution. Policy innovation means that new and fresh ideas are experimented with and incorporated into policies so better and different results may be achieved. These ideas are contextually designed into policies so that citizens will appreciate and respond favorably to them. Yet it is not just about new ideas and contextual designs but also policy execution that makes dynamic governance a reality.

Our cultural heritage — our shared values, beliefs, institutions, and customs — influences our behavior. While formal rules will reflect this heritage, it is the informal norms and conventions that are the most important carrier of cultural values. For example, in our interaction with others, we may choose not to engage in opportunistic behavior for our personal gain at the expense of others even when we can do so because we believe it to be wrong or socially unacceptable. Culture

represents our collective learning in our adaptive attempts to solve frequently encountered problems of the past. The learning process is a function of the experiences we confront and how these experiences are perceived, filtered, categorized and interpreted by our mental models. A change in culture, beliefs and assumptions and mental models is necessary for institutional change, which in turn affects what public policies are reconsidered, redesigned, and renewed. For Singapore, the assumptions regarding the primacy of economic growth, the need for global relevance and the indispensable role of the state in creating the conditions for growth influence the thinking and approach to governance. The policy choices themselves are shaped by the cultural values of integrity, meritocracy, self reliance, pragmatism and financial prudence.

Leaders achieve the desired results not just by their own charisma and effort, but by developing capabilities in their organizations so that knowledge and other resources can be systematically deployed to solve problems. While an organization's culture may be enabling, on its own it does not generate the knowledge and skills needed for effective action. Dynamic governance requires new learning and thinking, the deliberate design of policy options, analytical decision-making, rational selection of policy choices and effective execution. "Good governance is not just a matter of quick action, but also of adequate comprehension... leaders of governance do have to look hard and think hard before they leap."<sup>26</sup>

The three cognitive capabilities of the learning process fundamental to dynamic governance are *thinking ahead*, *thinking again* and *thinking across*. First, governments have to *think ahead* to understand how the future would affect the country and put in place policies to enable their people to cope with potential threats and to take advantage of the new opportunities available. Second, environmental turbulence and change can make past policies outdated and ineffective even if they had been carefully and thoughtfully chosen. Thus there is a need to *think again* existing policies and programs to assess whether

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<sup>26</sup> Amartya Sen (2006). "Good Governance in the 21st Century," Keynote address at the Raffles Forum, organized by the Lee Kuan Yew School of Public Policy, 14 September 2006, Singapore.

they are still relevant to the national agenda and long-term needs of society. Policies and programs would then have to be revised so that they can continue to be effective in achieving important objectives. Third, in the new knowledge economy, survival requires constant learning and innovation to meet new challenges and exploit new opportunities. This means that governments need to *think across* traditional country and domain boundaries in their search for ideas and interesting practices that they can customize and contextualize to their domestic environments.

When governments develop the capabilities of thinking ahead, thinking again and thinking across, and embed these into the paths, policies, people and processes of public sector institutions, they create learning and innovations in governance that facilitate dynamism and change in an uncertain world. In essence, dynamic governance occurs when policy-makers constantly *think ahead* to perceive changes in the environment, *think again* to reflect on what they are currently doing, and *think across* to learn from others, and continually incorporate the new perceptions, reflections and knowledge into their beliefs, rules, policies and structures to enable them to adapt to environmental change. These dynamic capabilities represent the key elements of the Singapore governance system over its 42 years of development. In a recent interview, Prime Minister Lee Hsien Loong said that Singapore's success may be attributed to "a willingness to work hard, make changes and adapt to the world as it is and not as we wish it to be."<sup>27</sup>

Dynamic governance requires the embedding of the capabilities of thinking ahead, thinking again and thinking across into the strategies and policies of public sector institutions so that there is continuous learning, execution, innovation and change. The three thinking capabilities have to be embedded into the approach for policy choice, execution and evaluation for effective change to become a reality. Only then can chosen paths go beyond the imprint of the founders to create innovations in strategies and policies to meet the new requirements for success.

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<sup>27</sup> Quoted by Kevin Hamlin in "Remade in Singapore," *Institutional Investor*, September 2006, NY.

Deliberate investments in institutional improvement and innovation for dynamic governance require choices made by people in positions of influence and leadership. Only humans can adapt and change within a context, and also consciously decide to reframe the context<sup>28</sup> that may lead to the reconfiguration of assets and capabilities in an institution. Making good decisions and choices requires that the organization's leaders possess the necessary motivation, attitude, values, intellect, knowledge and skills to envision the future, develop strategic options and select paths that give the institution the greatest scope for survival and success.

Processes are needed for getting things done in a coordinated and consistent manner, whether regular routine transactions, formulating and implementing policies, or inducing strategic renewal. Where there is no defined process, however broad or narrow, an organization would not be able to perform a required task even if the individuals in the organization have the knowledge and skills to do so. Even when there are defined processes, they need to be made agile through continual review and redesign to ensure that they are able to achieve their intended outcomes and not become outdated because of changing circumstances and changing technologies.

### **1.4.2 The Systemic Interactions of a Dynamic Governance System**

If culture, capabilities and change operate independently of each other, there may be some individual effects but there would be no coherence and their overall impact on governance would be limited. They may even work at cross purposes and the impact of one may cancel out the efforts made in another. The creative power of culture, capabilities and change is maximized when they work interactively and synergistically as part of a dynamic system. The capabilities of thinking ahead, thinking again and thinking across also should not be merely stand-alone skills and should not operate as independent processes. The capabilities are inter-related and if they are linked and

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<sup>28</sup> Stephan H Haecel (1999). *Adaptive Enterprise*. MA: HBS Press.

work interdependently as a system, their potential effects could be reinforced and their overall impact amplified.

It is thus important to view governance not only in terms of their individual parts but as a system of interdependencies among different institutions in government, and to bear in mind their complex non-linear cause-and-effect linkages, and feedback flows. Only then can high leverage strategies and actions be identified and the energies of the creative elements released effectively. A systemic perspective of governance sensitizes leaders to the external forces impinging on the system and the internal forces emerging within, and how these may reinforce or counteract the effects of managerial actions. It also provides leaders with a greater appreciation of timing effects, that there are multiple inter-linked processes at work and inevitable delays in complex social systems before results become visible.

The two major elements of the governance system — culture and capabilities — when working systemically, interact and reinforce each other to generate the dynamics of continuous institutional learning and change. When a culture that supports learning and change is energized by the capabilities of thinking ahead, thinking again and thinking across, more options will surface to be experimented with and pursued. Some of the alternatives will work and some will not. The dynamism in governance comes from the capacity to consider and pursue different options, not just in identifying the winning formula. The increase in experimentation and pursuit of different kind of options enhance learning and increase the likelihood of a society's progress. Even when some options do not work, the lessons learnt serve to improve the quality of decision-making in the future. The capabilities of thinking ahead, thinking again, and thinking across interact with a culture that encourages learning to unleash the energies and creativity that are at the very heart of a dynamic governance system.

Conversely, if culture and capabilities work independently, the synergistic effects described above may not be realized, and while there may be some ad hoc results, their potential in energizing governance is limited. Worse, when culture and capabilities are not aligned, they may work at cross purposes and good governance ideas and intentions may not be executed effectively. For example, great cultural values

and the beliefs of founders may be admired and respected but current leaders may not possess the vision or capabilities to build upon the cultural heritage to achieve significant progress; or good ideas and policies conceived through capable leaders and institutions cannot be implemented because they run counter to implicit cultural norms and assumptions. These non-alignments of culture and capabilities create discouragement and disillusionment in people and organizations, making current improvements impossible and future changes even more difficult to conceive and implement.

Thus, the development of dynamic governance cannot be achieved without understanding the interdependencies between culture and capabilities, between capabilities and the people and processes that are their sources, between capabilities and their interaction with the external environment, and between capabilities and their expression in adaptive paths and policies. These interactions and their cause-and-effect relationships unleash the reinforcing and balancing forces that either facilitate or impede dynamic change. Dynamic governance can be sustained only when there is long-term commitment to and investments in building each of the elements in the system and designing the necessary linkages for them to work as a whole. Understanding the interactions and flows in a dynamic governance system enables leaders to identify the areas of leverage in decision-making and the reinforcing and counteracting forces that would impact the timing and outcomes of specific policy decisions. The interdependent, interacting and reinforcing flows that are the heartbeat of dynamic governance are shown as connecting arrows in Figure 1.1.

The external environment affects the governance system through the uncertainties of future developments and the varied practices adopted in other countries. The external environment provides *ideas and insights* that stimulate thinking ahead and thinking across. Thinking ahead seeks a *dynamic fit* with the environment so that the policies remain relevant and their impacts desirable. Thinking across assesses the *trade-offs* that a society needs to make before new practices may be introduced. The internal environment, represented by the actual performance of existing paths, *induces* thinking again so that policies may be refined and renewed.

Able people and agile processes are the key drivers for the development of the three dynamic governance capacities of thinking ahead, thinking again and thinking across, which then are embedded in the paths of chosen strategies, policies and programs. Their approaches to the paths differ according to which dominant dynamic capability is being utilized. In thinking ahead, *new concepts* are developed from understanding the impacts of future uncertainties and from questioning implicit assumptions. In thinking again, the status quo of current performance is *challenged* in order to identify changes for improvements. In thinking across, innovations result from *customizing* the experience from other contexts to suit the local circumstances.

Long-term commitment and investments in developing able people and agile processes are required to sustain an unending cycle of thinking ahead, thinking again and thinking across. This will induce the constant *conceptualization, challenge and customizations* that are needed to enable people to learn, adapt chosen paths and policies, and change continually. This system of interdependent relationships among dynamic capabilities, people, processes, and paths enables guiding principles, formal rules, incentive structures, informal constraints, and the institutional structures to evolve with time to remain relevant and effective in the face of rapid technological change. This is the essence of a dynamic governance system.

### **1.4.3 How Systemic Interactions Affect Change: The Example of Education Policy**

Education has always been a priority for Singapore. In the 1960s the main objective was to ensure that every child had a place in school. All students followed a similar education structure — drawn largely from the British education system and adapted for local conditions with the bilingual policy. It was only in 1979 that the system was overhauled following the recommendations of the Goh Keng Swee Report on Education, which sought to reduce wastage and premature attrition from the school system. Students were streamed in their third year (revised later to the fourth year) of primary school into classes that reflected their academic and language abilities as demonstrated in

examination results. Top students with exceptional bilingual abilities from the national primary school leaving examinations were given options to study in specialized secondary schools to develop these capabilities further. On the whole, the education system was geared to train students to acquire the technical knowledge and skills that the economy needed. Schools were ranked according to the performance of their students in national examinations.

Though attrition rates declined and examination passes improved, there was much unhappiness. Parents put tremendous pressure on their children to study and do well in examinations to ensure that they were streamed into the best classes. Children streamed into classes intended for those with lower ability (“monolingual classes”) were demoralized and their self-confidence suffered. Teachers assigned students heavy workloads to drill them for examinations and to get better results in school rankings. The range of subjects offered in schools narrowed as both teachers and students dropped qualitative subjects deemed difficult for students to do well in examinations. The management of schools and teachers was centralized in the Ministry of Education, which ensured that all policies and programs followed consistent standards and procedures. Schools were expected to follow strictly the ministry’s directives. Teachers and principals felt powerless to improve the system. The education system was widely perceived as too examination-centered, too rigid, overly stressful on children, unforgiving, not catering to late bloomers, stifling to creativity, too narrow and de-motivating.

Though there was some fine-tuning to the system, the basic educational framework remained largely unchanged throughout the 1980s and much of the 1990s. This was due in large measure to the beliefs of the founding political leaders who had observed and learnt from the experiences of other newly independent countries. They had expanded their educational intakes post independence but many of the graduates produced had not been able to find jobs. This in turn had created large numbers of educated unemployed who were a potential source of political and social instability, a situation that Singapore’s political leaders wished to avoid. Thus throughout the 1980s and much of the 1990s, educational expansion was undertaken

within a manpower planning framework. Manpower requirements for the economy were forecast and educational intakes for each level adjusted accordingly. The recommendations of the Goh Report, in integrating the academic and vocational tracks, extended this thinking by trying to reduce wastage and seeking to ensure that all students left the school system with a skill that would help them secure employment.

In addition to these considerations, the system up to that point was aligned with many of Singapore's institutional values. There was continued improvement in examination passes; the approach was an efficient and pragmatic one which encouraged hard work and self-reliance. Students graduating from the system found employment and provided the manpower needed for economic growth. The rigor and objectivity of the examination system were highly regarded as benchmarks for meritocracy. Talent, based on academic performance, could be identified, nurtured and fast-tracked. The system was able to identify and produce talented individuals who became leaders in society regardless of their family background. A fundamental rethinking of the educational system was thus constrained by cultural values and beliefs which reflected the ethos at the time: efficiency, consistency, quantifiable improvements in examination results, and central control. While there was no educational crisis, voices of concern were nevertheless growing louder.

A confluence of factors led to a major review of the educational system in the latter half of the 1990s. Singapore's restructuring and transition to a knowledge-based economy required mental flexibility and creativity that the educational system had difficulty producing. The lack of entrepreneurship and innovation was starkly obvious when contrasted with beacons of the new economy such as Silicon Valley. Educational concerns were one of the main causes of emigration. The ministry also experienced difficulties in recruiting the qualified teachers needed and class sizes remained large by Western standards.

A shift in thinking occurred in the 1990s. The focus of education policy moved gradually from one that looked upon students solely as potential manpower for the economy to one that sought to nurture and help each student be the best that he or she could be. Subsequent

reforms in the Singapore education system since 1997 were developed based on this new way of thinking and were led by highly regarded political and public sector leaders: Ministers Teo Chee Hean and Tharman Shanmugaratnam, and Permanent Secretaries Lim Siong Guan, Chiang Chie Foo, Lim Chuan Poh, and Tan Ching Yee.

They re-examined assumptions and fundamental educational policies which had been operating for many years and learnt from the experience of other countries. Implementation was carried out in phases and progress was cumulative. The objective to maximize the potential of every child based on Singapore's long-standing belief in developing its people remained unchanged. Teachers and principals were involved in a multitude of project teams that reviewed different aspects of how the educational system was actually working, and recommended changes for improvement. New ideas were introduced into educational paths and approaches to build upon existing strengths to maximize the potential of every child in a changed global environment and in a more sophisticated Singapore society and economy.

Comprehensive reforms in school management processes, systems and structures paved the way for subsequent substantive changes in educational policies regarding curriculum and pedagogy. Two slogans were used to convey the main themes and approach to reform: "Thinking Schools, Learning Nation," and "Teach Less, Learn More." There was a major change in direction towards thinking skills rather than mere content acquisition, and student-centered learning rather than teaching of textbook knowledge. Systemic changes in educational processes and structures included changes to:<sup>29</sup>

- (i) school management: giving more authority and autonomy to schools and organizing them in clusters, more structured development for school principals, flexible sabbaticals, more holistic assessment of schools including broader bases for school rankings;
- (ii) school infrastructure: major investments in information technology and upgrading of school buildings;

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<sup>29</sup> Speech by Minister Teo Chee Hean at the MOE WorkPlan Seminar on 18 September 2002.

- (iii) career structures and development for teachers: developing their professional capabilities, external work attachments, more competitive salaries, enhanced recognition, faster promotions for high performing teachers, more support for teachers;
- (iv) curriculum and assessment: broader and more integrated curricula, trimming curriculum requirements, more emphasis on thinking and creativity, reducing over-emphasis on examinations, second-language teaching pedagogy geared to developing interest with a focus on conversational skills, removing streaming in primary schools;
- (v) educational structure: more diversity and flexibility to give students greater choice and more options, including integrated programs that bypassed the GCE "O" level examinations, new subjects, specialized schools in sports, arts, and mathematics and sciences, and private schools; setting up new polytechnics and universities.

Our purpose here is not to give a detailed account of the transformation of education policies. It is to illustrate how the systemic interactions worked to constrain and then drive education reforms in Singapore. It would be too shallow an analysis to attribute change to a single leader or a single cause. Both driving forces for change and counter-acting forces for stability build up in the system over time and need to reach a point when there is sufficient driving force to overcome the balancing forces before systemic change can be initiated. The educational system in the 1980s and 1990s reflected the cultural values and ethos then, and thus the major changes were difficult to achieve because the forces for stability were very strong, as illustrated by the cultural foundations at the base of Figure 1. 1.

We can also explain the driving forces and capabilities for change in education using the dynamic governance framework in Figure 1.1. External forces, in the form of the requirements for the new economy, created visible gaps in the educational system. Driven by strong beliefs in global relevance and people development, the educational system was reviewed to address new needs and plug the gaps to ensure continued success in the new economy. People and processes are the

driving forces needed to move the change forward and in this case, the able and visionary leadership of new ministers and permanent secretaries re-defined the systemic long-term paths and policy changes required. They then created the structures and processes to initiate, execute and sustain the efforts. These processes involved harnessing, through teams and review committees, the energy, knowledge and interest of the major stakeholders — teachers, parents and external experts — to devise and recommend changes for improvement. New paths and policies were then articulated, contextualized and executed. This example clearly demonstrates that people, processes and policies are reinforcing forces that have to be actively managed as a system to achieve the desired outcomes over the long term. After ten years of sustained development, the transformation of education policy and management in Singapore is still an on-going effort. New energies have to be constantly infused into the system to prevent it from inevitable atrophy. That is the nature and challenge of dynamic governance.

The rest of the book explores and explains these dynamic flows and relationships and their applications in the governance system of the Singapore government institutions. The rest of this chapter discusses the two main parts of the dynamic governance system: why and how culture is the foundation for dynamic governance, and what the three major capabilities of dynamic governance are and how they work.

## 1.5 Culture as a Foundation for Dynamic Governance

Culture denotes certain group beliefs and values that are shared or held in common, so it can be thought of as the accumulated shared learning of a given community based on a history of shared experience. Governance rules and structures are choices made by a society and reflect the values and beliefs of its leaders. The beliefs of leaders shape the rules, informal norms and the enforcement mechanisms that are institutionalized. Douglass North calls cultural beliefs the “scaffolds human erect”<sup>30</sup> and they shape the nature of institutional choices and change, and “over time, the richer the cultural context in terms

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<sup>30</sup> North (2005), pp. 48–64.

of providing multiple experimentation and creative competition, the more likely the successful survival of the society."<sup>31</sup> The values and beliefs may stay implicit and informal for a long time and may only subsequently be articulated after reflection and rationalization. Whether they are articulated or implicit, it is important to understand the cultural foundations of a society to appreciate why governance choices are made the way they are.

Culture affects governance in three ways. The first impact of culture is to *constrain* the agenda and policy making process. Issues that run counter to cultural values and principles are less likely to be accepted on the agenda, and even if they are accepted for consideration, the decision making process would be severely *constrained* by the implicit assumptions embedded in the culture. Second, cultural norms are often used to *confront* the consideration of innovative policy options that contradict them. The constraining and confrontational effects of culture mean that policy options that are contrary to existing values and norms would not be accepted. Sometimes these can become strategic blind spots that ultimately undermine a society's survival. Third, cultural values and norms *catalyze* decision-makers to actively look for alternatives and ideas that are aligned to and would further the implicit purposes of the group. The effects of these cultural values and beliefs are significant, though often implicit and informal, and are achieved mostly through the socialization of leaders. They affect the governance system through influencing the thinking and decision-making of leaders, and thus the choice of paths, policies, processes and practices that are adopted.

The culture of a society comes from an accumulation of experience derived from the adaptive, often partial solutions, to frequently encountered problems of the past. The perception of the value of these ideas in the progress of a society becomes deeply imprinted in the minds of the people. Over time, a common cultural heritage is formed, reducing the divergence of mental models, and creating a means for transferring these common social perceptions to future generations. This cultural heritage shapes how people think, evaluate, and decide

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<sup>31</sup> North (2005), p. 36.

across a spectrum of choices, including governance. The cultural foundations of governance are derived from how founding leaders perceive the strengths and vulnerabilities of a society's position in its context, which then influence how they articulate the intended purposes of the governance systems and institutions. These belief and values determine the principles utilized to guide policy decision-making.

The leaders' perception of position, articulation of purpose and evolution of principles are the foundations for understanding why and how governance institutions and structures develop over time. At the same time, they provide a sense of center and stability for individuals in a society as it adapts to constant change. But a stable center can either facilitate or impede learning, help or hinder change. If there is no clarity of purpose and principles, institutional rules and structures can become ends in themselves, self-perpetuating and highly bureaucratic. When the environment changes, there is no basis to review and revise existing rules, systems and structures. Instead of seizing new opportunities, new developments may make incumbent leaders and organizations feel insecure and threatened because they may lack the competencies to function in the new context. These dysfunctional behaviors cannot be challenged without a shared sense of purpose and a strong commitment to principles that facilitate change. Responding adequately to change requires values and mental models that seek to perceive emerging patterns, understand them and adapt to a new reality. The Singapore's Public Service for the 21st Century (PS21) initiative was specifically aimed at inculcating the values of anticipating change, welcoming change and executing change so that the public sector can face the future more effectively. Details of the PS21 strategic initiative will be discussed in Chapter 8. The broad themes of the position, purpose and principles in the Singapore government institutions are shown as the foundations that are common across the three dynamic governance capabilities in Table 1.1.

Singapore's approach to governance is shaped by its leaders' view of its unique position, circumstances and history — its small size, lack of resources, geographical location and multicultural make-up.

Table 1.1. Cultural Foundations for Governance in Singapore

Capability Culture	THINKING AHEAD	THINKING AGAIN	THINKING ACROSS
<p><b><u>PRINCIPLES</u></b>  <i>Guidelines for                      Action Based on                      Values &amp; Beliefs</i></p>	<p>Integrity — Incorruptibility                      People are key — Meritocracy for best use of talent                      Results-oriented — Rationality with pragmatism                      Efficiency — Use of markets adjusted for social equity                      Stability — Multi-racial, multi-religious understanding</p>		
<p><b><u>PURPOSE</u></b>  <i>Strategic                      Imperatives of                      Governance</i></p>	<p>Develop people as the key resource                      Inculcate self reliance through work, not welfare                      Financial prudence to build buffer for survival                      Domestic stability to attract FDI and talent                      Economic growth for survival                      Global relevance through connectivity and change                      Build long-term sustainability, not short-term political gains                      Government takes a proactive role in development</p>		
<p><b><u>POSITION</u></b>  <i>Unique Context &amp;                      Constraints</i></p>	<p>Small, resource-scarce, vulnerable to external trends                      Diverse cultures and ethnicity, threat to internal harmony                      Dominant single political party since 1959</p>		

Since Singapore’s founding by the British as a trading hub, it continues to depend on external connectivity, especially international trade and investments, for its survival. Its small market size led it to seek economic integration with Malaysia in 1963. Its separation from Malaysia in 1965 caused its leaders to look beyond its immediate region and “leapfrog” to the more developed nations for investments and trade to increase its chances for survival. Its historical experience shaped its deep sense of vulnerability, and the recognition of its dependency on developments in the global economic and security environment. Its lack of natural resources focused its leaders’ minds on their people as the only strategic resource for the country, and the need to accumulate financial resources from economic growth in order to build buffers for survival during lean years. The perceived vulnerabilities of Singapore’s position influenced the leadership’s intent and purpose, its activist stance, and the adoption of several strategic imperatives for good governance: long-term thinking, global relevance, sustained

economic growth, social stability, financial prudence, self reliance and people development.

A unique feature of the Singapore governance infrastructure is the dominance of a single political party. The political context is especially crucial because the public service leadership is accountable to the Cabinet, made up of ministers from the same political party that has ruled Singapore since 1959. The colonial heritage left by the British when Singapore obtained self rule in 1959 and the imprint and values of the founding fathers, especially its first Prime Minister Lee Kuan Yew and his trusted deputy, Goh Keng Swee, have influenced the developmental paths of and set the boundaries for governance in Singapore in the last 42 years. The political leadership's confidence in winning elections meant that they could adopt a decision-making approach that stressed long-term solutions and sustainable policies rather than short-term political popularity. Their confidence set the tone for rationality, systemic thinking and meritocracy in the development of the civil service, and the strength of the political leadership significantly influenced the values and principles of governance in the public sector.

Principles are guidelines for action based on the values and beliefs defined by leaders of institutions. Continuous change requires an ethical foundation that is stable and strong enough to withstand and support the constant re-examination and re-design of policies and programs. There are risks associated with constant change. Dynamic stability is achieved when there are clear principles founded on strong values and beliefs to guide the choice of what and how to change. Contrary to common perception, the Singapore civil service operates in a decentralized fashion with Permanent Secretaries being accountable to their respective Ministers. There are few formal coordinating structures at the civil service level. Though there are linkage mechanisms, most of the coordination structures are informal and social in nature, and founded on shared values and common principles. Socialization remains the main means of transferring values to younger members of the community.

Five principles set the tone for dynamic governance choices. First, the principle of anti-corruption is founded on a settled belief in

the value of integrity and service to society. Second, the principle of meritocracy is founded on a strong belief that economic development depends on the value of people's knowledge and skills rather than family background and social status. Third, the principle of rationality with pragmatism rests on a strong value of performance and focus on results. Fourth, the principle of using market prices adjusted for social equity is based on a belief in market prices as the best means for ensuring efficiency in the allocation of resources, with government intervening to provide a social safety net only for those who genuinely cannot afford to pay. Fifth, the principle of multi-racialism is based on the belief that domestic stability can be achieved only when there are harmonious relationships among the people of various races and religions. These values and principles influence the choice of policies, how they are designed, implemented and evaluated. They provide the criteria for decision-making and thus a stable foundation for dynamic adaptations to environmental uncertainties and technological change. The historical context that influenced the leadership perception of position and purpose is discussed in Chapter 3 and the values and principles of governance are further elaborated in Chapter 4.

### **1.6 Dynamic Governance Capabilities: Thinking Ahead, Thinking Again, Thinking Across**

Dynamic governance does not happen spontaneously. It is the outcome of leadership intention and ambition to ensure the survival of their societies. Dynamic leaders think differently, articulate their ideas so that peers and superiors appreciate and support them, and convert allocated resources into organizational capabilities that achieve desired results over a sustained period. Capabilities refer to an organization's attitude, knowledge, skills and resources deployed in conceiving and performing important coordinated tasks to achieve desired results. Capabilities are distinctive ways of doing things, and are developed over an extended period of time through processes of learning.

Dynamic leaders have the ability to govern with coherence in the midst of continuous change through clear strategic intent, astute management of their contexts, active learning and searching for

adaptive paths that are relevant, and effective execution of policy decisions. They systematically build capabilities in their people and processes to ensure that good ideas are converted into realistic policies, projects and programs, and consistently coordinate action throughout the organization by articulating and reinforcing worthy goals and principles.

The characteristics of the three dynamic governance capabilities of thinking ahead, thinking again, and thinking across in the Singapore public service are summarized in Table 1.2.

Table 1.2 outlines the nature and objectives of each of these capabilities and how they are manifested in the paths for making policy choices and decisions. It also shows the organizational processes for embedding these capabilities in the public service and the attributes of the people in leadership who embody these skills. These dynamic governance capabilities are coordinated institutionally through a set of shared views of where Singapore is positioned in the world, the purposes of governance, and what principles, values and beliefs are essential for its survival and success. The shared view of position, purpose and principles that constitute the cultural foundations for the Singapore governance system and which provide coordinated guidance for the performance of the three dynamic capabilities are also set out in Table 1.2. It provides a useful framework and set of guidelines for our examination of the development of dynamic governance capabilities. We will discuss each capability in some detail, including the criteria for decision-making, the major activities in the organizational processes, the attributes and competencies of the people who are involved and brief examples of how these capabilities worked in the Singapore public service.

### **1.6.1 Thinking Ahead**

*Thinking ahead* is the capability to identify future developments in the environment, understand their implications on important socio-economic goals, and identify the strategic investments and options required to enable a society to exploit new opportunities and deal with potential threats. The intent of thinking ahead is to gain foresight that

Table 1.2. Dynamic Governance Capabilities of the Singapore System

Capability Driver	THINKING AHEAD	THINKING AGAIN	THINKING ACROSS
<b><u>PATHS</u></b> <i>Policy Choices, Execution, Adaptation &amp; Innovation</i>	Future	Internal	External
	Uncertainties	Issues	Practices
	Foresight	Hindsight	Insight
	Refresh Goals	Better Quality	New Ideas
	Investments	Improvements	Innovations
	Beyond Present Circumstances	Beyond Past Legacies	Beyond Existing Boundaries
	Future to Current Implications	Current to Future Performance	Outside to Inside Programs
<b><u>PROCESSES</u></b> <i>Agile Structures &amp; Systems</i>	Exploring and Anticipating	Understanding and Probing	Searching and Researching
	Perceiving and Testing	Reviewing and Analyzing	Discovering and Experimenting
	Strategizing	Redesigning	Evaluating
	Influencing	Implementing	Customizing
<b><u>PEOPLE</u></b> <i>Able Leadership Recruitment, Renewal &amp; Retention</i>	Alert to Signals	Confront Reality	Learn from Others
	Scenario Builder	Problem-Solver	Knowledge-Broker
	Challenge Implicit Assumptions	Challenge Current Achievements	Challenge Accepted Models
	Credible	Candid	Contextual
<b>PRINCIPLES:</b> <i>Guidelines for Action based on Values &amp; Beliefs</i>			
<b>PURPOSE:</b> <i>Strategic Imperatives of Governance</i>			
<b>POSITION:</b> <i>Unique Context &amp; Constraints</i>			

would prompt the institution to assess the risks of current strategies and policies, refresh goals, and conceptualize new policy initiatives to prepare for the future. The time frame of thinking is from the future back to the present, with an outside-in perspective of how the uncertainties in the external environment would affect the achievement of desired outcomes and objectives.

Future uncertainties, by nature and by definition, cannot be made totally intelligible nor can any organization be fully prepared for them. The purpose of thinking ahead is not to try to forecast an inherently unpredictable future. In an uncertain world, thinking ahead is about engaging people in strategic conversations<sup>32</sup> so that they can see the plausibility of future developments, which may be different from what they have assumed. It is a process of helping decision-makers to re-perceive the world, re-conceive the strategic responses needed, and reconsider existing policies and programs. People learn to appreciate how events fit into a pattern, and understand their impacts on the socio-economic goals of the community. Only then can they question their assumptions about the way the world works, develop fresh perspectives and recognize the limitations of the current policy framework when the world changes. Thinking ahead creates a culture of regularly questioning underlying beliefs and mental models, and asking how relevant they continue to be in a changing world. It creates the mental preparedness, flexibility and openness that enable quick response as events unfold.

Thinking ahead is more than just conducting a formal planning process, which often degenerates into a bureaucratic process of filling prescribed forms devoid of substantive thinking and dialog. Thinking ahead involves exploring and rehearsing the future before it arrives and sensitizing people in the organization to recognize early signals of its impending arrival. Strategies and policies may be tested for robustness under alternate futures, and contingencies may be planned. By thinking through the uncertainties ahead of their occurrence, people in the organization becomes less fearful when events do occur, and have more confidence to respond better, faster and with greater flexibility — in short, be better prepared to face the future.

Without the capability to think ahead, people are more likely to be caught by surprise and then react out of shock and fear. In such circumstances, when leaders are under the spotlight and under pressure to do something fast, there is less time for careful thought

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<sup>32</sup> Kees vsn der Heijden (2005). *The Art of Strategic Conversations*, 2nd Edition. John Wiley & Sons Ltd.

and development of long-term strategic responses. They may engage in denial and redouble efforts at what is tried and tested, even when they know that these may no longer fit the new circumstances. They may choose a psychologically safe path by following the bandwagon in a wave of imitation of what others are doing, or go through a series of fire-fighting measures to alleviate short-term pain without finding long-term solutions. Thinking ahead recognizes that the best time to prepare for change is before the pressure or urgency to do so arises — because when they do, there is no time to think. That is why thinking ahead is a critical capability for dynamic governance.

The process for thinking ahead involves:

- (i) exploring and anticipating future trends and developments that may have significant impacts on policy goals,
- (ii) perceiving how these developments would affect the achievement of current goals, and testing the effectiveness of existing strategies, policies and programs,
- (iii) strategizing what options could be used to prepare for the emerging threats and exploit the new opportunities, and
- (iv) influencing key decision-makers and stakeholders to consider the emerging issues seriously and engaging them in strategic conversations about possible responses.

The capacity to think ahead requires leaders who are alert to signals regarding emerging issues and evolving developments in the social, economic, technological and political environments. They need to understand how these trends may culminate into scenarios of plausible futures and articulate the cause-and-effect logic of how these scenarios, if they come about, would require different sets of strategies and policies. They need to be both perceptive thinkers and creative conceptualizers to challenge implicit assumptions and energize people to meet the new challenges. They must be credible in both their performance track record and be compelling in the logic of their analyses so that decision-makers would pay attention and be willing to re-examine their assumptions about the changing criteria for effectiveness. They need to tell compelling stories based on facts and plausible events that would influence policy-makers to rethink their

beliefs and assumptions, and even to reconsider goals and objectives. Only then will they stimulate the openness and learning necessary to begin the process of change in mental models regarding goals, strategies, policies and programs.

Singapore's capability to think ahead is sometimes equated with its future-orientation and its capacity to think long-term, which have been widely admired. Its capacity to think ahead is not just a matter of plans and programs. It is a capacity that is deeply ingrained into its public sector leaders, embedded into its approach to policy-making, and entrenched into its institutional processes. It is an intangible skill and becomes clear only when one studies the pattern of thinking that characterized its approach to policy-making over the last 40 years.

Analyzing demographic changes provide the easiest approach to think ahead — for example, an aging population was not difficult to foresee since the baby-boomers born after World War 2 would be reaching retirement age within the next decade. In healthcare, it was foreseeable that an aging population would impose a greater burden of healthcare costs on the state. Thus policies were developed early for different levels of subsidies and for patient co-payments to ensure personal responsibility and choice, and to keep healthcare costs under control. At the same time limited competition was introduced into the healthcare delivery system to provide incentives for greater efficiency and achieve a higher standard of patient care and service.

The numerous master plans for priority policy areas are good examples of the public sector's capacity to think ahead, but by no means the only expressions of it. Over the years, much public sector effort has gone into developing master plans that took into account future trends and developments, and crafting strategies for ensuring success. In the early 1960s the planning process for economic development, as advised by Dr Albert Winsemius, identified the need for industrialization and a focused effort to promote foreign investment from leading multinational companies. Its success in creating jobs not only solved unemployment; it created a new policy issue in the 1970s: a shortage of labor. In the 1970s, Singapore invested in building a container port ahead of demand and ahead of other ports because of the strategic importance of trade to its economic development. It extended its

role as an entrepot serving its immediate neighbors and became the world's largest transshipment hub, providing aggregation of volume, connectivity and frequency for major shipping lines to serve their customers throughout the Asia-Pacific region. In the 1990s a slew of "2000" (thinking ahead to the year 2000) and "21" (thinking ahead to the 21st century) planning efforts were conducted, including Army 2000, IT2000, Library 2000, Singapore 21, Manpower 21, Tourism 21 and others.

A recent example of a major effort to collectively think ahead was the Economic Review Committee chaired by then Deputy Prime Minister Lee Hsien Loong, with the participation of hundreds of business leaders, professionals and public officials. The committee's report was released in 2003 and it was aptly titled, "New Challenges, Fresh Goals."<sup>33</sup> The report discussed the global uncertainties caused by the social and political aftermath of the Asian financial crisis, the new security threats resulting from the 9/11 attack on the World Trade Center in New York, the emergence of China and India as major economic players, and the impact of globalization and rapid technological advances. It highlighted new external and domestic challenges for the Singapore economy. The committee outlined a new vision for Singapore as "a leading global city, a hub for talent, enterprise and innovation," and "the most open and cosmopolitan city in Asia and one of the best places to live and work." The report then discussed the policy changes needed to remake Singapore to realize this new vision, including expanding external ties, building a competitive and flexible business environment, nurturing entrepreneurship and welcoming global talent.

### 1.6.2 Thinking Again

Albert Einstein said, "The problem is not to think but to think again." *Thinking again* is the capability to confront the current realities regarding the performance of existing strategies, policies and programs, and then to redesign them to achieve better quality and results. The

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<sup>33</sup> MTI (2003). "Report of the Economic Review Committee: New Challenges, Fresh Goals." Ministry of Trade and Industry, Singapore, February 2003.

timeframe for thinking is from the present situation to the future, with an inside-out perspective of how the performance of current policies and programs compares with the desired intent and outcomes. It involves utilizing actual data, information, measurements and feedback to surface issues and problems that impede better performance, and looks beyond the past legacy of a particular policy or program to seek ways to improve its performance.

If we have perfect feedback on the consequences of policy, the perfect mental model to correctly link the consequences to their true underlying causes, and the perfect knowledge to take corrective actions, the capacity to think again would be trivial. The reality is that there is so much noise in the system that it is difficult to have good and timely feedback, difficult to know what the feedback means, much less to be able to attribute them accurately. Even if we have the expertise to identify needed corrections, there may not be the political will or the resources to implement them.

Although thinking again is based on hindsight of what has already occurred, it uses the known facts and other feedback to ask questions, open up conversations and engage in dialog to facilitate learning about the underlying causes for the observed results. Thinking again is fact-based and creates an environment whereby people are constantly asking why they observe the results that they do and what they can do differently to obtain better or different outcomes. It removes the tendency to blame others or to take undue credit, both common responses whenever performance reviews are used for making judgments on people rather than for learning about the system. Thinking again leads to the reconsideration of the effectiveness and efficiency in the execution of policies and programs, as well as the appropriateness of their goals and strategies.

Thinking again may be triggered by success or failure — the key is how the results are perceived, interpreted and communicated to stimulate a rethink of the previous policy. Perhaps the most significant thinking again was done during the tumultuous two years between 1963 and 1965 when Singapore was part of Malaysia. The envisioned common market and bigger hinterland was not realized. Instead, the leaders from Singapore and Malaysia were embroiled in political

struggles which led to disillusionment on both sides. When Singapore finally separated from Malaysia, it was obvious that its earlier belief and strategy of creating a bigger hinterland to ensure economic viability had to be re-examined. Partly out of desperation and partly because of external advice, it decided to “leapfrog” the region and seek investments and markets from faraway countries in the developed regions of North America, Europe and Japan.

The unintended consequences of success may also trigger a re-think of policies. Perhaps the most well known reversal of a successful policy was the population control policy. This was formulated in the 1960s to cope with the overwhelming demand for jobs, housing and other social needs of a rapidly growing population in a bleak economic environment. As the economy grew, the population became more educated and delayed marriages and child-bearing. The policy disincentives for bigger families exacerbated the situation such that fertility slowed to below replacement levels. The “stop-at-two” population policy over-achieved the intended results, created limits to economic growth and compounded issues related to an aging population. The policy was reversed and now generous incentives are provided for Singaporeans to have more children and at an earlier age.

The process for thinking again involves:

- (i) reviewing and analyzing actual performance data and understanding public feedback,
- (ii) probing into the underlying causes of feedback or observed facts, information and behavior, both for meeting or missing targets,
- (iii) reviewing the strategies, policies and programs to identify features and activities that are working well and those that are not,
- (iv) redesigning the policies and programs, partially or completely, so that their performance may be improved and their objectives better met, and
- (v) implementing the new policies and systems so that citizens and customers are better served and enjoy a meaningful outcome.

The capacity to think again requires leaders who are willing to confront the realities of current performance and feedback, and to

challenge the status quo. They need to be confident yet humble enough to be candid without being offensive and to engage people in open dialog and interaction so that they are energized to change and do better. They need analytical and problem-solving skills to drill into the details of how things are done and why the feedback or results occur as they do. They also need the skills to redesign the system so that better results may be achieved.

The purpose of thinking again is to identify changes needed for improvement. For leaders who have initiated earlier changes, thinking again becomes especially challenging. Although change is never easy, it takes extraordinary emotional fortitude and effort for a leader to “think again” what he has previously initiated or earlier changed, and to change again. The make-up of the organization that has grown with the current leader makes the capacity to think again a rare occurrence. A strong and successful leader tends to staff the organization with people who share his or her vision and values, and who have the competencies to execute and realize the current vision. Knowledge and competence can be double-edged — skill in doing something well can become the only way to do something. A core competence can become a core rigidity and a competency trap that blocks further learning. Over time, groupthink can develop in the leadership so that there is subtle denial of reality, and little diversity of views and perspectives. Although the team itself may view this as cohesion and teamwork, often the reality is that they have lost the capacity to re-look at their existing policies and programs with the objectivity and detachment needed to change again, especially if they had succeeded with their original changes.

That is why we often observe difficulties in renewing leadership perspectives and capabilities adequately for the same team to lead a second round of transformation necessary for an organization to continue to succeed. It also means that the regeneration of the leadership capacity to be able to *think again* requires deliberate strategies and effort to bring in new people with different backgrounds, skills and views, and to put in place mechanisms to ensure that the inevitable and ensuing political difficulties do not eventually hollow out the new leaders. There can be no dynamic governance without leadership renewal.

Singapore's policy for rotating its leaders, both political appointment holders and public sector leaders, every few years has created natural mechanisms for thinking again. Each change in leadership is invariably accompanied by a thorough review of past policies and performance. Although this can be disruptive to the organization and viewed skeptically as a new leader's egoistic desire to stamp his own mark on the organization, it has the effect of causing people in it to think again what has been done and how further improvements can be made. This has often led to strategic renewal in both policies and organization.

The transformation of Singapore's public libraries<sup>34</sup> from 3rd to 1st world in the 1990s was facilitated by changes in leadership and organizational forms. Although library membership and readership had been declining and facilities deteriorating for a number of years, the initiative to think again only started in 1991 when the new Ministry of Information and the Arts was set up and a new minister, George Yeo, appointed. The Library 2000 Committee comprising non-librarians was appointed officially to review (*think again*) the role and development of the public libraries. The chairman and deputy chairman came from the state IT agency, the National Computer Board, which in an earlier released IT2000 report had envisioned a digital library without walls. The new chief executive of the library appointed to lead the change was also a non-librarian.

The "think again" of the public library system led to a new mission: to enhance the learning capacity of residents, new concepts: lifestyle libraries, new facilities: bringing libraries to the people in shopping malls, new processes: self check-out, returns at other locations, faster availability of new books, better customer service, and new skills for librarians. The results have been revolutionary. Library facilities are now attractive places for people to visit and access information. Visitors and book loans have increased several fold. More and newer books, and other multimedia content are now readily available. Drove of overseas visitors have seen the changes

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<sup>34</sup> Roger Hallowell, Carin Knoop and Boon Siong Neo (2001). "Transforming Singapore's Public Libraries." Harvard Business School Case Series.

first-hand to learn how the transformation was accomplished and managed without any staff lay-offs.

### **1.6.3 Thinking Across**

*Thinking across* is the capability to cross traditional borders and boundaries in order to learn from the experience of others so that good ideas may be adopted and customized to enable new and innovative policies or programs to be experimented with and institutionalized. It goes beyond mere adoption or imitation of rules and practices that may have worked elsewhere. By learning from others, insight is gained and then adjusted to the unique needs of a country's cultural and historical context. Thinking across is a dynamic governance capability that introduces fresh ideas and innovation into a society. The timeframe and perspective for thinking adaptively is from the present-outside to the future-inside.

Thinking across seeks to find interesting practices beyond the traditional boundaries of a nation to understand why and how they have worked to achieve given policy objectives. It then creatively transfers that knowledge into tailored programs that may be tried within the local institutional and policy environment. Thinking across is learning from others to gain new ideas for innovation, for new and different ways of doing things. The intent of learning from the experience of others is not mere technical imitation of best practices, but a deep contextual understanding of why others adopted different approaches to similar issues, how their history and circumstances influenced the selection of different policies and design of different programs. It includes understanding the lessons they learnt in their implementation, and how they perceived what worked or did not work, and whether and how they would approach it differently if they could start over.

As a society's developmental issues become more complex, it cannot merely depend on the adoption of standard, generic policies and practices to solve its problems. It has to learn from the experience of others and the experiments that may have been conducted elsewhere to design solutions that are suitable for its own citizens. Thinking

across recognizes that the traditional boundaries of functions, hierarchy, organizations, industries, sectors, geography, nations, culture, and knowledge domains are hurdles to learning. They create discrete mental categories that limit creativity in the search for holistic solutions to complex issues. A society that provides the incentives for people and organizations to explore alternative ways of solving problems, conduct trials to experiment with new ideas and learn from failures will progress faster, become more innovative, and increase their chances for continued success in a changing world.

Thinking across facilitates learning through exposure to different ideas and discovery of new insights and applications. It recognizes that breakthrough innovations happen often by a process of being exposed to interesting experiments in other communities, taking apart these ideas and re-assembling them in new combinations.<sup>35</sup> Thinking across overcomes the strategic myopia of a “not invented here” mindset. Instead of rejecting an idea or program because it came from elsewhere, thinking across makes “not invented here” a valued opportunity to tap the most creative ideas wherever they may be. It builds bridges to different cultures and backgrounds to open up new perspectives, and to find new approaches to governance and policy. Exposure to other domains allows people to see their own policies in a new light, question their own practices, and make new discoveries — how new connections may be made, and how different ideas may be recombined in new ways to create innovative approaches to emerging issues.

It recognizes that people who have grown up and lived in the same socio-economic and political environment often develop similar views and share similar blind spots. In being too familiar and too comfortable, they too easily reject ideas that do not fit into the local context in the first instance. It recognizes the need for people to step out of their familiar surroundings long enough to overcome their own blind spots and see what others are seeing.

The process of thinking across boundaries involves:

- (i) searching for novel and interesting practices adopted and implemented by others in approaching similar issues,

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<sup>35</sup> Andrew Hargadon (2003). *How Breakthroughs Happen*. Cambridge, MA: HBS Press.

- (ii) reflecting on what they did, why and how they did it, and the lessons they learnt from the experience,
- (iii) evaluating what may be applicable to the local context, taking into account the unique conditions and circumstances, and what would be acceptable to the local population,
- (iv) discovering new connections between ideas and new combinations of different ideas that create innovative approaches to emerging issues, and
- (v) customizing the policy and programs to suit local policy requirements and citizens' needs.

Leaders need to think across and be open to learn from people and practices outside their own culture. They need to be confident to go beyond the boundaries of familiar domains and competencies to look for different ideas, and build intellectual and social linkages so that these new ideas are not rejected too early and too easily. The new ideas are not abstract; they have actually been tried and implemented elsewhere, albeit in a different country, domain or culture. Leaders become knowledge brokers who span boundaries, build linkages to distant communities, grow social networks for learning and interactions, and provide conduits for the flow of new knowledge for their institutions. The sharing of information and experiences in the leaders' social networks give them new knowledge with which they can challenge accepted approaches and solutions in their local environments.

Instead of playing the devil's advocate in criticizing new ideas, leaders need to take on new innovation roles<sup>36</sup>, such as an anthropologist, an experimenter, a cross-pollinator, a set designer, and a storyteller. The role of leaders is to create an environment whereby people do not reject different ideas and solutions because of defensive 'they are not like us' attitudes that foreclose all learning. The uniqueness of one's context is not an acceptable excuse for not learning about other approaches. The uniqueness of context should focus the mind to learn even more in-depth so that the main principles and cause-and-

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<sup>36</sup>See Tom Kelley (2005). *The Ten Faces of Innovation*. USA: Currency-Doubleday Publishers.

effect logics of a particular practice may be distilled and contextually applied to the local circumstances. Customizing a successful solution to fit the local context requires a deep understanding of the underlying trade-offs that are made and whether a different trade-off is needed to meet the needs of the local community. The adaptability comes from an internalization of a nation's position in the world, the purpose to be pursued for its governance and institutional framework, and the principles that guide its paths of development.

Thinking across boundaries to learn and adapt has been characteristic of Singapore's governance since its independence. Minister Mentor Lee Kuan Yew estimated that perhaps 70 per cent of the governance ideas implemented in Singapore were learnt and adapted from elsewhere<sup>37</sup>. He said that Singapore's decision to move the international airport from Paya Lebar to Changi and write off about S\$750m of investments was motivated by his observation of aircraft landing and taking off at Boston's Logan airport that was located beside the sea. Building a new airport at Changi by the sea would solve the perennial noise problem created by aircraft landing and taking off over residential areas near the old airport at Paya Lebar.

When building its armed forces from scratch, the Ministry of Defence learnt from the military doctrines and training methodologies of the Israeli Defence Forces. The personnel appraisal system in the civil service and the public sector's approach to scenario planning were adapted from the Royal Dutch-Shell group. Growing Singapore as a garden city was motivated by what then-Prime Minister Lee saw in Phnom Penh. The National Parks Board (NParks) personnel had to experiment with plants from many countries to see what could grow well in Singapore's tropical climate. Thinking across brought new ideas to Singapore and with continual learning, led to new innovations. The Singapore Armed Forces evolved its own military doctrines, training methodologies and subsequently, new weapons and other military technologies. NParks later expanded the concept of a "garden city" to a "city within a garden" and developed a transformation of the

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<sup>37</sup> Comment made in answer to questions in a dialog with student at the Lee Kuan Yew School of Public Policy on 3 November 2006.

entire island, including park connectors linking all parks on the island so that the city could be conceived as being in a garden.

### **1.6.4 Example of How the Three Capabilities Work Interactively**

We have described the three capabilities that gave rise to the dynamism of the governance system in Singapore. While each of the three capabilities tends to lead to a different type of institutional change, major policy changes often require the exercise of all three sets of capabilities in an integrated, interdependent and systemic manner as shown in Figure 1.1. We conclude this section with a recent example of how the three capabilities worked synergistically to reverse a long-standing policy against the operation of casinos in Singapore.

In 2006, Singapore awarded tenders of more than S\$5b of investments each for two integrated resorts with casinos, to be built in downtown Marina Bay and the resort island of Sentosa. In doing so, it *thought again* and reversed a long-standing policy against having casinos in Singapore. The policy change resulted from *thinking ahead* and setting a strategic goal to grow the tourism and hospitality cluster, especially meetings and conventions, into a major service sector of the new Singapore economy. The policy change was also the result of *thinking across* boundaries and discovering how such resorts transformed Las Vegas from a gambling city to a global entertainment and conventions hub. Describing the decision as the most difficult he had taken up to that point as Prime Minister, Lee Hsien Loong said:

“Because if you’re making a decision where the advantages are clear-cut and the opinions are not polarized, it’s easy to do. But here the advantages were not so clear, and the dissenters had valid arguments, which we ourselves subscribed to for a very long time. But now the world is changing, and we’re starting to think that we have to re-examine our position. Eventually, we decided to do it because, as we understood better how these resorts operate and the way Las Vegas was going and the way the

tourism scene was developing across Asia, it became clear that it was not just a plus which we were forgoing, but if we did not do this, we might be out of the game.”<sup>38</sup>

However, it adapted the legalization of casinos with built-in social safeguards to discourage casino gambling among the locals. Guidelines were drawn up for the amount of space within the integrated resorts that could be used for casinos, charging an entrance fee for local residents at the casino, and allowing a person’s immediate family to apply for him/her to be barred due to gambling addiction issues.

It adapted the process used for the procurement of complex military systems to the evaluation and award of the tenders (the IR tender evaluation process is described in Chapter 5). External consultants independently calculated the land price that the government would charge and this was announced beforehand to ensure fairness to all bidders. They also checked the bidders’ financial projections and assessed the rigor of the financial estimates. A separate panel of experts assessed the architectural designs submitted. A committee of public sector leaders met the bidders and evaluated their bids independently of the political leaders, making their recommendations separately from the committee of ministers. Bidders who partnered with government-linked companies were not given special treatment: in the end no government-linked company won either of the two licenses. Throughout the tender process, Singapore maintained its trademark commitment to professionalism, transparency, objectivity, integrity and anti-corruption.

This is a clear example of how the three organizational capabilities built upon and reinforced one another systematically to bring about a major policy change, which nevertheless was implemented in a manner consistent with the values and principles that have guided policy decision-making and implementation in Singapore since its independence in 1965. It was a decision which resulted from dynamic capabilities with a stable center of values, i.e., dynamic stability at work.

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<sup>38</sup> Interview with Prime Minister Lee Hsien Loong reported in “Remade in Singapore,” *Institutional Investor*, September 2006.

The policy choice was different from those taken in the past but the underlying values of economic growth, pragmatism, market pricing, objectivity and honesty were maintained and reinforced. This is the essence of dynamic governance at work in Singapore. The rest of the book describes in detail how these dynamic capabilities are supported by a set of cultural values and principles, expressed through adaptable policies that are systemically executed, and developed through long-term investments in people and processes.

### **1.7 Synopsis of the Rest of the Chapters in the Book**

The dynamic governance framework in Figure 1.1 provides the conceptual structure for the rest of the book. Singapore's history shapes its purpose for governance and provides the context for understanding the deliberate intent to build governance structures and systems that dynamically stay relevant. The principles that serve as guidelines for action are the core values and beliefs of its leaders and their early experiences in ensuring Singapore's survival. The systematic and practical development of paths, policies, people, and processes in the Singapore public service are drivers of the capacities to think ahead, think again and think across.

Chapter 2 provides a more detailed discussion of the major concepts — governance, institutions, and dynamic capabilities — that guided our research, data collection and analysis in this study, so that readers can understand their conceptualization. This chapter is optional for those who are primarily interested in the substantive findings of our study and how they may be applied in their own contexts. Those who seek to understand the development of these concepts in the literature and their references would find this chapter useful.

Chapter 3 describes the historical context for the development of the public sector. The major patterns of political, economic, security and social developments in Singapore over a 40-year period from independence in 1965 to 2006 are summarized and their impact on the public sector governance and development discussed. An understanding of the context for public sector development is important to be able to interpret many of the strategies and actions

taken by the civil service in its transformation journey. The chapter will show how the transformation of the public sector is linked to changes in its context.

Chapter 4 describes the cultural foundations of governance in terms of the founding political leaders' perception of Singapore's position, their articulation of the purpose and the derived principles of governance in the public sector. The chapter describes the institutional culture of the Singapore public service and how it evolved from a set of shared values that emerged during the founding years of Singapore's independence.

Chapter 5 is the first of two chapters on how policies are adapted and executed. This chapter describes in detail the processes for making and executing policies, which affects policy choices and approaches. It provides a baseline for understanding the learning and adaptive capabilities that are embedded in the chosen paths and policies. Examples will show how these capabilities have enabled dynamism in the governance of the public sector.

Chapter 6 describes how the civil service, though constrained by path dependence, has been able to adapt policies to changing circumstances and improvise and innovate to meet new requirements. We describe the development of six policy areas — economic development, biomedical sciences, car ownership and road transportation, healthcare, the Central Provident Fund, and the working poor — over a number of years to illustrate the dynamism of these paths. From these, we draw lessons regarding policy adaptation and discuss the governance approaches that enabled the public sector to continue to learn and adapt to changing conditions and emerging issues.

Chapter 7 describes how fundamental governance capabilities are ultimately embodied in leaders through their recruitment, renewal, and retention in the public sector. We discuss the human resource philosophy and practices of the public service and explain why the development and socialization of people are so crucial to dynamic governance.

Chapter 8 describes how the public service sustains institutional renewal and reconfiguration through organizational processes for

re-examining assumptions by anticipating the future, for renewing activities by allocating financial resources, and for redesigning structural linkages by applying systemic disciplines.

Chapter 9 integrates the material covered in Chapters 1 to 8 and draws lessons and principles that have served the public sector well in its continuous journey of learning and change. It discusses the continuing challenges and how the public sector is addressing them. It seeks to generalize the lessons and principles learnt from the study of the Singapore public sector to other contexts, whether public sectors in other developing countries in Asia or the private sector in Singapore or elsewhere.