

A JOURNEY TOWARDS ORGANISATIONAL EXCELLENCE

- THE SINGAPORE EXPERIENCE

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Abstract

With increasing expectations of students, industry and other stakeholders, educational institutions are looking for ways to stay relevant and responsive to the demand for quality programmes, educational outcomes and services. The purpose of this paper is to share the experiences of a vocational and technical educational institution in its journey towards organisational excellence, in Singapore. Providing the challenges, context and motivation for the journey, it demonstrates how its framework for organisational excellence, efforts and achievements have helped in moving it closer to its vision of building a world-class technical education institution for the knowledge-based economy.



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INTRODUCTION

First, let me thank the Ministry of Education, Youth & Sports, Baden-Württemberg, for the kind invitation to this **International Symposium on Quality Management and Quality Assurance in Colleges and Vocational Education**. I have had the privilege of visiting Germany on several previous occasions as part of our long and close partnership and collaboration developed over the last twelve years between the Institute of Technical Education (ITE) in Singapore and your Ministry. My last visit to Baden-Württemberg was in June 2001. This Conference therefore provides a good opportunity for me to reflect on the global challenges we all face and their impact on the development of our vocational and technical education and training systems.

In particular, the focus of my paper will be to share with you our experiences in our journey towards achieving organisational excellence in ITE in Singapore. In doing so, I shall address the challenges, and provide the context and motivation for the journey, our organisational excellence framework, key initiatives and achievements. I shall also demonstrate the relevance of these efforts in achieving our vision to be a world-class technical educational institution and reflect on this journey from a practitioner's perspective.

OVERVIEW OF ITE

But first, a broad overview of Singapore and our education and training system. And, in particular, the role of the ITE – who we are, what we do, who we serve, and the key challenges which influence our journey towards organisational excellence.

Singapore, a former British colony centrally located in South-east Asia, as shown in **Figure 1**, achieved its independence as a country in 1965. A multi-racial society of four million people living on a small island of 680 square kilometres, Singapore is today a modern city state and global centre for industry, business, finance and communications. Our major industries are petrochemicals, pharmaceuticals, high-end manufacturing, tourism and services. Our major trading partners are Malaysia, United States of America, China, the European Union, Hong Kong and Japan. The per capita Gross National Income is US\$21,000. As a young nation with limited natural resources, one of Singapore's priorities has been the education, training and development of its people.

ITE is a post-secondary government-funded education institution. Established in 1992, our mission is to create opportunities for school leavers and adult learners to acquire skills, knowledge and values for lifelong learning. Our vision is to be a world-class technical education institution for a knowledge-based economy. As a post-secondary institution, ITE is well positioned as an integral part of the total national education and training system, as shown in **Figure 2**.

As a matter of policy, all students in Singapore receive 10 years of general education. Upon completion of secondary education, about 90% of a student cohort will progress to post-secondary education and training in Junior Colleges, the Polytechnics or the ITE. Junior Colleges provide a two-year highly academic programme for the top 25% of a school cohort who prepare for a university education. This track would represent the 'Gymnasium' in the German education system. The next 40% of school leavers would enter the five Polytechnics for a wide range of practical-oriented three-year para-professional diploma courses in engineering and technology, applied sciences, business and health sciences. The lower 25% of a school cohort, in terms of academic abilities, are oriented towards technical and vocational training at ITE. These students receive training in a wide range of full-time skills-oriented courses in Engineering, Info-Communications, Applied Sciences and Business, as well as apprenticeship training. Thus, 65% of a cohort, comprising Polytechnic and ITE students, would constitute the Vocational and Technical Education component of the Singapore education system. These tracks represent the dual system of apprenticeship in the German system. Within the total education system, there are formal linkages for those who have done well to progress from the ITE to the Polytechnics, and Polytechnics to the Universities.

ORGANISATIONAL EXCELLENCE

The Challenges

As an educational institution, the development of ITE has been shaped by rapidly-changing technology, globalisation and the knowledge-based economy. With technologies, in particular, information technology, having a direct impact at the workplace and in management and learning, a key challenge in education is how to stay relevant and responsive to the changing needs of students, industry and society. The knowledge-based economy requires that employees not only have the technical knowledge and skills for the jobs, but also the values for lifelong learning. Employers are looking for graduates who can think, innovate, communicate and work in teams. From the national and institutional perspectives, graduates must not only be knowledgeable, well trained, active and confident, but also ready to contribute to society and serve the community. Hence, how do institutions continue to ensure the relevance and quality of their training programmes? With increasing focus on educational outcomes, how do educational institutions ensure that they remain attractive to school leavers and adult learners? How do they ensure the employability of their graduates? Beyond academic matters, how do educational institutions respond to the higher expectations of stakeholders and customers in terms of management systems, processes and practices?

Since 1992, ITE has undergone a major transformation as a post-secondary technical education institution. Our response has been to seek and build organisational excellence within an academic teaching and learning environment. Guided by two strategic plans, the first – **ITE 2000** - formulated in 1995, and **ITE Breakthrough** in 2000, many new initiatives had been implemented to address the issues of continuing responsiveness, relevance and organisational excellence. Today, we have successfully restructured our training system and built a strong brand name, well recognised locally and overseas. Our students enjoy modern and well-equipped campuses, quality programmes and high employability. Learning from private-sector organisations, our approach is to benchmark our systems, processes and practices against international standards and best practices. Taking a strategic view of education as a service, we are better able to accept a mindset change in viewing students and employers as ‘customers’ and the government and community as ‘stakeholders’. As an educational institution, this means focusing our resources and efforts on the quality of teaching staff, a rigorous curriculum development process, relevant pedagogic model and a supportive and conducive teaching and learning environment.

But how was this transformation of technical education and, in particular, the building of a new institution, namely, the ITE, achieved? Looking back, I would attribute our success to many factors, not least of which would include strong governmental support, right policy decisions, effective governance structure, stakeholder support, community partnership, management leadership and staff commitment. All these elements are necessary, but with so many demands and sometimes ‘distractions’, a crucial element is staying focused, in

line with the mission, vision and goals. A mindset change in accepting ‘quality and excellence in whatever we do’ as a way of life is our first step in embarking on our journey towards organisational excellence. In a sense, this is also our journey in building a world-class technical education institution for the knowledge-based economy. ITE would be a world-class institution if it is recognised not only locally, but internationally, for the quality of its programmes, facilities, graduates and organisational practices.

Organisational Excellence Framework

We began to focus our efforts on organisational excellence in the mid-1990s when our first comprehensive strategic plan, the ITE 2000 Plan, was formulated. At that time, a national initiative called ‘*Public Service 21*’ or PS21 was launched by the government, to bring about mindset changes towards change and excellence, so that the public service can be “in time for the future”. It focuses on four key elements of change, namely, staff involvement, staff well-being, organisational review and quality service. As a Statutory Board under the Ministry of Education, ITE became a member of this PS21 Movement.

As our interest in organisational excellence evolved, we integrated PS21 with two other interdependent components, the **ITE Breakthrough Plan** and **Singapore Quality Award (SQA) Model** under an **ITE Organisational Excellence Framework**, in year 2000, as shown in **Figure 3**. Under this framework, the PS21 Programme provides the impetus to prepare and equip our staff for impending changes. The ITE Breakthrough Plan acts as a developmental plan that charts our future direction and defines our mission, vision and goals. The SQA Model serves as a benchmark to help us align our approaches, systems and processes to achieve world-class organisational excellence.

The SQA is the national benchmark for ‘World-Class Business Excellence’ for both public- and private-sector organisations in Singapore, as shown in **Figure 4**. The Award is conferred upon the ‘best of the best’ organisations in recognition of their attainment of world-class standards of performance excellence. Modeled after the American Malcolm Baldrige, European Quality and Australian Quality Awards for business excellence, the SQA model has been adopted as our model for organisational excellence. To qualify for the SQA, an organisation needs to achieve an aggregate score of at least 700 points (out of 1000) through an external validation exercise, based on seven SQA criteria, including Leadership, Planning, Information, People, Processes, Customers and Results.

To help organisations move towards the SQA, a development programme, called the **Singapore Quality Class (SQC) Scheme**, is adopted as part of the SQA framework. Organisations need to achieve at least 400 points (out of 1000) under the same SQA framework to be admitted to the SQC. ITE qualified for the SQC in 1999, and has since undergone one three-year external revalidation exercise and annual self-assessment exercises.

Building Blocks of Organisational Excellence

Driven by our desire to achieve quality, standards and excellence in our programmes and services, we have adopted a range of complementary models, tools and benchmarks to progressively strengthen our framework for organisational excellence. These key building blocks, which we have put in place, as shown in **Figure 5**, are:

- **Singapore Quality Class** for overall business excellence;
- **People Developer System** for people excellence;
- **ISO 9001: 2000** for our Academic Quality Management System;
- **Balanced Scorecard** for strategic alignment with our long-term and annual corporate plans;
- **Net Economic Value** for resource management; and
- **Knowledge Management** for information sharing and learning.

KEY INITIATIVES OF EXCELLENCE

Underpinning the building blocks as foundation for organisational excellence are innovation, systems, technology, benchmarking, leadership, people and culture. Our journey towards organisational excellence is driven by an Organisational Excellence Steering Committee chaired by me and comprising other senior management staff. For the purpose of today's presentation, I shall highlight examples of key initiatives which have made a significant impact on organisational excellence under the **SQA Model**.

Leadership

One of the core areas, for which ITE was commended in year 2001 for its organisational excellence, is 'Leadership'. The external assessors said, and I quote, *"The leadership of ITE is visionary and forward-looking, having come up with many innovative concepts and approaches, such as the ITE 2000 (ITE's first strategic plan) and ITE Breakthrough Plan. It has articulated a clear mission and vision, supported by values and strategies, which focus on customers and stakeholders. The leadership is highly visible with many forums for communication with employees, and its strength is evident in its ability to bring the people along the journey of organisational excellence"*. Unquote. Our senior management team sets the direction, the tone and creates an environment that fosters collaboration and teamwork.

In recognising that change may be difficult for some staff members, special change management seminars were held to prepare our staff in accepting change as part of the new work culture. Such seminars have helped in creating a greater sense of awareness, readiness and togetherness in addressing the many initiatives which were being introduced. In responding to the need for corporate communications at the highest ITE-wide level, I introduced the 'CEO-In-Campus' dialogues with staff and students. Given the size of ITE, with over 2000 staff and the geographical spread of its 10 campuses, these dialogues have helped to strengthen the visibility and bonds among management, staff and students. Personally, I welcome this opportunity to stay with the ground and feel the 'pulse' of the campuses. A constructive and close working relationship with our Union of ITE Training Staff has also contributed towards managing the change process successfully.

Planning

Since we started our first strategic plan (ITE 2000) in 1995 to build ITE as an established post-secondary education institution, we have evolved an integrated and comprehensive planning process. Cited as a 'best practice' under the SQA Model, the external assessors said, and I quote, *"ITE has a well-defined planning process. A consultative approach is taken, targeting at meeting stakeholder needs, and is well-deployed with visible involvement of staff and key stakeholders"*. Unquote. This holistic seven-step long-term strategic planning process is shown in **Figure 6**. Adopting both a 'top-down' and 'bottoms-up' approach, the process entails a whole spectrum of activities, from environmental scanning to input gathering, strategy formulation, communication, implementation and monitoring. While leaders provide the setting by defining the broader parameters, staff, customers and stakeholders have the opportunity to contribute to, and build on the plan through their participation. The strengths of this planning process are its comprehensiveness, extensive consultation, communication and buy-in by staff, customers and stakeholders.

The long-term strategic plan is not a static plan. It is a dynamic plan, which evolves constantly to incorporate new developments and changes. The present five-year ITE Breakthrough Plan is reviewed half-yearly and annually, in conjunction with the formulation of the Annual ITE Corporate Work Plan. Starting with 18 programmes when it was first formulated in 2000, ITE Breakthrough now has 25 programmes. And 17 of the programmes have now been completed. This long-term strategic plan is complemented by an annual corporate planning exercise whereby a 'corporate theme' setting out a common focus and priorities is identified by senior management for the following financial year. For example, our corporate theme for this year is *"Enterprise and Innovation @ ITE"*, a theme consciously chosen to reflect a changing global and social environment. A Corporate Work Plan Seminar is then held to solicit staff's inputs on the programmes to be included in the Annual Corporate Work Plan. Starting last year, the Balanced Scorecard approach was also adopted as a corporate performance management tool.

People

Next, staff – they are the ones who make things happen in our journey towards organisational excellence. People lie at the heart of everything we do. In re-affirming the commitment and important role of our teaching staff, our former Minister for Education was quoted in 2002 as saying, and I quote, *“At the heart of the ITE are its dedicated teachers... ITE Lecturers play an important role in nurturing the students’ learning process and sharing their careers and success in life”*. Unquote. In this respect, our focus has been on creating a work environment which promotes staff development and engages staff in contributing to the continual improvement of the organisation.

This, we have successfully done through ‘Work Improvement Teams’ or WITs, which were first introduced in our work environment in the 1980s as part of the National Productivity Movement. Today, these Work Improvement Teams have evolved into ‘Innovation & Learning Circles’ or ILCs, and are deeply entrenched in our work culture. All ITE staff are members of ILCs. ILCs provide the opportunity for our staff to work in teams and actively engage in contributing their knowledge, ideas and suggestions in areas for which they have an interest and are passionate about. Such activities further contribute to building a stronger culture of team spirit, openness, involvement, innovation and enterprise.

As for our focus on staff development, our belief, values and practices are benchmarked against the **Singapore People Developer Standard** Scheme. Under this scheme, our commitment is to provide 100 hours of learning per staff per year. Annually, a Corporate Learning Plan is formulated in response to the long-term and short-term needs of ITE. The Corporate Learning Plan is then cascaded to the departmental and individual levels. To actively support the training and development of our staff, various schemes have been implemented, including in-house courses, industry attachment programmes, job rotations and external education and training courses. All staff have an Individual Learning Plan developed annually and reviewed in consultation with the supervising officer as part of their continual efforts in lifelong learning. For our commitment to people development, ITE achieved the Singapore People Developer Award in 2000.

Processes

ITE prides itself in having a structured and rigorous process for its course design, delivery, assessment and other supporting processes. As shown in **Figure 7**, our Academic Quality Assurance System places a heavy emphasis on the entire curriculum development and delivery process, from academic planning to course design, programme delivery, evaluation and assessment of results. While the courses to be developed are derived from our strategic and annual corporate work plans, the outcomes are measured against key performance indicators in the ITE Balanced Scorecard. ITE’s Quality Management System for the course design, delivery and assessment of full-time education programmes was certified under the **ISO 9001:2000** benchmark in 2002. This practice has helped ITE to ensure quality and consistent standards of its courses across campuses.

Underlying the rigour of the curriculum development process is a structured and internationally-recognised occupational analysis process known as 'Developing A Curriculum' or DACUM. Through DACUM, the skills profile of an occupation is developed based on an analysis of the specific job competencies and tasks with the assistance of a panel of experienced and skilled persons. The skills profile is then validated by employers before it is used as a basis for curriculum design. The outcomes of ITE's curriculum process are the documented Training Standards, Instructional Specifications, Equipment Lists and Norms for Training Facilities.

REFLECTION ON JOURNEY

So far in this presentation, I have outlined the challenges we face, our motivation to strive for excellence, our framework for organisational excellence, the benchmarks we use and some examples of excellence in our practices relating to 'Leadership', 'Planning', 'People' and 'Processes'. At this point, I would like to reflect on this journey towards organisational excellence and demonstrate the relevance of our efforts in pursuing our vision of a world-class technical education institution.

My sense is that educational institutions need to respond to the changing local and global environments. With increasing expectations of students, industry and other stakeholders, educational institutions need to look at new ways of organising themselves to stay relevant and responsive in delivering quality programmes and services. Embracing quality assurance systems, tools of organisational excellence and benchmarking against the best international standards and practices are no longer an option but a necessity. A framework for organisational excellence is therefore a good starting point to ensure that the institution has the ability to stay focused and align its efforts and resources in achieving its mission, vision and goals. The assurance is therefore not so much what we have achieved today, but whether we have the systems, processes and practices, which will ensure our relevance and timely responses to the future needs of the institution.

As for ITE, we have embarked on this journey towards organisational excellence since the mid-1990s. Based on our experience, I can say that it has been a rewarding journey. While there is no question that additional commitment, efforts and resources are required, I can say with confidence that our efforts in building organisational excellence have been an important factor in our success in transforming ITE to what it is today. This journey has helped to foster a closer bond among management and staff, strengthened team spirit and enhanced our ability to manage change. ITE is already a member of the **Singapore Quality Class**, a recipient of the **People Developer Standard Award** and is **ISO 9001:2000**-certified. More recently, in July this year, ITE received the **Public Service Award for Organisational Excellence** in recognition of our achievements in organisational excellence. We are moving increasingly closer to our vision of a world-class technical education institution for a knowledge-based economy.

Pursuing organisational excellence is a never-ending journey. It calls for top management commitment, leadership, a positive mindset towards change and innovation, sharing and learning, communications, and the active engagement of all staff. While we have achieved much, many more challenges remain. But before I conclude, let me leave you with two citations reflecting on where ITE is today:

- (1) The first is a quote from Professor Robert Zemsky, Institute for Research on Higher Education, University of Pennsylvania, USA, who in year 2001 said, and I quote, *“Singapore has developed one of the most sophisticated and strategically placed programmes for vocational and technical education anywhere in the world. Its new facilities are world-class, its teaching staff are eager and qualified”*. Unquote.
- (2) The second is a quote from our former Minister for Education, Rear-Admiral Teo Chee Hean, who in year 2002 said, and I quote, *“ITE has distinguished itself as “best-in-its-class” for providing vocational and technical education, even when compared to such systems in advanced countries... I am confident that given its leadership, strategic planning, progressiveness and dynamism, ITE will achieve its vision of building a world-class post-secondary technical education institution for the new economy”*. Unquote.

On this note, I, once again, thank you for your kind invitation. I hope that the lessons I share have been of value to you. Thank you for your attention.

Figure 1 : Location of Singapore and ITE

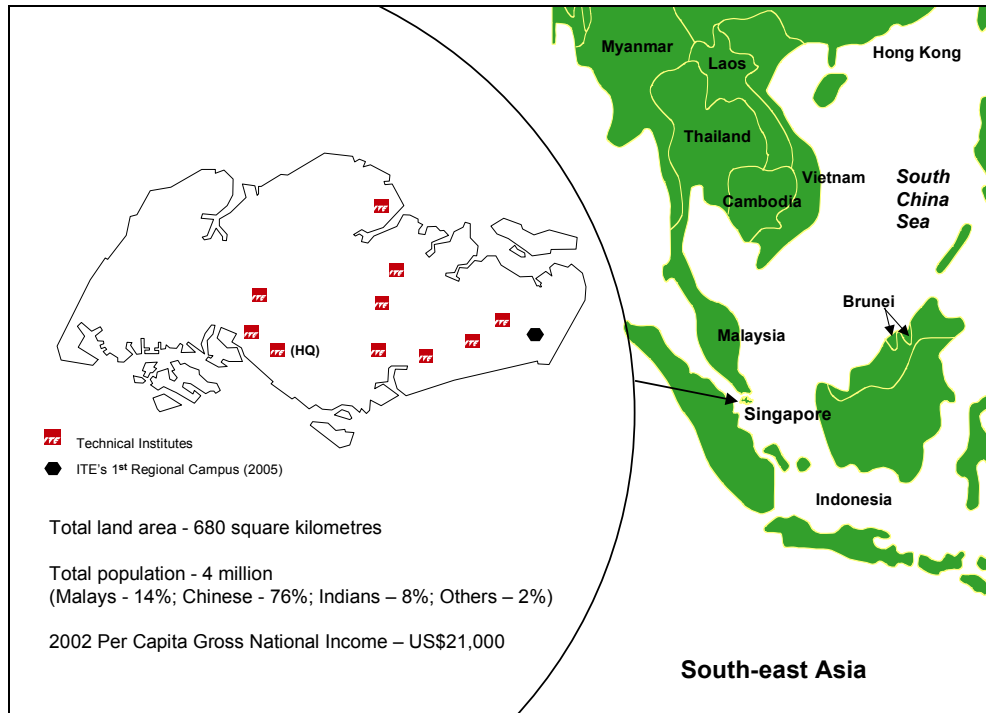


Figure 2 : ITE As A Post-Secondary Education Institution

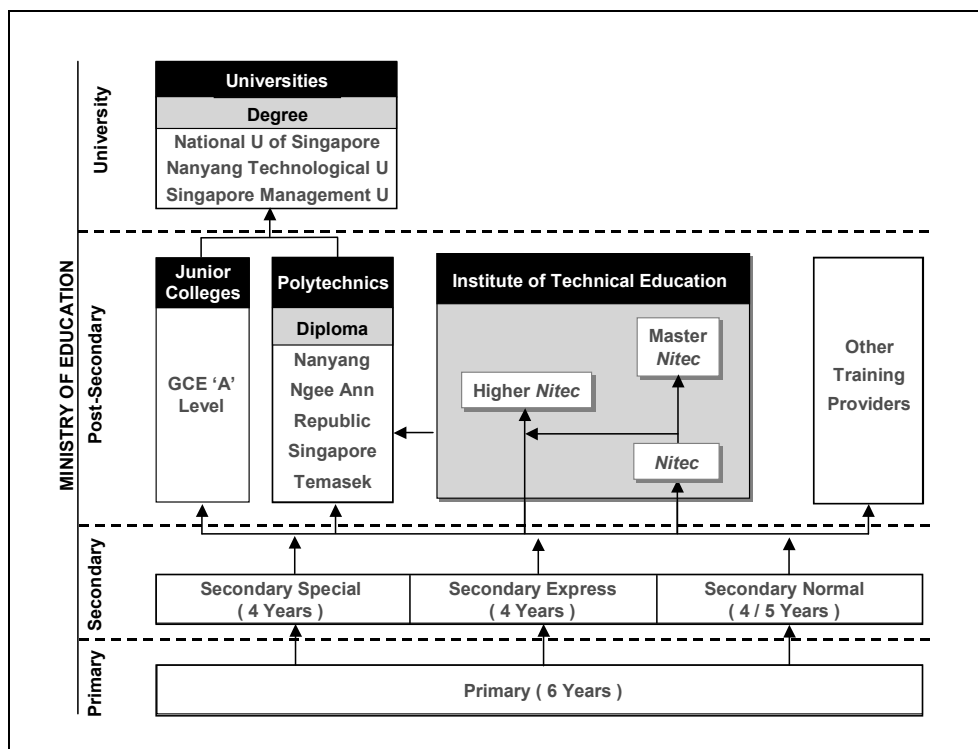


Figure 3 : ITE's Organisational Excellence Framework

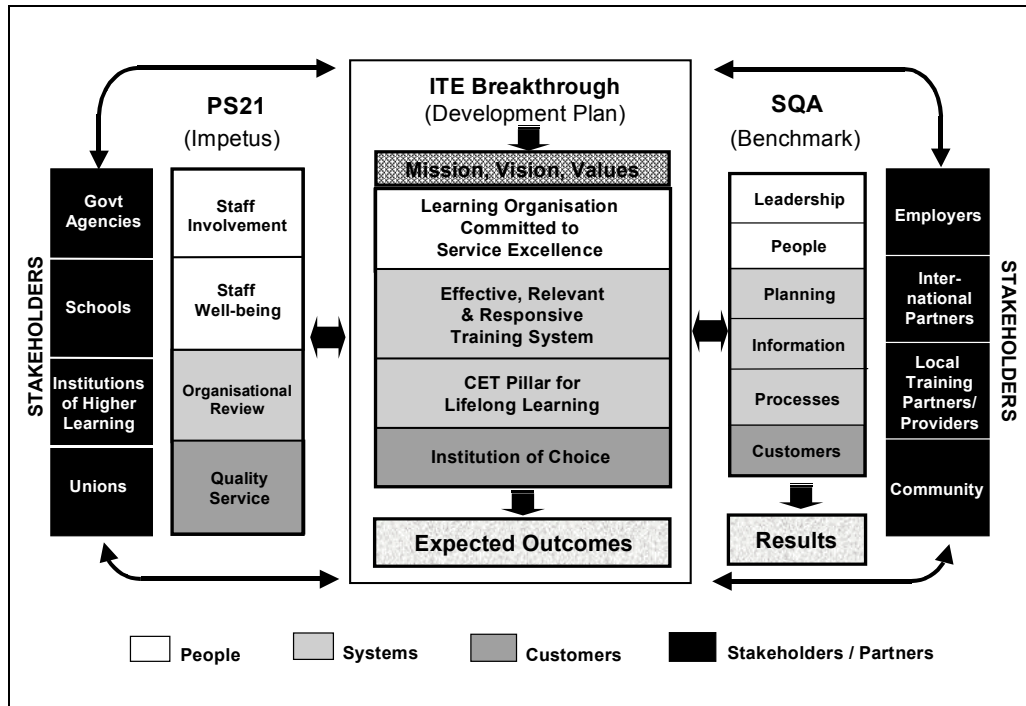


Figure 4 : 2003 Singapore Quality Award Framework

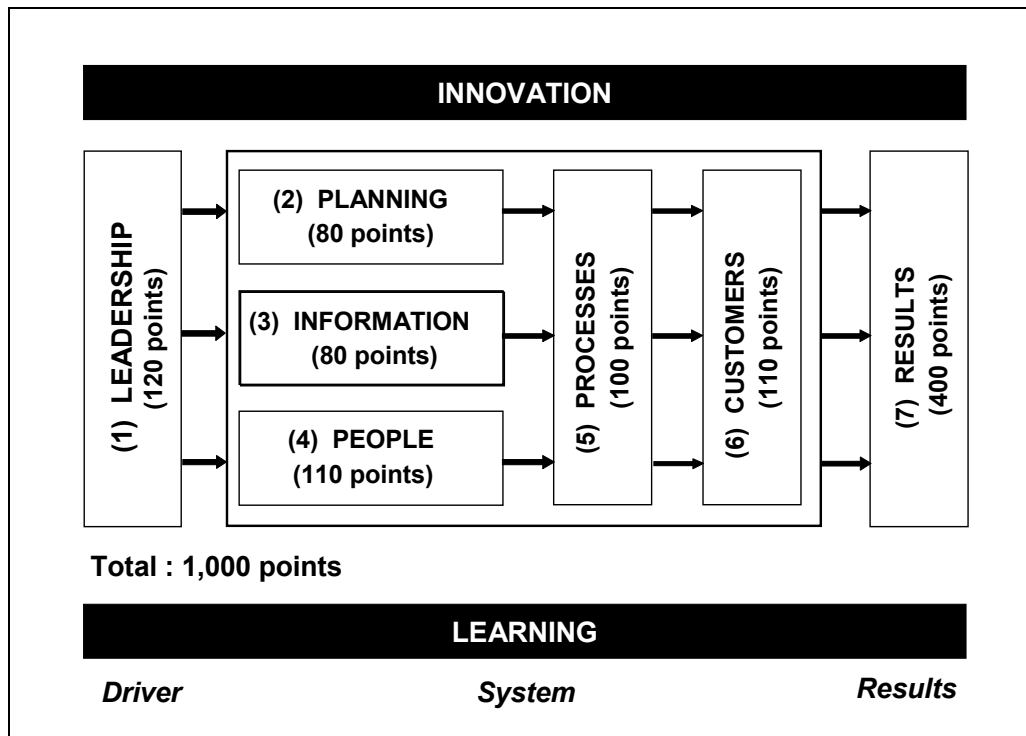


Figure 5 : Building Blocks of Organisational Excellence

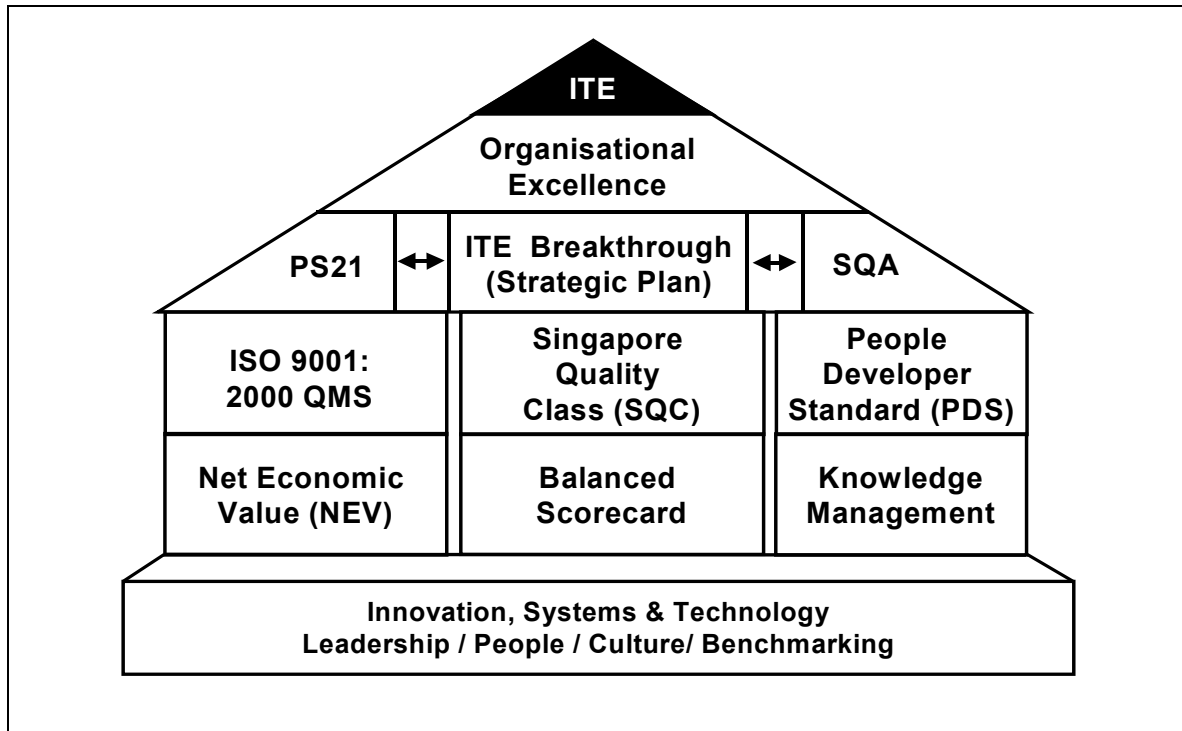


Figure 6 : ITE's Strategic Planning Process

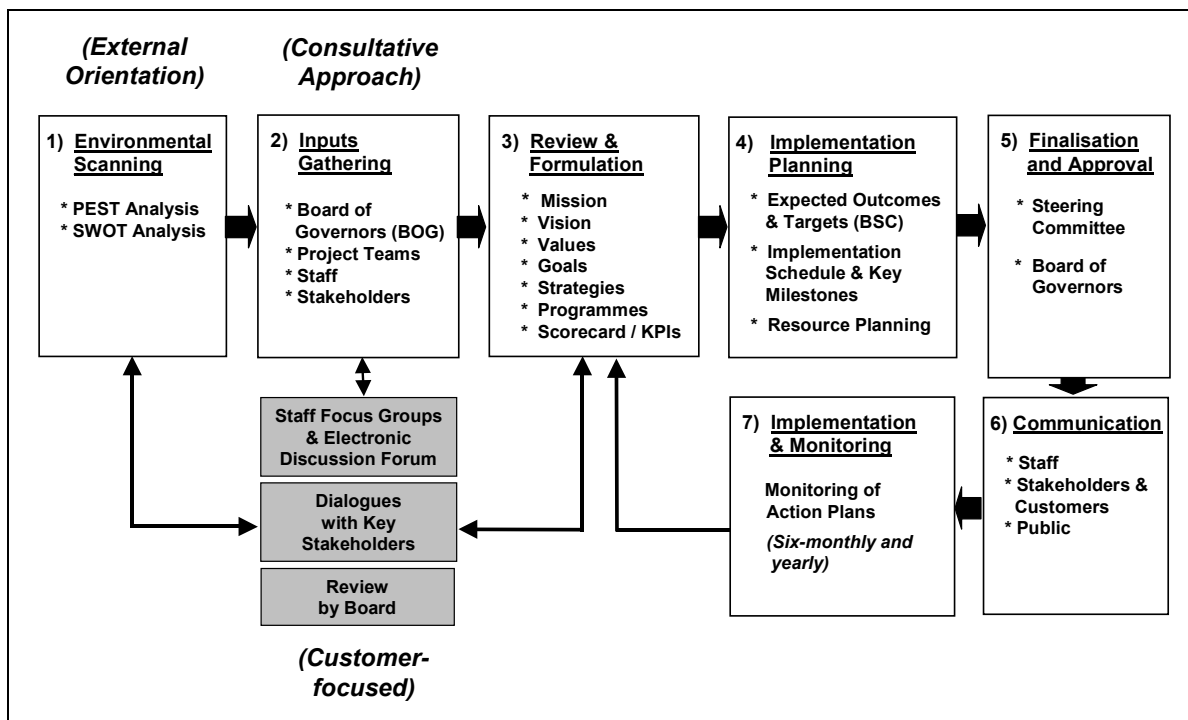
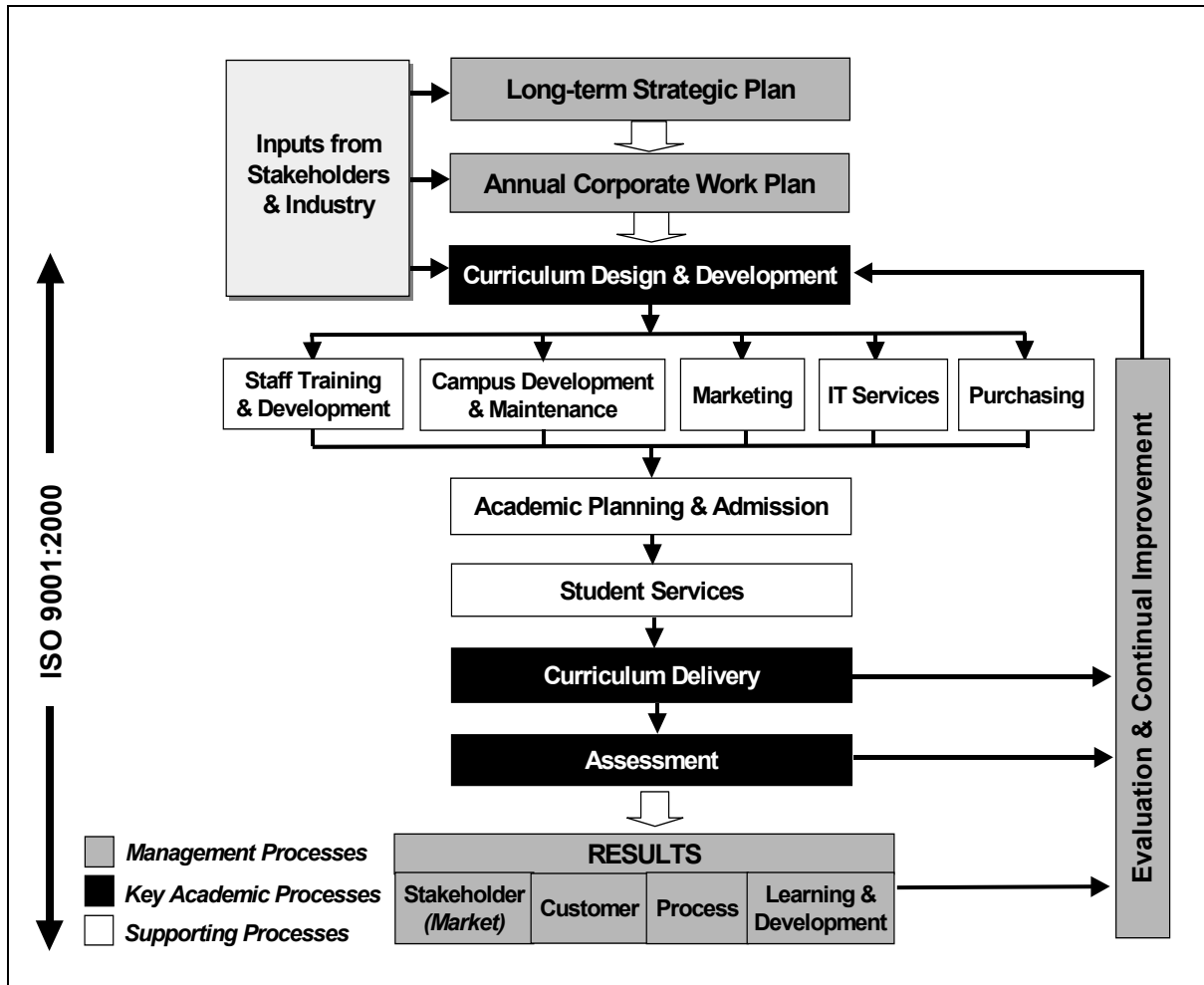


Figure 7 : Academic Quality Management System



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