

A TOM Implementation Framework for Hong Kong Manufacturing Industries 香港製造業的全面優質管理推行架構

Chin & Dale



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香港製造業的全面優質管理推行架構

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*Δ TQM
Implementation
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for Hong Kong
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In this book, evidence is presented of the pressing needs of promoting sustainable quality performance of Hong Kong industries, and how companies in Hong Kong utilise a localised TQM implementation framework to capture new opportunities for improving their management practices and achieving business excellence.

The framework was developed as a result of a project funded by the Industry and Technology Development Council of the Hong Kong Special Administrative Region (HKSAR) Government under the Industrial Support Fund (ISF Project no. AF/252/97). The main objective of this ISF project was to promote a proven TQM approach based on international experiences, and to customise the TQM implementation framework for Hong Kong's manufacturing industries.

The ISF project has four major stages. Stage 1 investigated the characteristics and current quality management practices in the Hong Kong's manufacturing industries. More than 100 companies were involved in this stage of the project. Stage 2 developed a TQM implementation framework and a 22-step guideline for helping Hong Kong organisations to establish their own approach to the introduction of TQM. Stage 3 was a pilot implementation programme that was launched in selected organisations in manufacturing sectors of electronics/electrical appliance and toys/plastic products.

本書針對香港工業正急需增強在品質方面表現，揭示利用本地化的“全面優質管理推行架構”可幫助香港公司獲得新契機去改善它們在管理上的實踐及業務上的強勢。整個計劃得到香港特別行政區工業及技術發展局工業支援基金撥款贊助（計劃編號AF/252/97），目的是引進國際在全面優質管理的經驗及實踐，從而建立適合本港製造業在全面優質管理的推行架構模式。

計劃共分為四主要階段跨越兩年時間，已有數百家製造企業先後參與該計劃的不同階段。計劃的首階段重點在研究香港製造業現有品質管理實踐及其特質。第二階段在發展全面優質管理的推行架構及一個二十二步驟的指引，以促進香港企業在品質管理方面的實踐。第三階段是在選定的幾個製造行業(包括電子/電機器具及玩具/塑膠產品)推行試驗計劃。

第四階段總結計劃所得發現及經驗，評估有關品質管理架構及指

Stage 4 consolidated the findings and experiences from the project, and validated the effectiveness and applicability of the framework and guideline.

The project was completed in early 2000, and the experience gained has been packaged into the TQM implementation framework that provides an adaptable mechanism for generating a common level of company-wide understanding of continuous improvement. The framework can serve as a blueprint for local manufacturers to establish their own approach to TQM and communicate and assess the progress made against plans.

Adoption of the framework can assist Hong Kong organisations with the introduction and development of TQM practices in their own continuous improvement journey. Proper installation of the framework and accompanying guideline can enable organisations to secure a competitive position, irrespective of their size, location and business nature. In addition, it is also anticipated that the framework will help organisations sustain good quality management practices, thereby leading to an overall better image of Hong Kong industries.

引的成效及可行性，及透過印刷物，研討會及專題討論會等方法推介該計劃的成果。

計劃已于2000年初結束，所得到的經驗已總結在全面優質管理的推行架構內，目的是提供一個有效的適應機制及客觀的持續改善的共同水準。這架構模式可作為本地製造商建立它們持續改善、溝通及評審進度的藍圖。

採納此架構模式可協助香港的公司持續改善，旅程中發展及實踐全面優質管理。若能適當地裝置及成功推行其有關指引，可令企業能獲得較有利競爭位置，這架構模式是適合於各行各業及大小企業，亦沒有所位處的地域的限制。除此之外，這架構模式亦預期可以協助製造企業維持及實踐良好的品質管理，從而增強香港工業整體的優質形象。

Executive Summary

Introduction

引言 *Introduction*

Significant shifts in competitive edge have been sharpening the needs for continuous improvements and quality breakthroughs. In Hong Kong, design and manufacture of quality products or services is now an integral part of business strategy, driven by customer requirements, competitive pressures and business opportunities. Responding to this challenge, many Hong Kong organisations have taken a low level initiative to employ different standards in one form or another to document, implement quality assurance practices and verify continued compliance.

In 1997, the Industry and Technology Council of the HKSAR Government approved an Industrial Support Fund (ISF Project no. AF/252/97) to support a two-year project, "Implementing the UMIST TQM Framework in Hong Kong Manufacturing Industries". The project aimed to develop a localised framework for implementing Total Quality Management (TQM) for Hong Kong manufacturing enterprises, particularly in the electronics/electrical appliance and toys/plastic products

在香港，激烈的市場競爭不斷引發對品質改善及突破的需求。設計及生產優質產品需因應客戶需求、競爭壓力及業務機遇等因素，結合在企業的業務策略內。為迎接這挑戰，很多香港組織亦已能自發地使用一些標準去推行及保證它們對品質的持續改善。

在1997年裡，香港特別行政區工業及科技局批核工業支援基金(計劃編號AF/252/97)贊助為期兩年的計劃“香港製造業全面優質管理推行架構”。該計劃的目的是發展為香港製造業發展本地化的全面優質管理推行架構，尤其應用在電子/電器及玩具/塑膠產品等製造業。該計劃並提供一套推行指引及程序來促進製造業發展其本身的品質管理系統。

manufacturing industries. A set of implementation guidelines and procedures were provided for facilitating manufacturing enterprises to develop their own quality management practices.

This book is one of the tangible deliverables of the ISF project. In the ensuing chapters, this book describes the paradigmatic shift and the development of quality management practices in Hong Kong. It elaborates the components of a practical UMIST TQM model and explains the critical processes and guidelines of implementing a customised framework in the manufacturing sectors. The book presents the initiation, methodologies and main findings of the project, and describes the content and application of the TQM implementation framework. In addition, it also discusses how the framework will help Hong Kong organisations to implement TQM and gain attainable business results.

本書是整個計劃其中一項的推行成果。接著的各章將描述香港品質管理實踐的發展及轉變。並詳細說明 UMIST 所提倡的全面優質管理模式的成分及解釋其在製造業推行的關鍵過程及指引。本書發表該計劃的構思、方法及主要發現，並描述推行全面優質管理架構的具體內容及應用。除此之外，它亦討論該架構如何協助香港組織推行全面優質管理以獲取預期的業務成果。

Practices

香港工業在
品質管理的實踐
*Quality Management
Practices in Hong Kong Industries*

Hong Kong, being a newly industrialised economy in Asia Pacific region, has grown fast but erratically. It has followed a similar track as that of many developed countries (e.g., the United States of America, the United Kingdom, Germany and Japan) to transforming its industry from a low-cost manufacturing base to a high value-added, design- and service-oriented manufacturing centre. In Hong Kong, manufacturing industries have experienced a remarkable inward-transfer of manufacturing facilities to Mainland China. Dynamic trading conditions, ever-changing market demands and uplifting quality requirements have sharpened industry's focus on developing quality management and improvement practices in gaining and retaining competitiveness. This chapter discusses the paradigmatic shift and the development of quality management practices in Hong Kong. A quest for the introduction and development of total quality management (TQM) is also described.

Before the 1990s:

The Era of Poor Quality Consciousness

Many early studies found that quality consciousness and the implementation of quality management systems in Hong Kong were inadequate and inappropriate. Only a few manufacturing firms had developed and implemented their own quality systems. The majority of companies had no clear quality vision and mission, and top management had lacked the initiative to steer quality activities through corporate strategies and policies. In most circumstances, only operational-type quality objectives would be made for middle management and the front-line operators. It was also common to find that no independent quality department or function was established in companies to look after their quality

香港作為亞洲太平洋區域中的新興工業化經濟體系，經濟增長非常急速而不規律。它的工業發展遵循很多已發展的國家（例如美國、英國、德國及日本等）相似途徑，由低價值生產基地轉變為高增值、邁向以設計及服務為主導的生產中心。同時，近年來香港製造工業亦已經歷廣泛的向中國大陸北移。動態的貿易環境、不斷變化的市場要求及品質水準的提高等已迫令香港製造業正視品質管理的發展及改善運作，從而獲取增強它們的競爭力。

本章討論香港工業模式的轉移及品質管理的發展，同時亦揭述引進及發展全面優質管理的需要。

在 1990 年以前：缺乏品質意識的年代

在很多早期的研究中發現，香港的品質意識及推行品質管理系統是不足夠及不適當的。只有小部份製造企業及公司有發展及裝置品質管理系統。而大部份公司均沒有清晰的品質前瞻及使命，高層管理大多缺乏企業策略及政策去推動品質活動。在這情況下，他們亦只有為中級管理及前線員工設定運作性質的品質目標，公司內沒有設立任何獨立的品質部門或

matters. Some studies also identified several deep-rooted barriers of quality management (QM), including the inability to plan for changes, the ignorance of cost of poor quality, the misconception of quality control, and inadequate education and training. In addition, difficulties in document control, ambiguous responsibilities and unplanned maintenance practices were also faced by the majority of manufacturing firms. Under this operating environment, the adoption of modern management philosophy and the development of QM practices seemed to be particularly difficult. Evidence indicates that before the 1990s, Hong Kong manufacturers have lagged far behind the world-class companies in areas of quality practices and management. This situation remained until the early to mid-1990s when there was diffusion of the ISO 9000 series quality standards, the concepts of continuous quality improvement (CQI) and total quality management (TQM) to the industries in Hong Kong.

Early 1990s: The Introduction of the ISO 9000 Series

ISO 9000:1994 is a series of international standards for quality assurance and management, and applies to all types of organisations across the world, large and small, manufacturing and services. It is a standard "language" for documenting quality practices, a system to track and manage quality assurance activities throughout an organisation, and also a third-party auditing model to assess, certify and maintain certification for organisations.

Hong Kong manufacturing industries were largely export-oriented. It was therefore difficult for manufacturers to penetrate the lucrative international markets without attaining ISO 9000 series certification. This situation was not only applicable to the markets of very

功能去處理品質事情是非常普遍的。有些研究亦指出在有關品質管理上根深蒂固的障礙，包括沒有能力去為公司計劃改變、疏忽差劣品質的成本、推行品質控制的誤解及教育和培訓不足等。除此之外，大部份製造業公司亦面對文件控制、劃分權責及維持實踐改革等各方面的困難。在這樣運作環境下，實踐現代管理哲學及發展品質管理常會遇上相當的困難。所以在 1990 年代前的文獻大都指出香港製造企業在品質實踐及管理領域都遠遠落後於世界級公司的表現。此不利形勢要到 1990 年代中期，當香港工業引進 ISO 9000 系列品質標準去配合推行持續品質改善及全面優質管理的概念後才改變過來。

1990 年代早期：引入 ISO 9000 系列

ISO 9000:1994 是一品質保證及管理的國際標準系列，適合應用於各類型的企業及組織，無論其大或小、是屬於製造或服務行業。它是品質管理系統的建立及有關運作的標準語言。它也可作為評估、驗證及維持企業的品質管理系統運作的第三者審核工具。香港製造業是出口導向的，所以製造商若未能獲得 ISO 9000 系列證書

competitive and high-value added products (e.g., electronic parts and computer-related components), but also the low-cost products. ISO 9000 series registration has implications on whether manufacturers can continue to export their products in the targeted competitive markets. In 1989, the Hong Kong government has promoted the ISO 9000 series certification scheme, and established the Hong Kong Quality Assurance Agency (HKQAA) to assess and register companies aspiring to attain ISO 9000 series status. Other foreign certification bodies also established their offices in Hong Kong to serve the industry. In order to help small and medium-sized enterprises (SMEs) who often lacked resources and capabilities in preparing for ISO 9000 series registration, the Hong Kong Productivity Council (HKPC) developed a sectarian syndicated consulting approach for individual industry on a sector-wide basis. The Hong Kong Government Industry Department then started to launch a series of quality awareness campaigns, seminars and events (e.g., "Make it Better in Hong Kong" Campaign, Quality Week, and Quality Month, etc.) to promote the importance of quality culture, the adoption of quality concepts and management practices in design, manufacturing and marketing operations in industries. As a result, the awareness and the adoption of the ISO 9000 series increased dramatically in Hong Kong. Use of statistical quality control and awareness of cultural changes were promoted in Hong Kong through the joint efforts of the Government, HKQAA, HKPC and many other professional bodies and leading organisations, like HKSQ (Hong Kong Society for Quality), etc. Despite this, many manufacturing enterprises, especially the SMEs, were still struggling with the impact of the ISO 9000 series and the quest for quality transformation in industry. Many companies were not

是較難進入相關的國際市場。此情況不祇局限於高度競爭及高增值產品(例如電子元件及與電腦有關零件)，至於低價值的產品亦是如此。因此，製造商若取得ISO9000系列的註冊，它們的產品較能繼續出口到目標市場上競爭。在1989年香港政府已引進ISO9000系列證書計劃，並成立香港品質保證局(HKQAA)處理評審香港各行業有關註冊ISO9000系列證書事宜。同時間，亦已有多個外國驗證機構在香港建立其辦事處。此外香港生產力促進局(HKPC)也提供一種以企業聯合組織顧問的形式去協助較缺乏資源及能力的中小型企业申請有關ISO9000系列的註冊。另一方面，香港政府工業處亦推介一系列的宣傳品質運動、研討會及其他項目(例如“香港製造，國際級數”運動、品質周及品質月等)。目的是加強工業界對品質文化重要性的認知，同時推動採用品質概念在設計、生產及市場運作上的有效管理。在政府、HKQAA、HKPC及其他多家專業及大機構(如HKSQ等)的努力推動下，ISO9000系列推展得到不斷的深化。同時在企業裡，統計品質的應用亦相應增多，品質文化也有顯著的改變。雖然如此，在1990年代初期，仍有很

ready for implementing and/or upgrading their quality systems and practices in the early 1990s. Nevertheless, this increased awareness of design and manufacture of quality products or services have resulted in quality becoming an integral part of business strategy and operations. The new motivation and initiatives to adopt quality assurance practices has also been promoted.

Mid-1990s: Awareness of Continuous Quality Improvement

With the promoting efforts of quality awareness and the proliferation of the ISO 9000 series of quality management standards across industry, a further commitment to continuous quality improvement (CQI) has become imperative for Hong Kong manufacturers to strive for survival and enhance their competitiveness in the mid-1990s. Continuous quality improvement has become a prerequisite of establishing and sustaining competitive edge for Hong Kong manufacturing industries which have relied heavily on export markets. The ISO 9000 series focuses on assuring a company's efficient operation at its status quo, and can be used as a good baseline for continuous quality improvement. CQI helps management to review and improve quality of the company's products and services continuously by the gradual changes, see Exhibit 1.1. It addresses organisation-wide amalgamation of various policies, concepts and procedures that have been designed to achieve "excellence". Manufacturing firms need substantial cultural changes to enhance quality consciousness and attain quality assurance. This is accompanied with the needs of internal improvement, marketing positioning, supplier control, and customer and regulatory requirements. The customers' demand,

多製造業尤其中小型企業未能掌握到ISO9000系列對品質提升所帶來的好處。它們大都未能推行及/或建立有效的品質系統。但整體來說，在這時期企業的商業策略及運作已意識到著重設計及出產優質成品或服務的重要。這也推動了對品質保證的需求及實踐。

1990年代中期：意識到持續改善品質的需要

在1990年代中期，香港工業界開始廣泛推廣品質意識及採納ISO9000系列品質管理標準，加強持續改善品質以提高競爭力。香港製造業極倚重出口市場，持續品質改善已成為建立及維持競爭優勢的先決條件。ISO9000著重保持公司有效的運作現狀，亦可為持續品質改善的基線。持續品質改善(CQI)有助管理層檢討及逐步改善公司產品及服務的質素(參考圖表1.1)，它結合達至卓越的政策、概念和程序。製造企業需要改變組織文化來加強品質意識及保證，同時需要改善內部運作、確立市場定位、監察供應商的品質。洞悉客戶及法律等的要求。客戶的需要、競爭者的表現、內部商業策略及減低品質成本通常是邁向全面優質管理的主要推動力，圖表

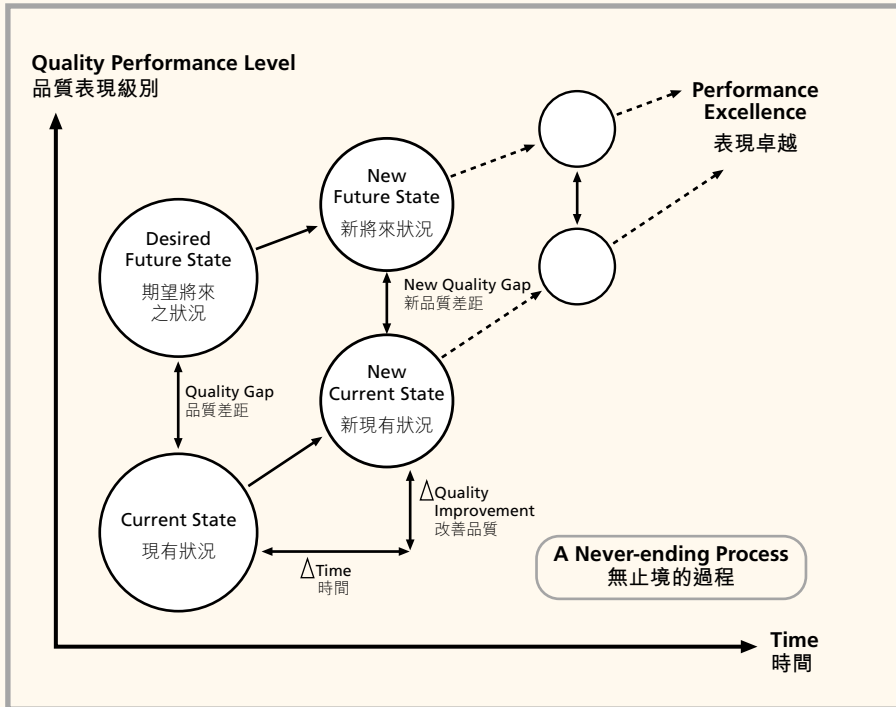


Exhibit 1.1: The "never-ending" process of continuous improvement
圖表 1.1: 永無止境的持續改善過程

competitors' performance, internal business strategies and reduction of quality costs are often the main driving forces of QM practices towards TQM. It is shown in Exhibit 1.2 that these forces drive the "quality wheel" upward and enhance the quality level through CQI practices. Once a higher quality level has been attained, the ISO 9000 quality system would reinforce the achieved performance just like a "wedge" to prevent slippage of the "quality wheel". Some recent studies also showed that only few ISO 9000 certified companies considered the standard as their ultimate quality goal, and many others had plans to implement or already been implementing aspects of CQI in their journey towards TQM.

Towards and Beyond 2000: Adaptation of Total Quality Management

Nowadays, many manufacturers have recognised the importance of quality (and even for low-cost manufacturing) and QM operations in Hong Kong as well as in Mainland China. Driven by the ISO 9000 series movement, many Hong Kong organisations have deliberately strengthened their QM practices and the efficiency of manufacturing operations. Some firms have also considered TQM rather than the ISO 9000 series as their ultimate quality goal, and have adopted the CQI/TQM strategy for sustaining their competitive edge. A considerable cultural change and restructuring of the traditional practices were required for undertaking such a strategic shift. The ISO 9000 series standards provided a foundation for TQM implementation that fostered a company-wide operational efficiency and effectiveness in pursuit of sustainable quality goals. Exhibit 1.3 depicts the evolution of quality management practices in Hong Kong. In addition to this, many firms

1.2顯示此力量能推動品質輪向上，透過CQI實踐去提升品質的層次。在達至高一層品質的同時，ISO9000品質系統便會發揮其作用，就如楔子防止品質輪向下滑動。近期多項的研究顯示只有少部份ISO9000檢定企業會以此標準為它們最終品質目標，其他大多數的企業已計劃採納或已推展CQI作為邁向全面優質管理的途徑。

邁向及跨越2000年： 適應全面優質管理

現今很多香港及中國內地製造商已認識到優質(包括低價值的生產)及品質管理運作的重要性。很多香港的組織在ISO9000系列運動推動下，它們的產品質量及生產效率已得到明顯的加強。很多企業亦已考慮推廣全面優質管理作為它們最終品質目標而非局限於取得ISO9000系列證書。而催向採納CQI/TQM策略來維持業內的競爭優勢。此等策略性轉移需要配合品管文化的改變及改革守舊的運作。ISO9000系列標準提供了推行全面優質管理的基礎，這基礎促進公司的運作效率及效能以達至維持高品質的目標。圖表1.3描述香港品質管理實踐的演進。除此之外，很多公司亦積極將優質概

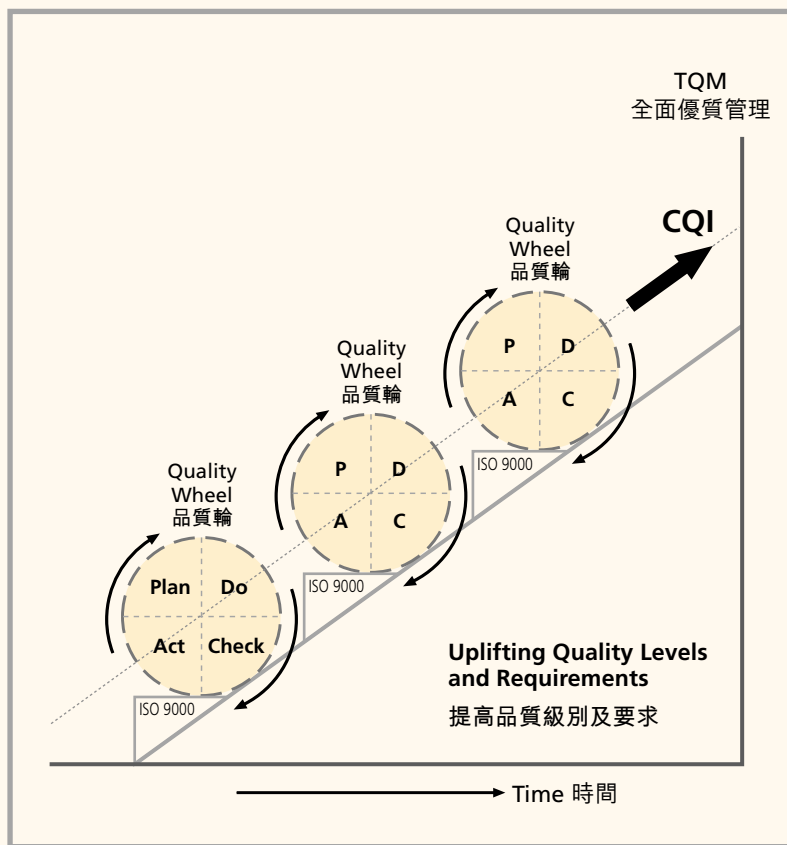


Exhibit 1.2: Integration of ISO 9000 and CQI
圖表 1.2: 整合ISO 9000及持續品質改善

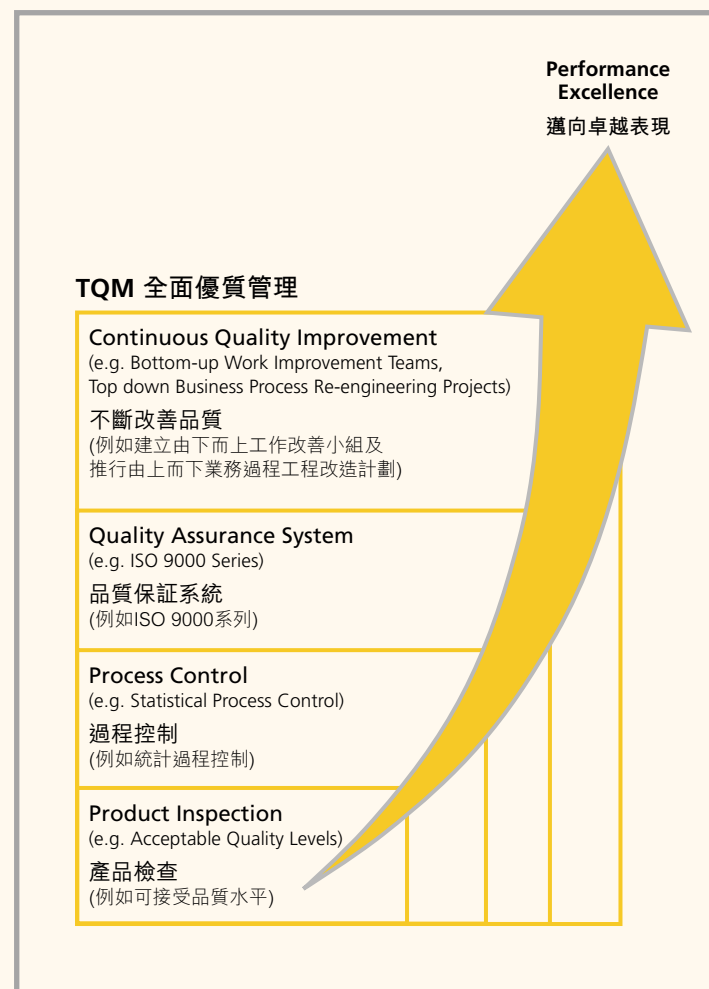


Exhibit 1.3: Evolution of quality management practices in Hong Kong
圖表 1.3: 香港品質管理實踐的演進

have taken further initiatives to transplant the quality concepts and QM practices, and transfer the technical, financial and management know-how, as well as, training and development of the workforce to their operations in China. The transfer of quality management practices from Hong Kong to China has contributed significantly to the synergy of Hong Kong and China manufacturing industries.

Successful development and transformation of quality management practices lies significantly in creating favorable business and operational environment by implanting quality cultures and changes of organisational structures. Each organisation has to assess its own unique environment and plan for the TQM implementation rather than rush into changes. In other words, manufacturing firms should initiate organisational changes progressively, and deploy the total quality efforts for attaining continuous improvement. Typically, organisational structures need to be changed in accordance with the adaptation of new quality cultures, management systems and organisational policies (e.g., the reward system and human resource management).

The changes could then be instituted and sustained by the ISO 9000 series quality system, and in turn facilitate the CQI strategy and the company-wide TQM implementation across the organisation.

Quest for Total Quality Management Introduction and Development

The adoption of TQM by an organisation can provide the required edge for them to survive and prosper in the fierce globe market. There is little exception for manufacturing enterprises in Hong Kong to transform themselves to this new paradigm of operation. Hong

念及有效的管理(包括技術、財務及管理專門知識、員工的培訓及發展等)轉移到它們在中國的生產運作上。這樣的品質管理轉移加強了香港及中國製造業的整體結合的催化作用。

成功推展品質管理在於能否改變組織的品質文化及結構來創造有利的商業契機及運作環境。每家組織必須評估它們的獨特情況，去計劃推行全面優質管理而非在急於改變。換句話說，製造業的公司要能有效改變組織的架構及部署相應的全面品質行動，才可達至持續改善的目的。大致來說，組織結構需要配合新的品質文化、及改變現有的管理系統及組織政策(包括獎勵系統及人力資源管理等)。任何更新及改變是需要在公司的ISO9000系統內修定，配合CQI策略及推動整體組織的全面優質管理。

引進及發展全面優質管理的訴求

推行全面優質管理是有策略上的意義的，它能提供企業組織在嚴峻的全球競爭環境下所需的優勢。在全面優質管理的轉型目標上，香港及其他地方的製造企業是一致的。若要獲得全面優質管理的成效，香港的組織必須裝備自己及轉型整體的架構。

Kong organisations have to demonstrate their ability to manage the transformation challenges and achieve the TQM competencies.

Because of the variety of starting points and motivations for business and operational improvement, different companies may encounter a range of problems and difficulties. The first challenge concerns the mechanisms to cope with immediate critical business issues, such as sustaining core competencies, diversifying products and markets, enabling quick response, improving customer satisfaction and loyalty, and improving employee satisfaction. The second challenge deals with the specific ways to close gaps in the management practices against world-class performance in order to establish a TQM infrastructure to support long-term business strategies. In order to help promote and sustain organisational performance of manufacturing enterprises, a project entitled "Implementing the UMIST TQM Model in Hong Kong Manufacturing Industries", has been funded by the Industry and Technology Council of the HKSAR Government since 1997. The project was conducted by the City University of Hong Kong under the Industrial Support Fund (ISF Project no. AF/252/97). It aimed to promote the UMIST's - University of Manchester Institute of Science and Technology - TQM approach and experiences, and to develop a localised, field-proven TQM implementation framework for manufacturers in both Hong Kong and the Mainland.

個別的公司改善業務運作上可有多個不同的起點及原動力，它們可遇到不同的問題及困難。首要的挑戰是如何解決直接關鍵的業務問題，例如如何維持組織的核心能力、產品及市場的多元化、應變快捷、促進改善客戶的滿意和忠誠及改善僱員的滿意等。另一挑戰是如何拉近組織的管理實踐與世界級表現間的差距，及建立全面優質管理的基礎結構去推行長遠商業策略。為了促進及維持製造企業組織的表現，香港特別行政區工業及科技局由1997年開始支援贊助一個名為“在香港製造工業推行UMIST全面優質管理模式”的計劃，此計劃在工業支援基金(編號AF/252/97)支持下由香港城市大學推展。它的主要目標是引進曼徹斯特大學科技學院(UMIST)的全面優質管理方法及經驗，從而建立一個適合香港製造業的推行全面優質管理的架構模式。

CHAPTER

2

全面優質管理的簡介

*Introduction to
Total Quality Management*

Total Quality Management (TQM) is the mutual co-operation of everyone in an organisation and associated business process processes to produce products and services that meet the needs and expectations of customers. It is a new and integrative approach for today's organisations in the pursuit of competitive advantage in both local and global markets. The purpose of this chapter is to offer a brief overview of the evolution of quality management practices and key concepts and principles underlying the TQM philosophy and approaches. Many of these concepts and approaches are key to rethinking the role of quality management practices in the new millennium. This chapter also discusses the adoption of a proven TQM implementation framework in pursuit of sustaining competitive advantage for Hong Kong manufacturing industries.

Evolution of Quality Management Practices

Quality management can be regarded as a systematic way of guaranteeing the organised activities happens the way they are planned. It is a management discipline concerned with preventing problems from occurring by creating the attitudes, behaviour and controls that prevent defects from happening in the company's performance cycle. Systems for improving and managing quality have evolved rapidly in recent years. These involve the design and operation of systems and technology, and fostering a work-force commitment to quality, in order that a company can consistently produce goods and service that satisfy customer requirements. The systems also involve increasing the skills, and engaging the efforts of all members of an organisation to enable them to contribute to problem solving and the pursuit of zero defects demanded by this philosophy of continuous improvement in all activities.

在推廣全面優質管理的情況下，組織可促進全人參與合作，提升業務生產及服務，以符合客戶的需求及期望。它提供組織有效更新及整合的途徑，有助於增強在本地及全球市場上競爭優勢。本章闡述品質管理實踐的演化進程及提供全面優質管理哲學的基本概念及原則。同時，這些概念及原則是組成加強品質管理實踐的關鍵。本章亦討論如何有效採納的全面優質管理的推行架構模式，從而加強香港製造業的競爭優勢。

品質管理實踐的演進

管理品質是指有系統及組織地按計劃進行保證有關品質的活動。它著重紀律以防止問題發生，並利用創造性的態度及方法去處理企業表現上的缺點。近年來，應用在改善及管理品質的系統已急促演化。這些演化包括在設計及系統運作方面，以至技術及培養對品質承諾上的推動，使公司能生產優質貨品及服務以滿足客戶要求。此外亦涉及如何增強企業組織人員的技能及動力，積極參與解決問題，及在持續改善的理念下追求零缺點的表現。

現時有關品質概念及管理的著作都很多的，內容包括減少產品的差異、持續改善產品和服務、增強設計質素、需時及防止劣品、

There is an abundance of literature on quality concepts and quality management. For instance, reduction of variation, continuous improvement of products and services, design quality, speed and prevention, zero defects, cost of poor quality, leadership, people participation and partnership, cross functional management, systematic approach to quality and strategic focus with respect to customer satisfaction, competitiveness, profitability, quality planning and organisation-wide commitment are the major concepts and factors that are introduced by quality gurus and practitioners in one form or another in managing quality. The most informative and influential of these texts, which span a number of decades, include those such as Shewhart, Ishikawa, Deming, Crosby, Feigenbaum and Juran. Exhibit 2-1 addresses the pioneers of the quality movement and their contributions.

Modern quality control had its origin in the linking of quality control and inspection activities, based on the

零缺點、差劣品質成本、領導能力、全員參與和伙伴關係、跨功能管理、品質系統化和策略化，集中客戶滿意、競爭力、利率率、品質計劃以及組織承諾等。這些都是由品質界方面的權威和品管從業員所推介的主要概念及因素。最為有教益的及影響深遠的包括Shewhart、Ishikawa、Deming、Crosby、Feigenbaum及Juran等多年來的著作。圖表2.1簡列有關品質運動啟導者的貢獻。

現代的品質控制概念起源於傳統的品質控制及檢驗上，這是建基於Shewhart及Deming的早期倡導工作。他們利用統計過程控制技巧有效地監察及評估每天產出及建議改善。除後的時期是品質保證階段，由Juran建議用可靠性工

Quality Pioneers 品質運動的啟導者	Contributions 供獻
Feigenbaum	Total Quality Control 全面品質控制
Ishikawa	Preventive Quality 防止品質
Taguchi	Design Quality 設計品質
Crosby	Cost of Quality 品質成本
Kearns	Competitive Quality 競爭品質
Mazda	Innovative Quality 創新品質
Taylor	Inspected Quality 檢查品質
Deming	Process Control Quality 過程控制品質
Juran	Quality Management 品質管理

Exhibit 2.1 Contributions of pioneers to the quality movement
圖表 2.1: 品質運動啟導者的貢獻

early and leading work by Shewhart and Deming. They developed powerful techniques for monitoring and evaluating day-to-day production using statistical process control, and suggested ways to improve quality. The subsequent phase was known as quality assurance, essential elements of which were reliability engineering to assure acceptable product performance over time, and the cost of quality and total quality control, proposed by Juran and Feigenbaum respectively. The impact of their ideas led to the blending of purely manufacturing concerns with the wider management issues of planning, organisation and control. This in turn was followed by the concept of TQM that characterised the quality initiatives in the 1990s.

According to ISO 8402:1994, TQM is a management approach of an organisation centred on quality, based on the participation of all its members and aiming at long-term success through customer satisfaction, and benefits to all members of the organisation. TQM added a new dimension to the work of the preceding phases - the redefinition of quality from the customer's viewpoint. The dimension was based on marketplace evidence that suggested quality could be a powerful competitive weapon. This dramatic shift in perspective has solicited senior management interest and involvement, linking quality with profitability and its inclusion in the strategic business planning process. Its acceptance as a managerial philosophy, which impacted all employees, has concomitant human resource implications.

Principles of Total Quality Management

TQM is an integrated management philosophy and set of practices that emphasises, among other things, continuous improvement, meeting customers' requirements, reducing rework, long-range thinking,

程序方法保證產品可接受的長期表現，與及由Feigenbaum提倡的品質成本和全面品質控制等。這些概念在原本純製造的範疇融入了其他有關計劃、組織及控制等方面的管理論點，後更演變成爲1990年代的全面優質管理概念。

根據1994年修定的ISO8402標準，全面優質管理是以品質為組織管理的重點，建基於全員參與，以長期成功及客戶滿意為目的，令組織內全員都能得益。與前兩階段的發展比較，全面優質管理增置了一項新的界面，是從客戶觀點去為品質重新定義，此界面是著重蒐集市場證據，以優質產品及服務為強力的競爭武器。在品管概念的劇化轉移過程中是須要高層管理的重視及參與，將品質與利潤的考慮包含在商業計劃裡。事實上，全面優質管理的理念須融合在企業的管理哲學內，它影響著每一位僱員，及直接與人力資源扣上相互配合的關係。

全面優質管理的原理

全面優質管理整合管理哲學及實踐，它強調持續改善、符合客戶要求、減少再造、著重長遠思考、增加僱員參與和團隊精神、並著重過程再設計、競爭表現借鑑、小組解決問題、及經常量度結果和關注緊密的供應商關係。

increased employee involvement and teamwork, process redesign, competitive benchmarking, team-based problem-solving, constant measurement of results, and closer relationships with suppliers. The principles of TQM differ from traditional management philosophies in many ways. It is a comprehensive approach for improving the entire organisation for long-term profitability. The shift from traditional management to TQM is revolutionary and the implementation of TQM involves a fundamental change in the ways in which business is conducted. Those changes include making customers a top priority, a relentless pursuit of continuous improvement of business processes, and managing the systems of the organisation through teamwork. TQM strives to create an organisational culture that fosters continuous improvements in everything by everyone all the time, and requires changes in organisational processes, strategic priorities, individual belief, attitudes and behaviours.

Fundamental to creating a TQM environment is the development of corporate vision, the guiding principles and strategies to work toward the vision. The mission statement acts as a compass that gives the organisation a macro-sense of direction and creates alignment. The guiding principles express an organisation's overriding values and beliefs, whereas the strategy is an integrated and sequential milestone that can help track the progress toward improving quality-driven business processes. TQM is a non-prescriptive philosophy with limited solid instructions in putting the principles into practices. Moving towards the TQM paradigm is not a simple process. Recent studies in the UK and the USA has revealed that a certain percentage of companies find TQM efforts fail to live up their expectations. Rushing into implementing TQM will only result in a waste of effort as integrating

全面優質管理的原則與傳統管理有很多不同之處，前者以全面整合的途徑去改善整家組織的長期利益。推行全面優質管理是涉及基本的商業管理方法改變，所以從傳統管理轉移至全面優質管理富改革性的。這些改變包括以客戶為優先，及在管理組織的系統上持續改善業務過程及應用團隊精神。全面優質管理鼓勵創造組織文化，培養全員對所有事項都抱有不斷改善態度，並促進組織的過程、策略優先權、與及個人信念、態度及行為等之改變。

創造全面優質管理環境有關能否發展企業的前瞻、引導原則及邁向該企業前瞻的策略。企業的使命扮演著邁向作用，它令有關組織了解宏觀的企業方向及整體的管理運作。引導原則表達組織的價值觀及信念，而策略則能整合邁向改善品質過程的進度。全面優質管理的哲學不會依從慣例，也沒有固定的實踐原則，所以成功邁向全面優質管理並不容易。在近年的英國及美國研究裡已揭示有相當百份比的企業，它們所推行的全面優質管理都不能達到預期的成效。過於急促地推行全面優質管理只會導致浪費努力，因為推展全面優質管理哲學於組織內是相當複雜及會涉及多方面的考慮及影響。

TQM philosophy into an organisation is complex and wide-ranging in its effects.

Building of a TQM Infrastructure

The adaptation of TQM practices requires comprehensive organisational changes and a complete integration of human resources into every aspect of a business in a dynamic organisational system. It is advisable to introduce the process of change step-by-step, and to have a shared responsibility with co-operative workforce, a harmonious, balanced and team working relationship, and empowered workers. Recent research and literature advocates that the adoption of TQM requires a quality culture and supportive organisational infrastructure.

Quality consciousness and awareness can be promoted through education and training and supported by structural and progressive change of a management system. While an appropriate quality culture keeps the management system operating smoothly and improving consistently, the system in turn nurtures the growth of organisational infrastructure. TQM practices bring along a set of behaviours, attitudes and processes that prevail throughout the stages of design, production, service marketing and administration to produce high quality, defective free goods and services at a quality and cost suited to the market and with dependable delivery. Top management, empowered workers, customer satisfaction, open communication, and a strong project champion greatly enhances the chances for the successful introduction of TQM initiatives. TQM is not a short-term fix and hence a never-ending commitment is required. Implementing TQM thus relies significantly on the commitment and leadership of top management and a supportive quality culture and management system created by them.

建立全面優質管理的基礎結構

實踐全面優質管理是需要相應的組織改變，及在組織系統和業務上各方面人力資源的分配。建議引進逐步改變的過程，並須要有合作的、協調的、平衡的工作力量及責任分擔、團隊的工作關係及適份授權與員工。近期多項的研究及文獻亦指示，成功推展全面優質管理是有賴企業對品質文化的著重及能否建設支援性的組織基礎結構。

教育和培訓能促進組織內品質意識及察覺，這亦配合結構性和累進改變的管理系統。當適合的品質企業文化能保持管理系統上的運作流暢及持續改善，系統亦能培植配合的組織基礎結構。實踐全面優質管理將帶動在設計、生產、服務市場及行政各階段等的行為態度及過程的改進。以達至高品質生產、無缺點貨品及服務，合乎市場成本及高效付運等。高層管理的承擔、授權的員工、滿意的客戶、開放的溝通及對計劃的擁護都能提高成功引進優質管理的概念及實踐。全面優質管理不是短期裝配，它需要對品質改善有持續的承擔。推行全面優質管理是有賴高層承擔及領導，與及由他們創造的支援品質文化及管理系統。

Implementation of TQM

The overwhelming volume of literature in TQM primarily focuses on techniques, prescriptions and procedures in a separate manner. However, less attention has been devoted to how TQM could be systematically introduced and developed, the hurdles encountered by organisations, and how they adapted the principles of TQM to existing cultures. The most useful TQM introduction plan should meet a number of criteria to incorporate the organisational development and changes and be operational at the same time, and a practical guideline needs to:

- 1 Identify activities, indicators and time lines required for organisational development and improvement at distinct phases during the TQM introduction process.
- 2 Address the need to complete assessment with facts and ethical work culture diagnoses at critical phases in the process.
- 3 Identify where the organisational development efforts may be initiated.
- 4 Address the need for continual evaluation of TQM and improvement efforts with the evaluation and control based on facts.

Some proponents of continuous improvement also argue that there is a universal set of practices that, if implemented, will lead to high performance. If TQM is typical of other major organisation change process, it should be implemented using principles that apply to any organisational change. In particular, each situation should be diagnosed periodically and organisation change efforts redirected throughout the ongoing TQM implementation. However, due to different backgrounds and business situations, individual organisations should determine the appropriate starting point to implement TQM.

全面優質管理的推行

有關全面優質管理文獻大多集中在技巧、指示及程序方面的展述，較少專著說明怎樣引進及發展全面優質管理、組織所遇到的障礙及它們怎樣將全面優質管理原則配合在現存的企業文化裡。引進全面優質管理是需符合一些標準以結合組織的發展及改變和配合實際的使用。指引重點包括：

- 1 在引進全面優質管理過程中，應識別活動、指標、組織發展所需時間排列及清晰階段的改善。
- 2 指出在關鍵階段過程中需要完成事項的評估及道德文化的配合。
- 3 識別組織發展動力在那處開展。
- 4 指出不斷評估全面優質管理及改善努力的需要。

很多擁護持續改善的人仕認為需要有一套通用的實踐方法，若推行得法會引導組織獲得更高表現。因此全面優質管理能帶動企業組織改變，整個過程應以適合組織改變的原則推行。對實際情況應定時地視察，組織亦需將其改變的原動力注入正在推行的全面優質管理有關措施及項目裡。但是由於品質管理實踐須配合不同的業務情況及背景，個別的組織應決定適合它們本身的起點及推行計劃的步驟。

CHAPTER 3

概觀全面優質管理的
推行架構

*An Overview of
TQM Implementation Framework*

The UMIST TQM model is proven approach for helping organisations get started on their TQM journey. The approach was developed based on the results of Professor Dale's extensive research and consultancy in quality management throughout the 1980s, and has been successfully implemented in numerous organisations in the UK, USA, Continental Europe, South Africa and Singapore. This chapter describes the four sections and 28 elements of the UMIST model that constitute the contents and key components of a customised TQM Implementation Framework for Hong Kong environment.

Introduction of TQM Implementation Framework

In facilitating Hong Kong organisations to attain continuous improvement, a practical TQM model can help identify the important issues and approaches that best suit their needs, resources and business situations. The initial customisation of UMIST TQM implementation framework took into account Professor Dale's work in Hong Kong which started in 1991 as part of the Hong Kong Government Industry Department's "Make It Better in Hong Kong" Campaign.

The framework has four main sections. The foundation section is "Organising", and the two pillars, which form its structure, are the use of "Systems and techniques" and "Measurement and feedback". "Changing the culture" is the fourth section that must be considered at all stages. It primarily results from the other activities, interacts with them throughout the improvement process, and will evolve as operating experience of TQM is developed. These four sections need to be addressed once the motivation for starting improvement has been identified and the overall strategic direction of the process has been set. Central to the whole process of

在管理品質改善領域上，曼徹斯特大學科技學院 (UMIST) 倡導了一個有效的全面優質管理模式。此模式是 Professor Dale 在1980年代裡在品質管理課題上的廣泛研究及諮詢的結果，它曾經在英國、美國、歐洲大陸、南非及新加坡等多家組織內成功推行。此章描述組成UMIST品管模式的四個段節及28個元素，它們亦成為一個切合香港環境所定制的全面優質管理推行架構的主要成分。

推行全面優質管理的架構簡介

為幫助香港組織掌握持續改善之重要，引進一個已有成效的全面優質管理模式是可以協助它們識別在推行上的重要事項，同時亦可切合他們個別需要、資源及業務情況。全面優質管理的推行架構是按UMIST全面優質管理模式定製。此架構亦包括Professor Dale自1991年開始為香港政府工業署協助推行的“香港製造，國際級數”運動所得的成果。

這個架構模式共分四個段節。基礎節是“組織”，兩棵形成它的結構的柱子就是“系統與技巧”和“量度與反饋”，第四節是“改變文化”，它包融在各階段的考慮。能改變文化是進行所有活動的最首要的考慮，它與其他活動互相影響遍及整個改善過程，同時它會隨著發展全面優質管理運作而演

improvement are people, both as individuals and working in teams, without these skills and commitment towards TQM, continuous improvement will not occur. A diagrammatic representation of the framework is given in Exhibit 3.1.

Sections and Elements of the TQM Implementation Framework

1) Organising

This is concerned with the motivation for starting a process of continuous improvement and the resultant plans necessary to introduce the process. It should consider the appropriate time to introduce TQM, communicate it down and across the organisation, and explain why it is being adopted and what will be involved.

It is also useful for organisations to identify the problems and obstacles that are likely to be encountered in the introduction of TQM and agree actions to steer around or minimise them.

2) Systems and Techniques

This section involves the development of a quality management system and other systems, such as environmental management and occupational health and safety, to provide the necessary controls and discipline and standardisation of improvements. It also involves the development and use of quality management tools and techniques to, for example, aid quality planning, listen to the voices of customers, capture data, control processes, make improvements, solve problems and involve people.

3) Measurements and Feedback

This section enables the voices of customers to be translated into measures of performance with which

化。當組織的改善動力已啟動及整體策略方向的程序已訂立，這四個段節的推行的有關細節是需要製定的。整個改善過程的重點是全員的參與，包括個人及整個團隊。若沒有對推行全面優質管理的承擔，持續改善的成效便不會發生。此架構的基本成份可參照圖表3.1。

推行全面優質管理的架構段節及元素

1) “組織”段節

它關係著如何開展持續改善過程及開發所需的工作計劃。這段節考慮合適時間去引進全面優質管理，同時在組織內各階層解釋為何需要採納全面優質管理，和將會涉及的有關細節。對於在推行全面優質管理時將會所遇上的問題及障礙，組織亦需詳加分析及尋求解決處理的方法和措施。

2) “系統與技巧”段節

這段節包括如何發展品質管理系統及配合其他系統(例如環境管理及職業健康安全等)，如何提供所需改善的控制、紀律及標準。它亦包括開發及使用有關品質管理的工具及技巧。這些都有助計劃品質方案、聽取客戶聲音、作資料搜集、控制及改善生產流程，解決問題及鼓勵員工參與。

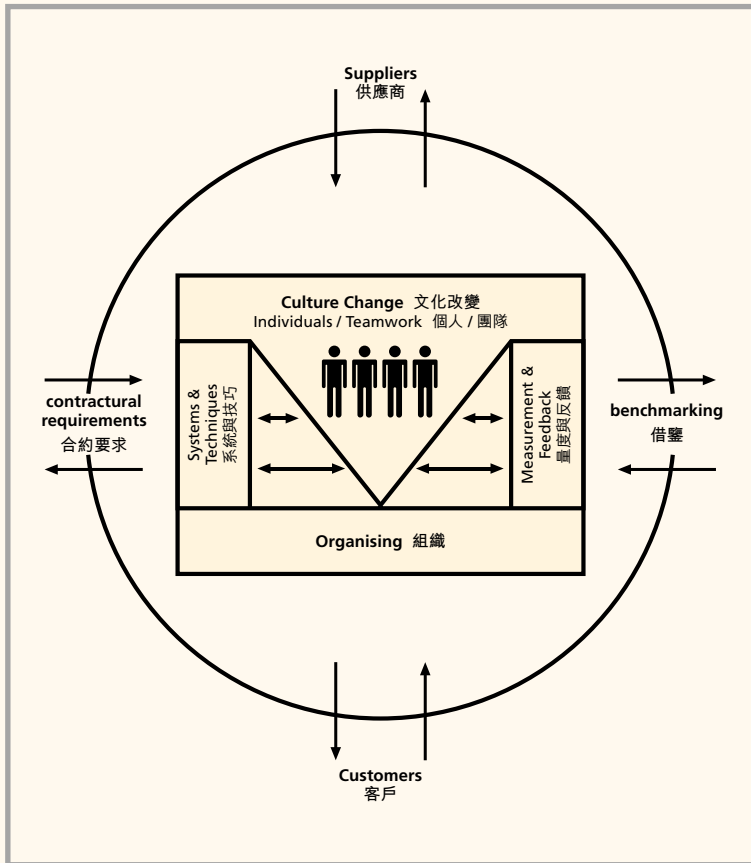


Exhibit 3.1: The TQM implementation framework
圖表3.1: 推行全面優質管理的架構模式

the organisation can identify and improve upon. It also deals with internal measures of performance, supplier assessment and development, and rewards and recognition.

4) Changing the Culture

Changing the business culture or making it more conducive to continuous improvement is a key element. It requires the introduction and acceptance of individuals, groups and organisational change. Culture change is not just relevant to continuous improvement, although the increased emphasis on customers and their needs within TQM makes some form of culture change a necessity for all organisations.

A summary of the key elements in each section of the framework is found in Exhibit 3.2, and a brief description of individual elements is given in Appendix 1. These elements must be carefully considered as they play critical roles in developing effective strategies and practices for TQM implementation. Basically, the framework is not a "how-to" guide for TQM, but is a means of developing and presenting plans in a non-prescriptive manner. It allows an organisation to choose an appropriate starting point and course of action and develop the improvement process at a pace that suits their business situation and available resources.

3) “量度與反饋” 段節

這段節是將客戶的聲音翻譯成為組織可以用來識別及改善表現的量度標準。它亦處理內部表現量度標準、供應商評估及發展和員工獎勵等。

4) “改變文化” 段節

能改變業務文化或使它有益于持續改善是整個過程的關鍵元素。它是包括個人、小組及組織的改變。文化改變除與持續改善有關外，全面優質管理更強調滿足客戶及他們的需要。個別的組織是有著不同的文化改變形式。

以上各段節的關鍵元素摘要在圖表3.2，而有關個別元素要點則描述在附錄1。這些元素在發展有效策略及推展全面優質管理均扮演關鍵角色，所以它們是需要認真檢視的。基本上，這個架構模式不是一個提供“怎樣”推行全面優質管理的慣例指引，而它只是提供一個有效發展及展現計劃的方法。它容許個別組織選擇它們合適的起點和推展的進程，以配合它們業務上的個別情況與及可用資源進行改善。

Organising 組織	Systems and Techniques 系統與技巧	Measurement and Feedback 量度與反饋	Changing the Culture 改變文化
1 Formulation of a clear long-term strategy for the process of continuous improvement, integrated with other key business strategies, departmental policies, and objectives 明確的表達清楚長遠持續改善策略，整合在其他關鍵商業策略、部門政策及目標	11 Identification of the tools and techniques applicable at different stages of the process of continuous improvement 識別持續改善過程不同階段適合的工具及技巧	16 Identification and definition of key internal and external performance measures to assess the progress being made and to ensure customer satisfaction 識別及定義關鍵內部及外部表現標準來評估進度及確保客戶滿意	22 Assessment of the current status of organisational culture, before developing and implementing for change 評估現時組織文化的狀況才發展及推行改變
2 Definition and communication of a common organisational definition of quality, TQM and quality 解釋及傳播組織的品質及全面優質管理統一定義	12 Development of the appropriate type of training in the use of tools and techniques, targeted at the right people 發展合適種類工具及技巧的培訓，對準正確的人們	17 Discussion with customers, about expected performance, needs, and expectation, using a variety of techniques 使用多種的技巧與客戶討論期望的表現、需求及期望	23 Recognition of the ongoing nature of culture change, rather than a prerequisite for TQM 寧願認知自然進行的文化改變而非全面優質管理必須的
3 Selection of an approach to TQM 選擇全面優質管理途徑	13 Consideration of the use of a formal quality system, if one is not in place 考慮使用正式品質系統，若果沒有一個適合	18 Consideration of benchmarking, once the organisation has taken some steps down the continuous improvement journey 當組織在持續改善旅程已展開一些步驟，考慮典範借鑑	24 The development of plans for change that enable it to take place in a consistent and incremental manner 發展改變計劃使它以前後一致及增長方式進行
4 Identification of the organisations and people (internal and external) who can be sources of advice on aspects of TQM 識別可以成為全面優質管理建議來源的組織及人們(內部及外部)	14 Identification and implementation of other systems and standards that may be required by customers, legislation, or in order to compete 識別及推行其他系統或標準，可能是客戶、法律要求或為了競爭	19 Consideration of various means for celebration and communication of success, and the development of methods for recognising the efforts of teams and individuals 考慮各種方法慶祝及傳播成功，發展認知團體及個人努力的方法	25 The recognition of the role of people within the organisation 認知人們在組織內的角色
5 Identification of stages of improvement activity, taking into account the starting point of the organisation, the motivation for continuous improvement and the tools that may be applicable 識別改善活動各階段，考慮組織的起點、持續改善的原動力及可以適用的工具	15 Adoption of process analysis and improvement as a continual part of the organisation's quality improvement process 採納過程分析及改善，作為組織品質改善過程繼續的部份	20 Consideration of linking rewards to continuous improvement activities and results 考慮聯系獎勵及持續改善活動及結果	26 Identification of the interrelationships of all activities, and the way in which they contribute to quality within the organisation in order to minimise conflict 識別所有活動的相互關係及他們對組織內品質的供獻來減少矛盾
6 Recognition of executive leadership, tangible commitment, and support as being crucial at all stages 認知行政領導能力、確實的承諾及支持是所有階段的關鍵		21 Utilisation of some means of assessing the progress toward world-class performance 利用一些方法評估邁向世界級表演的進度	27 Identification of factors that indicate TQM has started to change culture 識別顯示全面優質管理已開始改變文化的因素
7 Development and communication of vision and mission statements that are concise and understandable to all employees 發展及傳播簡明及所有僱員可以理解的遠景及使命聲明			28 Consideration of the culture of a country and its people in planning for change 計劃改變時考慮國家及它的人民的文化
8 Establishment of a formal programme of education and training. 建立正式的教育及培訓計劃			
9 Establishment of an organisational infrastructure that will ultimately facilitate local ownership of continuous improvement 建立最終會促進局部持續改善所有權的組織基礎結構			
10 Establishment of teamwork that is designed to become part of the organisation's method of working 建立設計成為組織工作方法的團隊			

Exhibit 3.2 28 elements of TQM implementation framework
圖表 3.2: 全面優質管理推行架構的28個元素

Adoption

推展全面優質管理的
三個進程

Three Phases of TQM Adoption

Many Hong Kong companies are experienced difficulties in putting the principles of TQM into practice. With the variety of starting points and motivations for continuous improvement, it is often difficult for organisations to specify a plan detailing the order in which introduction should be undertaken. With the customised TQM implementation framework, it is advisable for organisations to carry out a simple self-assessment of their current status in terms of organisational performance and resources available before starting TQM. According to their current status of TQM, individual organisations can choose the appropriate starting point to implement TQM. This chapter introduces a 5-level scoring method to assess the pre-implementation status, and describes the awareness, preparation and implementation phases of TQM adoption.

Pre-Implementation Assessment

In facilitating the adoption of TQM practices, companies need to assess their current status in terms of organisational performance and resources available. A scoring method of pre-implementation assessment was developed in association with the 28 elements of the TQM implementation framework. Exhibit 4.1 shows a 5-level assessment of TQM adoption. They are namely, the Unaware, Uncommitted, Initiators, Improvers, and Achievers. A general description of each level is given in Exhibit 4.2.

The pre-implementation assessment is based on three evaluation dimensions: "Approach", "Deployment" and "Results". "Approach" refers to how the company addresses the items and a systemic, integrated and consistent approach will generate a higher score. "Deployment" refers to the extent to which the company

很多香港公司在推展全面優質管理原則時都會遇上困難。由於它們可能不同的起點及有著不同持續改善的誘導，故通常是難以撰定一個是可概括引進全面優質管理的流程。所以在開展全面優質管理前，個別組織需要進行簡單的自我評審現有的表現及資源狀況。根據組織現時的全面優質管理狀況，它們可以選擇其合適的起始點去推展全面優質管理。此章介紹一個五組級別的方法來評審組織在推行全面優質管理前的狀況，同時亦描述採用全面優質管理的“意識”、“預備”及“推行”等三個階段。

推行前預先評審

為配合應用全面優質管理的推行架構，公司需要評審它們現時的組織表現及資源狀況。本章提供一種結合了該架構的28個元素的評審計分方法。圖表4.1顯示採用全面優質管理的五個級別評審。它們包括“不察覺者”、“未承擔者”、“始發動者”、“改善者”及“成功者”等。各個級別的描述在圖表4.2。

推行前評審的三度評估空間包括“途徑”、“展開”及“結果”等。“途徑”是指公司如何撰取有系統的、整合的及一致的途徑去達到更高分值。“展開”是指公司在用途徑的配合程度。“結果”是指

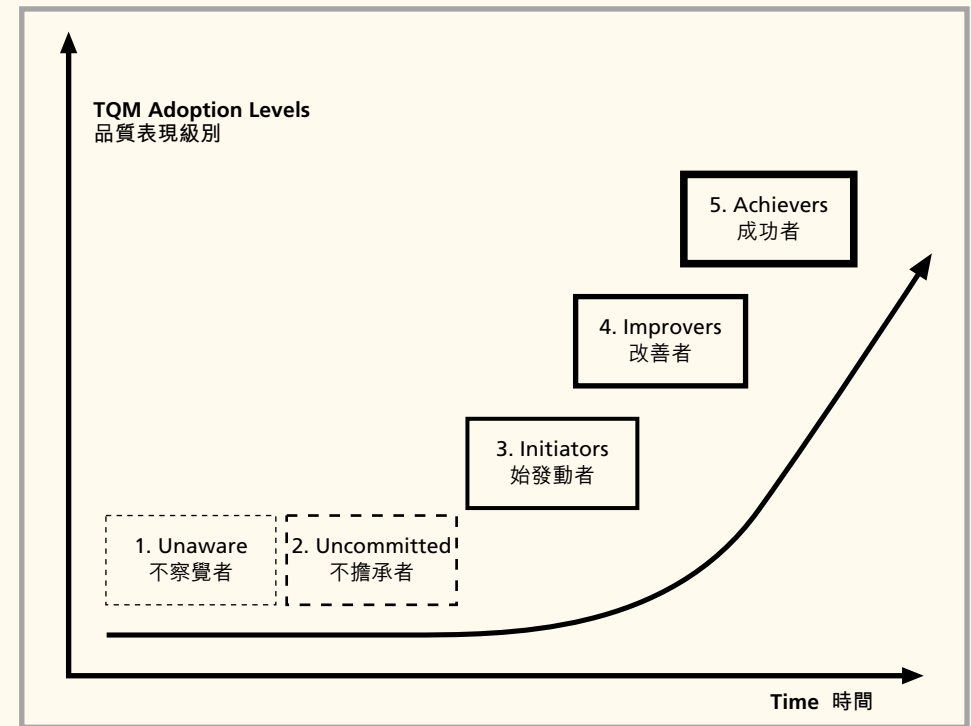


Exhibit 4.1: A 5-level assessment of TQM adoption
圖表 4.1: 推展全面優質管理五個級別評審

Levels **Descriptions of TQM Adoption Status**
級別 **採納全面優質管理狀況的描述**

- 1 **Unaware** organisations are those not familiar with the concept, practices and tools and technique of continuous improvement. Some may be registered to ISO 9001 or ISO 9002, but they are unaware of the wider issues and mechanisms of continuous improvement and TQM.
不察覺者 是那些不熟識概念、實踐及持續改善的工具及技巧的組織。部份組織可能已經註冊ISO 9001或 ISO 9002，但是他們察覺不到更廣泛的持續改善結果及持續改善結構方式及全面優質管理。
-
- 2 **Uncommitted** organisations are those with some understanding (or misunderstanding) of TQM and have decided that the principles and practices underpinning the concept are not for them. For instance, they may give an impression that they have adopted TQM, but no real changes have been made.
不擔承者 是那些部份明白(或是錯誤明白)全面優質管理的組織，他們會認為全面優質管理的概念原則及實踐未必適合他們的組織。例如他們認為已推行相當的全面優質管理意念，但實際上他們的組織是沒有真正改變過。
-
- 3 **Initiators** are those who have become aware of continuous improvement in their organisations, but they are still in the earlier stages of putting the basic elements of TQM in place. These organisations still need clear guidance of what to do in order to facilitate the TQM adoption process.
始發動者 是那些組織已經察覺持續改善的重要，但他們仍是在較早時期，基本全面優質管理元素可能已具備。這些組織仍然需要清晰的引導去促進全面優質管理採納過程。
-
- 4 **Improvers** are those organisations who are moving in the right direction and have made real progress, but there have still a long way to go. The process of improvement is typically not self-sustaining, and the TQM efforts may not be internalised throughout the organisation. These organisations are often vulnerable to short-term pressures and unexpected difficulties.
改善者 是那些組織正朝向正確方向前進及已經產生真正進步，但仍然有悠長的路程要走。改善的過程是多未能自我持續，全面優質管理動力亦未必能從內部引發遍及整家組織。這些組織的優質管理狀況亦較容易在短期壓力及不可遇見困難下受到影響。
-
- 5 **Achievers** have reached a point of TQM maturity in their organisations. The kind of culture, values, trust, capabilities, relationship and employee involvement required to attain the internationally recognised standards or specific quality excellence awards have been developed. Continuous improvement has become total in nature.
成功者 在指有關的組織已到達全面優質管理成熟點。他們已經發展那些在獲取國際級標準或特定品質卓越獎所需的文化、價值、信任、能力、關係與及僱員參與。

Exhibit 4.2: Descriptions of TQM adoption Status
 圖表 4.2: 描述全面優質管理的級別狀況

makes use of the approach. "Results" refers to the company's performance in achieving the items. Exhibit 4.3 shows an example of scoring sheet. The sheet is designed to help an organisation define its current TQM adoption status. By assessing the current provisions and/or status, four scores (i.e., "0", "1", "2" and "3") can be given to individual elements of the framework.

A final score can be calculated by summing up the self-assessment scores of all 28 elements. With reference to the following table, the score can provide some indications to which stage of TQM adoption the organisation belongs.

Score 得分	TQM Adoption Level 現時TQM 的狀況級別
.70	Achievers 成功者
.40 but < 70	Improvers 改善者
.20 but < 40	Initiators 始發動者
< 20	Unaware/Uncommitted 不察覺者/未承擔者

Following the pre-implementation assessment of current status, TQM practices will typically go through three sequential phases of awareness, preparation and implementation. A diagrammatic representation of three phases is given in Exhibit 4.4.

The Awareness Phase

The Awareness phase begins when one or more individuals have become aware of TQM and started to spread the concept within the organisation. These individuals may be at any position in the managerial hierarchy, but their efforts are likely to produce only limited results. Before proceeding to the next phase, senior management should understand the effects of adopting TQM on the company's future success, and they also need to provide the necessary leadership. Senior management leadership and participation is the key determinant of successful TQM introduction and development. The primary task of this phase is to increase company-wide awareness of TQM.

公司完成有關計劃內項目的表現。圖表4.3是一份標準評分表格的例子。此表格是為了協助組織評審它的全面優質管理狀況而設計。透過評審組織現時在優質管理的裝備及/或狀況，四種不同的分值(它們是“0”，“1”，“2”及“3”)是用以給予架構內個別元素。

將所有28個元素的自我評審得分總計可以得出最終分值。所得分值便可顯示組織在推展全面優質管理過程中屬於那一階段，請參考以下列表

在評審組織現時狀況後，實踐全面優質管理大致會經過“意識”、“籌備”及“推行”等三個接連階段。圖表4.4顯示這三個階段。

意識階段

這階段的開始是當組織內有一個或以上的人已察覺到全面優質管理的重要及開始在組織內傳播此概念。這些個人本身可能在管理層內任職，但是他們個別的努力只能產生局限的結果。在未達至下一個實踐階段前，高層管理應明白成功推展全面優質管理對公司的影響，他們亦需要提供所需的領導。高層管理的領導及參與是成功引進及拓展全面優質管理的關鍵因素。所以，此階段的基本工作是如何增強全公司化的全面優質管理意識。

Assessment and Evaluation Items 評審及評估項目	Score 得分*			
	0	1	2	3
Organising 組織				
1. Long-term Strategy 長遠策略				
2. Organisation, Definition of Quality, TQM and Continuous improvement 組織、品質定義、全面優質管理及持續改善				
3. Approach to TQM 全面優質管理途徑				
4. Sources of Advice on Aspects of TQM 全面優質管理方面的諮詢來源				
5. Stages of Improvement 改善階段				
6. Executive Leadership, Tangible Commitment and Support 行政領導、確實的承諾及支持				
7. Vision and Mission Statements 前瞻及使命聲明				
8. Education and Training 教育與培訓				
9. Organisation Infrastructure 組織基礎結構				
10. Teamwork 團隊精神				
System and Techniques 系統與技巧				
11. Tools and Techniques 工具及技巧				
12. Training 培訓				
13. Quality System 品質系統				
14. Other Systems and Standards 其他系統及標準				
15. Process Analysis and Improvement 過程分析及改善				
Measurement and Feedback 量度與反饋				
16. Internal and External Performance Measures 內部及外部表現量度				
17. Discuss with Customers 與客戶討論				
18. Benchmarking 借鑑				
19. Celebration and Communications of Success 分享及傳達成功				
20. Linking Rewards to Continuous improvement Activities and Results 聯系持續改善活動結果與獎勵				
21. Assessing the Progress toward World-class Performance 評審邁向世界級表現的進度				
Change the Culture 改變文化				
22. Current Status 現時狀況				
23. Ongoing Nature of Culture Change 文化改變性質				
24. Plans for Change 改變計劃				
25. The Role of People 組織內員工的角色				
26. Interrelationships of All Activities 所有活動相互關係				
27. Factors Indicate that TQM Has Started to Change Culture 顯示全面優質管理已開始改變文化的因素				
28. Culture of a Country and Its People 國家及其人民的文化				
Remarks 備註*				
The indication of each score is listed below: 每項得分的顯示在以下列出：				
0 No approach 沒有可依的途徑				
1 Some evidence of the beginning of a systematic approach and deployment 部份開始有系統的途徑及展開的證據				
2 Systematic approach and deployment with no negative result 已有系統的途徑及展開，沒有負面結果				
3 Systematic approach and deployment with indication of good performance 已有系統的途徑及展開，顯示良好表現				

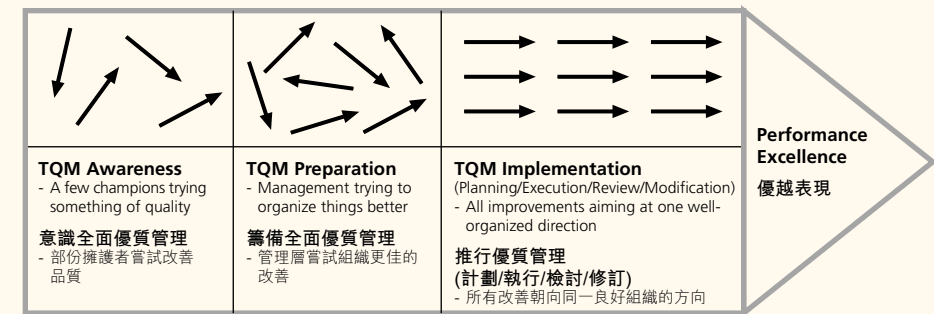


Exhibit 4.4: Three phases of TQM practices
圖表 4.4: 三個全面優質管理的實踐階段

Exhibit 4.3: A scoring sheet for assessment of TQM adoption status
圖表 4.3: 評審全面優質管理狀況的標準計分表格

The Preparation Phase

In the Preparation phase, senior management need to review the company's current practice with respect to TQM, and confirm their commitment and leadership to adopting TQM. "Quality" needs to be redefined in the organisation, from item-focus (i.e., conformance to specification) to people-focus (i.e., customer satisfaction), a new TQM vision and mission statements need to be created, and the notion of continuous improvement introduced as a guiding principle. In support of the establishment of TQM Steering Committee, senior management should set clear TQM objective, and provide adequate human and financial resources to promote and communicate the TQM campaign company-wide. TQM advocates and resistors should both be identified, and adequate training plans and deployment of necessary skills and knowledge for employees established. In this phase, the organisation is acquiring knowledge, and tools and techniques, and preparing itself for a transition into the next phase of TQM implementation.

The Implementation Phase

The Implementation phase is the point at which an organisation involves the coordinated, focused application of the acquired knowledge in pursuit of clearly defined company goals and improvement objectives. It can be sub-divided into four stages, namely planning, execution, review and modification. In the Planning Stage, the organisation needs to plan the technical aspects of implementation and identify improvement projects. In the Execution Stage, senior management need to deploy ownership of the improvement process down to line management, and in turn drive, in a disciplined and coordinated manner,

籌備階段

在籌備階段，高層管理需要檢討公司現時運作、確認公司對推展全面優質管理的承擔及領導。組織需要重新為“品質”定義，由著重項目(如符合規格)轉為著重人們(如客戶的滿意度)，創立推展全面優質管理的前瞻及使命，及引進持續改善的觀念為引導原則等。在支持建立全面優質管理領導委員會的同時，高層管理應訂立清晰的全面優質管理目標，提供適份的人力及財務資源，推展公司全面優質管理運動。此外，亦需要識別出全面優質管理的擁護者及抵抗者，應建立適當的僱員培訓計劃以配合所需知識及技術的要求。組織在這階段獲得的知識、工具及技巧，有助於轉移至另一個全面優質管理的推行階段。

推行階段

在這階段裡，組織協調及應用已掌握的知識去達成所定立的公司目標及改善目的。它可細分為四個時期，名稱分別是計劃、執行、檢討及修正。在計劃時期裡，組織需要策劃技術方面及識別改善專題項目。在執行時期，高層管理需要將改善過程的擁有權下放至其他管理層，順序發展紀律及協調方式目標。同時亦需要成立專題項目的小組及利用足夠培訓支援及激勵小組。在檢討

the development of goals and objectives. Project teams need to be formed and team efforts activated with training support. In the Review Stage, it is necessary to introduce and develop effective feedback systems to monitor and drive continuous improvement throughout the organisation. In addition, a sound performance measurement system is needed to assess internal business performance and provide benchmarking with competitors and best-in-class performers. In reaching the Modification Stage, management may need to adjust or rebuild the existing organisational infrastructure to suit the TQM implementation. Project scope, objectives and methodologies will also be modified according to the changing needs, requirements and circumstances of the organisation.

時期裡，組織是需要引入及發展有效的反饋機制，監察及鼓勵持續改善。除此之外，亦需要一個健全的表現量度系統去評審內部業績及借鑑競爭者及世界級的表現。當到達修正時期，管理層或需要調整或重建現有組織基礎結構以便推行相應的全面優質管理。再者，隨著需要、要求及組織環境等的改變，有關的專題項目範圍、目標及方法亦需作修正。

推行全面優質管理的 廿二步驟指引

A 22-Step TQM Implementation Guideline

Based on the 28 elements of the TQM implementation framework, a 22-step guideline was developed for facilitating TQM adoption through the Awareness-Preparation-Implementation phases. Throughout the entire process, the parties involved include top management, steering committee members, departments and project teams, as well as external consultants, as appropriate. This chapter describes the logical flow and main areas of the guideline. A brief description of individual implementation steps is given in Exhibits 5.1 and 5.2.

根據全面優質管理推行架構的28個元素，一套22個步驟的指引亦已制訂，以配合“意識”、“籌備”及“推行”等三個階段。在整個過程中，參與團體包括高層管理、領導委員會成員、各部門及專題小組以及合適的外部顧問。此章描述該指引的邏輯流程及主要範圍。個別推行步驟則簡短描述在圖表 5.1 及 5.2 內。

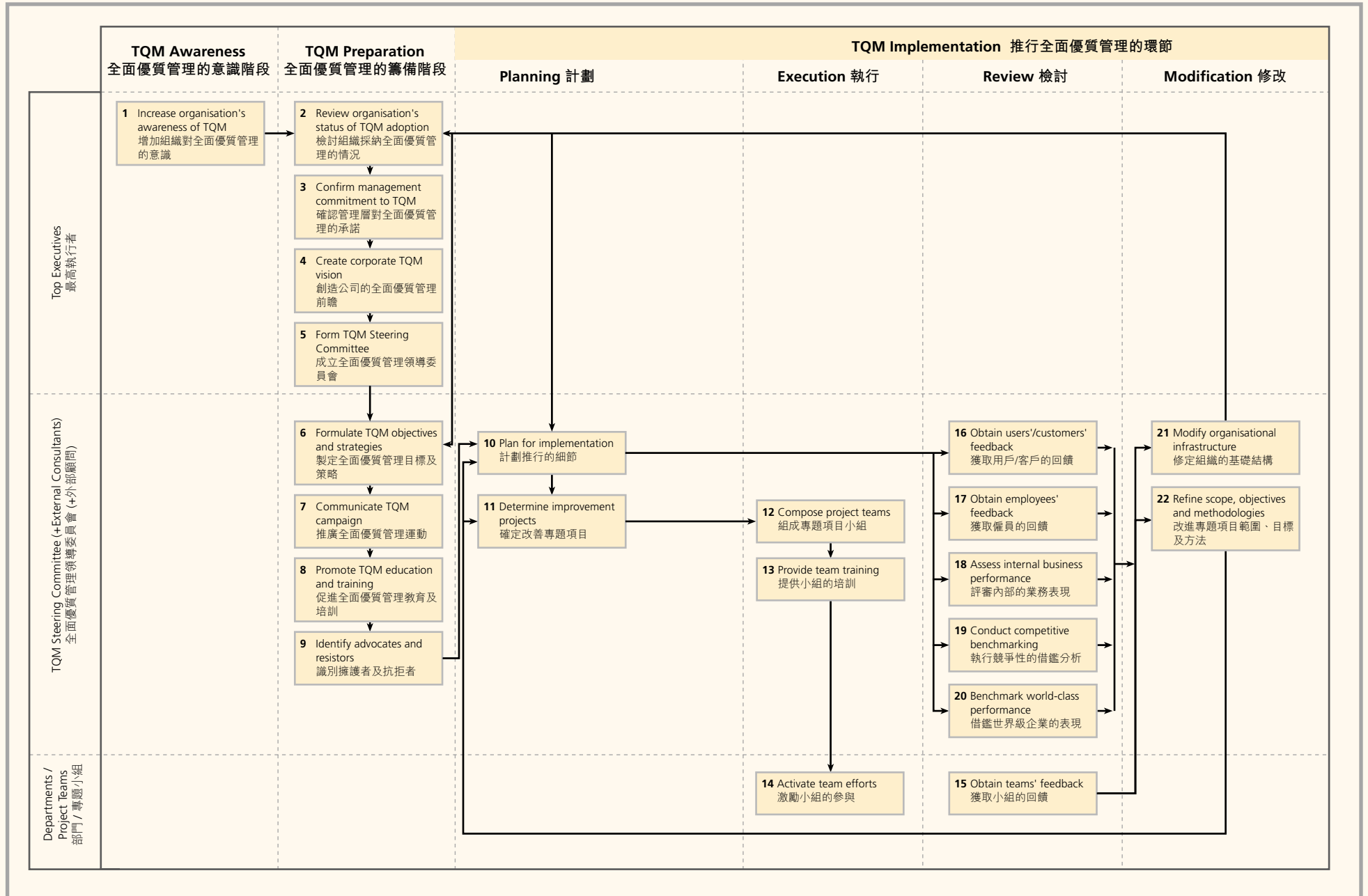


Exhibit 5.1 A 22-step implementation guideline of TQM adoption
圖表 5.1: 推展全面優質管理的 22 個步驟指引

Step Ref. 步驟	Responsible Parties 負責團體	Main Tasks and Focal Areas 主要任務及範圍
TQM Awareness 全面優質管理的意識階段		
1	<ul style="list-style-type: none"> Senior management 高層管理 Individual managers/ employees 個別經理/僱員 	<ul style="list-style-type: none"> To promote and enhance organisation's awareness of quality 促進及提高組織的品質意識 To determine the strategic needs of quality to a company, and to assess the organisation's strengths and weaknesses, for example, the use of SWOT analysis. 決定公司的品質策略需要，評審組織的實力及弱點，例如使用SWOT分析
TQM Preparation 全面優質管理的籌備階段		
2	<ul style="list-style-type: none"> Senior management 高層管理 Managers 經理 	<ul style="list-style-type: none"> To review the current status of TQM adoption 檢討採納全面優質管理現時狀況 To determine the belief, concepts and system of quality management in the company 決定公司的信念、概念、品質管理系統
3	<ul style="list-style-type: none"> Senior management 高層管理 Managers 經理 	<ul style="list-style-type: none"> To confirm management commitment and leadership to TQM 確定對全面優質管理的管理承諾及領導 To commit time and organisational resources for the introduction and development TQM practice 承諾時間及組織資源予引入及發展全面優質管理實踐
4	<ul style="list-style-type: none"> Senior management 高層管理 Managers 經理 	<ul style="list-style-type: none"> To create TQM vision that indicate where the company wants to go 創造全面優質管理前瞻顯示公司希望向那處前進 To communicate the vision to staff 對職員傳播遠景 Use of company newsletters, periodicals and other media 使用公司刊物、期刊及其他媒介
5	<ul style="list-style-type: none"> Senior management 高層管理 Managers 經理 Facilitator(s) 促導員 	<ul style="list-style-type: none"> To establish a TQM Steering Committee 建立全面優質管理領導委員會 To assess and monitor the progress of TQM introduction 評審及監察引入全面優質管理之進度 To establish a set of priorities, such as project selection 建立一套優先次序，例如專題的選擇 To monitor and provide project teams with guidance 監察及提供專題小組指引 To set up examples of personal commitment 設立個人承諾典範
6	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 	<ul style="list-style-type: none"> To set TQM objectives and perform strategic business planning 設立全面優質管理目標及執行業務策略計劃 To convert corporate vision statement into a set of company objectives and strategies 轉換企業遠景聲明成為一套公司目標及策略

Exhibit 5.2 Focal areas of implementation guideline of TQM adoption
圖表 5.2: 推展全面優質管理指引的主要範圍

Step Ref. 步驟	Responsible Parties 負責團體	Main Tasks and Focal Areas 主要任務及範圍
TQM Preparation 全面優質管理的籌備階段		
7	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 	<ul style="list-style-type: none"> To communicate with employees their roles and needs in the TQM campaign 傳播全面優質管理運動的需要及僱員的角色 To publicise the TQM vision, guiding principles and objectives 公開全面優質管理遠景、指引原則及目標 Typical communication channels include business meeting, informal gatherings, departmental meetings and company newsletter 典型溝通渠道包括商業會議、非正式聚會、部門會議及公司刊物
8	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 External consultants 外部顧問 Internal/outside trainers 內部/外部培訓員 	<ul style="list-style-type: none"> To establish a company-wide education and training programme on TQM awareness and introduction 建立全面優質管理意識及指引的公司教育及培訓計劃 To promote and develop the related basic TQM knowledge, techniques and tools 促進及發展有關全面優質管理基本知識、技巧及工具 To provide training by internal trainers and/or external consultants 內部培訓員及/或外部顧問提供培訓
9	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 External consultants 外部顧問 	<ul style="list-style-type: none"> To identify the advocates and resisters in the organisation 識別組織內擁護者及抗拒者 To investigate the attitude of employees towards the TQM adoption 研究僱員對採用全面優質管理的態度 Use of employee satisfaction surveys and performance appraisals 使用僱員滿意調查及表現評價
TQM Implementation - Planning 推行全面優質管理的計劃環節		
10	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 External consultants 外部顧問 	<ul style="list-style-type: none"> To plan for TQM implementation in line with four aspects: organising, systems and techniques, measurement and feedback, and changing of culture 計劃推行全面優質管理計劃與四方面一致：組織、系統及技巧、量度及反饋及改變文化 To establish an agreed reward and recognition scheme for promoting TQM adoption 建立已同意的獎勵及認知計劃來促進採納全面優質管理
11	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 	<ul style="list-style-type: none"> To identify continuous improvement projects 識別品質改善專題 To ensure that projects are supportive of TQM vision and objectives 確保專題支持全面優質管理遠景及目標 To assign the projects that have a high probability of success 指派有高成功機會率的專題

Step Ref. 步驟	Responsible Parties 負責團體	Main Tasks and Focal Areas 主要任務及範圍
TQM Implementation - Execution 推行全面優質管理的執行環節		
12	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 	<ul style="list-style-type: none"> To establish a strong team infrastructure (e.g., departmental improvement teams, process improvement teams, cross-functional teams, and ad hoc task forces) 建立強壯團隊的基礎結構(例如部門改善小組、過程改善小組、跨功能小組及特別全務部隊) To appoint leaders who need to establish ground rules, share information, and cultivate team unity. 委派建立合理規定、分享資料培養小組團結的組長 To select members who are the advocates and have clear team's mission 選擇擁護及有清楚小組任務的組員
13	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 External consultants 外部顧問 Internal trainers 內部培訓員 	<ul style="list-style-type: none"> To prepare and establish teams training 預備及建立小組培訓 The training includes total quality concepts, teambuilding and communication, and basic quality tools, and problem solving techniques 培訓包括全面優質概念、建立小組及溝通、基本品質工具及問題解決技巧 Common approaches include cascaded training, training by designated in-house trainers and/or by external consultants. 通常的途徑包括一系列培訓、內部培訓員及/或外部顧問提供的培訓等
14	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 Project Teams 專題小組 	<ul style="list-style-type: none"> To activate team with formal team meetings 以正式小組會議刺激小組 To assign trained facilitators for individual teams as advisor 委派受過培訓的促進員為個別小組顧問 To provide a clear project scope and objective to the teams 提供小組清晰專題範圍及目標
TQM Implementation - Review 推行全面優質管理的檢討環節		
15	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 Project Teams 專題小組 	<ul style="list-style-type: none"> To acquire feedback on project progress and final outcomes 獲取專題進度反饋及最後結果 Use of standard feedback channels (e.g. regular progress report, performance assessment and audit sheets) 使用標準反饋渠道(例如定期進度報告、表現評審及審檢表)
16	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 Marketing/Quality Departments 市場/品質部 	<ul style="list-style-type: none"> To collect users' and customers' (internal and external) feedback 收集使用者及客戶(內部及外部)的反饋 To employ the means of customer satisfaction surveys, customer visits, customer complaints, marketing research, user groups or customer panels, and customer-supplier meetings 使用客戶滿意調查、客戶探訪、客戶投訴、市場研究、使用者小組或客戶專門小組及客戶供應商會議的方法

Step Ref. 步驟	Responsible Parties 負責團體	Main Tasks and Focal Areas 主要任務及範圍
TQM Implementation - Execution 推行全面優質管理的執行環節		
17	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 	<ul style="list-style-type: none"> To collect feedback from employees on their attitude and comments towards TQM introduction 收集僱員對引入全面優質管理的態度及意見的反饋 Use of employee satisfaction surveys, employee performance appraisal, and departmental meetings 使用僱員滿意調查、僱員表現評審及部門會議
18	<ul style="list-style-type: none"> Senior management 高層管理 TQM Steering Committee 全面優質管理領導委員會 External consultants 外部顧問 	<ul style="list-style-type: none"> To carry out internal business assessment to assess the performance of the internal operations 執行內部業務內部運作表現評審 To compare performances against internal standards and goal 比較內部標準及目標的表現
19	<ul style="list-style-type: none"> Top Executives 最高執行者 TQM Steering Committee 全面優質管理領導委員會 External consultants 外部顧問 	<ul style="list-style-type: none"> To perform competitive benchmarking 執行競爭性借鑑 To compare an organisation's operations and processes with other best-in-class performers or competitors in the same industry 與其他業內最佳業績者或相同工業的競爭者比較組織的運作及過程
20	<ul style="list-style-type: none"> TQM Steering Committee 全面優質管理領導委員會 	<ul style="list-style-type: none"> To compare performance against other competitors that have world-class performance 與其他有世界級表現的競爭者比較表現 To perform self-assessment of progress against criteria of international and national/regional quality awards 執行與國際及國家/區域口品質獎標準的自我評審
TQM Implementation - Modification 推行全面優質管理的修改環節		
21	<ul style="list-style-type: none"> Top Executives 最高執行者 TQM Steering Committee 全面優質管理領導委員會 	<ul style="list-style-type: none"> To modify organisational infrastructure that support TQM introduction, policy deployment and continual improvement 修改組織基礎結構支持引入全面優質管理、政策展開及持續改善 To identify and eliminate implementation roadblocks and obstacles 識別及消除推行路障及障礙 To change the procedures/process, organisational structure, pay/rewards and recognition systems, if necessary 如有需要改變程序/過程、組織架構、薪資/獎勵及認知系統
22	<ul style="list-style-type: none"> Top Executives 最高執行者 TQM Steering Committee 全面優質管理領導委員會 	<ul style="list-style-type: none"> To modify project/programme scope, objectives and methodologies 修改專題/計劃範圍、目標及方法 To perform project/programme review 執行專題/計劃檢討 To facilitate creation and transfer of good practices 促進創立及轉移良好實踐

Increase Organisation's Awareness of TQM

Before considering the adoption of TQM, management should determine the strategic quality needs of the organisation. Senior management need to evaluate the current operation practices, assess the strengths and weaknesses, determine the opportunities for improvements, and explore the threats being faced to the organisation.

Review Organisation's Status of TQM Adoption

A review should be conducted of the current status of the beliefs; concepts; and system of quality management practices in the company. Senior management needs to investigate the success elements and critical processes of TQM adoption that cover the design, planning, operations, delivery, maintenance, control and monitoring functions, as well as the performance audits of the processes, products and services currently provided by the organisation.

Confirm Management Commitment to TQM

Senior management need to commit time and organisational resources for adopting TQM. They should take the initiative to identify areas for improvement throughout the organisation, obtain agreements from all parties involved regarding the scope and objectives of improvement efforts, and develop an employee-led process for improvement.

Create Corporate TQM Vision

Senior management need to set forth a clear TQM vision and mission statement(s) that indicates company objectives for performance improvement. The vision should be translated into quality goals and strategies, and communicated to employees, customers, suppliers

增加組織對全面優質管理的意識

考慮推廣全面優質管理前，管理層應製定組織所需要的品質策略。高層管理需要評估組織現時運作情況、評審強點及弱點、決定改善的機會及探索組織所面對的威脅。

檢討組織採納全面優質管理的情況

這是指檢討現時組織內信念、概念及品質管理系統。高層管理需要分析成功的因素及全面優質管理的關鍵過程，這是包括設計、計劃、運作、付運、維修、控制及監察等功能，同時亦要審核組織現時運作程序、產品及服務的表現。

確認管理層對全面優質管理的承諾

高層管理需要提供推行全面優質管理所需的時間及資源。他們應主動識別組織內的改善範圍，獲取組織內對改善範圍及目標的共識，同時亦要鼓勵以員工為主導的改善過程。

創造公司的全面優質管理前瞻

高層管理應設定清晰的全面優質管理前瞻和使命，及明確的改善表現目標。此前瞻可演繹成為品質目標及策略，利用公司的通訊、期刊及其他媒介與僱員、客戶、供應商及其他股東等溝通。

and other stakeholders by the use of company newsletters, periodicals, and other media. This allows them to visualise the mission, culture and commitments of the company.

Form TQM Steering Committee

A management committee, panel or Steering Committee needs to be established to design, plan, and manage the introduction and development of TQM. The Committee should comprise top management, operations executives and front-line representatives. Its main role is to assess and monitor the entire process of TQM adoption. For example, it should establish a set of priorities for project selection, provide guidance to project teams, set up examples of personal commitment, and identify any blockages.

Formulate TQM Objectives and Strategies

The Steering Committee helps senior management establish the corporate TQM vision and translate it into a set of TQM objectives, operating principles and action plans. It activates a company-wide strategic quality planning, formulates strategies and prepares quality plans with the divisions and appropriate personnel, and provides new motivation to make the improvements.

Communicate TQM Campaign

It is necessary for senior management to communicate with employees their roles and needs in the TQM campaign. The Steering Committee should publicise the TQM vision, guiding principles and objectives in an open and effective way. It also needs to make the performance criteria more specific to fit the company's situation and give them meaning within the context of the business operations. Typical communication channels

容許他們知悉公司對優質改善的使命、文化及承諾。

成立全面優質管理領導委員會

應設立管理委員會、專門小組或領導委員會等去專責設計及計劃推展管理全面優質管理事宜。委員會應包含高層管理、運作行政人員及前線員工代表。這委員會的主要工作是評審及監察整體全面優質管理推廣過程。例如，建立一套選擇專題項目的優先順序指引、指導專題項目小組、建立個人承諾的榜樣及識別任何障礙等。

製定全面優質管理目標及策略

領導委員會需協助高層管理為組織建立全面優質管理的前瞻，更演變成爲整套的目標、操作原則及活動計劃。它創設組織的長遠品質計劃路向，製定策略、籌備分區計劃及提升員工對改善生產的原動力。

推廣全面優質管理運動

在進行全面優質管理運動時，高層管理需要界定明確的僱員角色及需要。領導委員會應以公開有效的方法公布全面優質管理的前瞻、指引原則及目標。它亦需要因應組織的情況及業務運作去製定表現的基準。一般常用的溝通渠道包括每月/每年的業務會議、非正式聚會、部門會議及公司通訊等。

include monthly/annual business meetings, informal gatherings, departmental meetings, and company newsletters.

Promote TQM Education and Training

It is important for both management and staff to know which constituent parts require development of documentation and conformity to quality, environmental, and occupational health and safety management standards. The design and provision of a company-wide education and training programme is needed to promote awareness and introduction of TQM practices. The programme should convey the quality management concepts and team practices (e.g., bottom-up quality culture, leadership, team building, and quality control circles).

Identify Advocates and Resistors

In order to promote TQM practices and minimise or avoid unnecessary resistance from employees, it is beneficial to investigate the attitude of employees using employee satisfaction surveys and performance appraisals. This helps to identify and distinguish the advocates and resistors of TQM adoption, and seek possible means to establish a favorable and harmonious organisational working environment. Decision need to be made about the resistors.

Plan for Implementation

An implementation plan for continuous improvement activities needs to be developed in line with the four sections of TQM framework, namely organising, systems and techniques, measurement and feedback, and changing the culture. Typically, the process will go through a series of stages encompassing awareness,

促進全面優質管理教育及培訓

管理層及僱員雙方都應知道那些組成部份是需要發展加強，以符合文件處理的要求及品質、環境及職業健康及安全管理等標準。為了提升推展全面優質管理的意識，組織是需要設計及提供一套完備的教育及培訓計劃。這計劃亦應傳達品質管理的概念及團隊的實踐（例如由下而上品質文化、領導、建立團隊及品質控制圈等）。

識別擁護者及抗拒者

為了推展全面優質管理及減少或避免不必要的僱員方面的阻礙，可利用僱員滿意調查及表演評價等來了解他們的應受態度是有好處的。這有助於識別推展全面優質管理的擁護者及抗拒者，同時間組織亦能建立良好及協調的工作環境。對於抗拒者組織是需要作出相應決策務求能改變他們。

計劃推行的細節

推行持續改善活動計劃是需要跟全面優質管理架構的四個段節(指組織、系統及技巧、量度及反饋及改變文化等)配合。整個過程會是由意識、教育及培訓、整合到識別問題、改善計劃、最後到推行品質計劃及評審。在過程中需要加強組織內各功能範圍之間(例如設計、運作、市場及維修)的互相協調及合作是需要加強的。為

education and training, consolidation, problem identification, improvement planning, implementation of quality plans, and assessment. It is necessary to identify the milestones and have ongoing monitoring of the plan. Co-ordination and co-operation among various functional areas (e.g. design, operations, marketing, and maintenance) should be encouraged. An agreed pay/rewards and recognition scheme for promoting TQM adoption should be established.

Determine Improvement Projects

This is to ensure that the quality improvement projects are supportive of the TQM vision and objectives. Improvement and problematic areas are segregated to determine whether "Kaizen-type" improvements or breakthrough actions and or both are required. It is advisable to assign initial projects which have a high probability of success. Detailed action plans should be developed with consensus and support from all functional areas concerned. Appropriate operation procedures should be prepared and work instructions revised in line with users' and customers' feedback and requirements.

Compose Project Teams

For facilitating the project work, it is necessary to establish a strong team infrastructure (e.g. departmental improvement teams, process improvement teams, cross-functional teams, as well as ad hoc task forces), appoint team leaders and select members who are committed to teamwork and develop clear operating guidelines for the teams. These teams and task forces are formed according to their skills and different operational requirements. They need to be action-centered, establish ground rules, share information, and cultivate team unity.

了促進全面優質管理的推展，設立一個全員認同的報償/獎勵制度也是必要的。

確定改善專題項目

這是確保有關品質改善能達到組織的全面優質管理的前瞻及目標。改善範圍及問題範圍是需要界定的，目的的決定採用漸進式的改善方法，還是用較激進的突破行動，或兩者都採用。在推行品質改善初期，應選取那些有較高的成功的機會的項目。詳細的行動方案是需要得到有關的功能部門一致的支持的。同時，有關的運作程序及修訂工作指示也需要符合使用者及客戶的反饋與要求。

組成專題項目小組

為配合專題項目的工作，是要依賴完善的團隊結構(例如包括部門改善小組、過程改善小組、跨部門小組及特別任務部隊等)，任命小組負責人及選擇團隊成員。同時也需為小組設立清晰運作指引。這些小組及部隊是應按他們的技術及不同的運作要求而組成。他們需要以行動為中心、建立行動的規則、分享資料及培養團隊合作精神。

提供小組的培訓

這是包括有關工作範圍應用的實質技術、方法、工具及技巧(例如

Provide Team Training

Adopting TQM should include training in applying practical skills, methods, tools and techniques (e.g., problem solving techniques, quality control tools, and 5S concepts) in job-related areas. The quality policies and the conformity requirements of quality management and related standards (e.g. ISO 9000 series, SA 8000, QS 9000, TL 9000, ISO 14000 and OHSAS 18001, etc.) need to be included in the training programmes. Common approaches to training include cascaded training, training by designated in-house trainers, and training by external consultants and/or quality professionals.

Activate Team Efforts

Teams and task forces should be activated with formal team meetings. They should be encouraged to initiate projects and plans regarding the improvements of processes, operations and procedures in their work places. Senior management need to delegate suitable authority and deploy resources to teams and task forces, in conjunction with the execution of improvement tasks and activities. The Steering Committee should provide a clear project scope and objectives, review the progress of individual teams, and advise, as appropriate, management for improved deployment of resources. In addition, trained facilitators should be assigned to help direct the administration and improvement efforts of individual teams and task forces. Motivation and morale support should be initiated from the top, and then deployed to the different departments and/or divisions of the organisation.

Obtain Teams' Feedback

The Steering Committee should acquire the teams'

解決問題技巧、品質控制工具及五常法概念等)的培訓。有關品質政策、品質管理及標準要求(例如 ISO 9000系列、SA 8000、QS 9000、TL 9000、ISO 14000及 OHSAS18001等)亦需包括在培訓工作內。通常的培訓途徑包括系列式培訓、指定培訓員培訓、與及由外間顧問或品質專業人員等所提供的培訓。

激勵小組的參與

可透過在正式小組會議中激勵小組及工作部隊。這包括鼓勵他們開始有關改善工作運作及程序等的專題項目及計劃。高層管理需要付予適當權責及資源給小組及工作部隊，從事執行改善的工作及活動。領導委員會亦需提供清晰的項目範圍及目標，與個別小組檢討進度。及在需要的情況下及建議管理層撥資源等。除此之外，組織亦需指派經驗的促導員到個別小組及部隊去協助它們的行政及指導改善工作。高層亦需要激勵及支援組織內不同部門及/或區分的士氣。

獲取小組的回饋

領導委員會需要得到小組項目進度的報告及透過標準渠道反饋最終結果(例如定期進度報告、表演評審及審核表等)。有關的改善計劃進度及已進行的糾正行動是需要檢討的。在報告有關計劃及行

feedback of project progress and final outcomes through standard feedback channels (e.g. regular progress reports, performance assessment and audit sheets). The progress of improvement plans and the corrective actions undertaken should be reviewed. Activities that address team effectiveness can stimulate team efforts and encourage feedback in performance improvement. The efforts of teams should be explicitly rewarded, and management should show appreciation of team efforts in achieving predetermined targets of improvement performance. This will stimulate teams and individuals to perform even better, and also encourages others to participate actively in continuous improvement activities.

Obtain Users'/Customers' Feedback

This is to collect users' and customers' (internal and external) feedback through customer-satisfaction surveys, customer visits, customer complaints, marketing research, user groups or customer panels, and customer-supplier meetings. The feedback and requirements acquired from users/customers can help prioritise the identified areas of continuous improvement, along with the time and resource constraints, as well as other organisational concerns (e.g. environmental, safety and social responsibilities).

Obtain Employees' Feedback

Employees' views should be sought on their attitude and comments towards TQM implementation by all possible means, including employee satisfaction surveys, employee performance appraisal and departmental meetings. Positive recognition and feedback of quality efforts are important for organisational learning and as a stimulus to create structured, planned and continual improvement activities in the organisation.

動的成效可以激勵小組的努力及反饋相關的改善表現。除明確認同小組的努力外，管理層亦應賞識小組能完成預定改善表現目標。此做法會激勵小組及個人有更佳表演，及鼓勵其他員工主動參與持續改善的活動。

獲取用戶/客戶的回饋

這是指透過客戶滿意調查、客戶探訪、客戶投訴、市場研究、使用者小組或客戶專門小組與及客戶/供應會議等來收集使用者及客戶(包括內部及外部)的反饋。從使用者/客戶獲得的反饋及要求可以協助優先處理已識別的持續改善的範圍、時間及資源的限制，與其他組織的憂慮範疇(例如環境、安全及社會責任)。

獲取僱員的回饋

有關僱員對推展全面優質管理的態度及意見，可以從僱員滿意調查、僱員表現評價及部門會議等獲取。正面認同及對品質努力的反饋對於組織學習及激勵組織內創造有結構、計劃及持續性的改善活動是十分重要。

評審內部的業務表現

內部業務評審是一種比較組織的目標來審核內部運作表現的有效方法。有關設計品質、防止出錯、符合標準的要求及文件上管理等都是核心要求。亦需要評估

Assess Internal Business Performance

Internal business assessment is an effective means to audit the performance of internal operations by comparison with internal standards and organizational goals. The core requirements of design quality, prevention, conformance and documentation should be stressed. All positive changes and improvements should be evaluated in line with the corporate mission and operational objectives. Deviations from the predetermined objectives should be explained. In addition, useful data and information should be processed and shared to promote company-wide organisational learning.

Conduct Competitive Benchmarking

Competitive benchmarking should be performed by comparing the organisation's operations and processes with the "best-in-class" performers and competitors in the same industry. In order to diagnose the improvement opportunities and analyse problematic areas, performance information of organisation operation/process should be acquired, and relevant standards, specifications and methods employed. The findings can contribute to refinement of the quality goals, safeguard the performance improvement, and enhance customer values.

Benchmark World-class Performance

Once some of the basic steps in the continuous improvement process have been put into place, the proven means of assessing the progress of business towards world-class performance should be used. This includes performance benchmarking against other competitors of world-class performance, and performing self-assessment of progress against the Excellence Model

所有對組織有效益的改變及改善是否與企業使命及運作目標一致。所有與預定目標有差異的都是需要尋求原因。除此之外，所得到有用的數據及資料是需要加以處理及分享，以加強整體的組織學習。

執行競爭性的借鑑分析

有關組織的運作是需要與業內的最佳的業績者及競爭者比較。為了分析改善機會及問題範圍，組織內的運作/過程是需應用相關的標準、規格及方法去評估。所有發現可有助於改進品質目標，保持改善表現及提高客戶滿意度。

借鑑世界級企業表現

當組織內持續改善基本步驟已確立，進一步的評審方法是應以邁向世界級企業表現為借鑑目標，這包括與其他世界級競爭者的表現作比較，同時亦可用Malcolm Baldrige National Quality Award、European Quality Award、或其他國際或地區性品質獎(例如HKMA Quality Award等)的要求作自我評審。

修定組織的基礎結構

推展全面優質管理需要整體的組織改變及在業務上各方面配合所需的人力資源。為了加強全面優質管理的實踐，相應的開展政策及持續改善措施和現有組織基礎

criteria of the Malcolm Baldrige National Quality Award, the European Quality Award, or other national and regional quality awards (e.g. the HKMA Quality Award).

Modify Organisational Infrastructure

The adaptation of TQM practices requires comprehensive organisational changes and integration of human resources into every aspect of the business. To support TQM adoption, policy deployment and continual improvement, it is usually necessary to modify the existing organisational infrastructure and change the procedures/process, organisational structure, rewards and recognition systems. Any implementation roadblocks, obstacles and barriers should be identified and eliminated.

Refine Project Scope, Objectives and Methodologies

Several variables and factors affect the progress of quality projects and programmes, including organisational resources, management commitment, state of operations, equipment condition, impact of changes, communication between departments, time spent on training, employee resistance, conflicting interpretations of policies and other decisions, customer satisfaction, safety, operational and financial performance. It is necessary to perform periodical reviews on the scope, objectives and methodologies of these projects/programmes, and refine them accordingly to take account of the changing organizational needs and requirements. In addition, the creation and transfer of good practices should be facilitated, and continuous improvement procedures properly established, documented and monitored according to the quality manual.

結構是需要修改，有關的程序、過程、組織結構、獎勵系統等亦需要改變。同時間，任何可成為推行的路障、障礙及柵欄等都要識別出來及清除。

改進專題項目範圍、目標及方法
影響品質專題項目及計劃有很多的變數及因素，它們包括組織的資源、管理的承諾、運作狀況、設備條件、改變的沖擊、部門間的溝通、培訓所使用時間、僱員的阻力、不一致解釋政策與及客戶的滿意程度、安全、運作及財務等的表現。組織是需要定期檢討有關的專題項目/計劃範圍改進目標以配合組織的需求及改變。除此之外，組織拓展良好的運作，建立有關改善的程序，記錄及校正品質手冊裡。

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在香港推展全面優質管理
推行架構的主要發現

*The ISF Project of
TQM Implementation Framework
in Hong Kong*

In 1997, the Industry and Technology Council of the HKSAR Government approved an Industrial Support Fund (ISF Project no. AF/252/97). The project investigated the application of the UMIST TQM model and customised it to become a TQM implementation framework for use in local manufacturing industries. Hundreds of manufacturing enterprises were involved in various stages of the 28-month project. The experience gained has been packaged to help manufacturers establish their own approach to continuous improvement and foster company-wide operational efficiency and effectiveness. This chapter describes the methodologies used and reports the key findings of the project.

The ISF Project on TQM Implementation

The ISF project, "Implementing the UMIST TQM Model in Hong Kong Manufacturing Industries", has four major stages. Stage 1 investigated the characteristics and current quality management practices in the Hong Kong's manufacturing industries using seminars, interviews, and questionnaire surveys. Stage 2 involved the development of a TQM implementation framework and a set of accompanying guidelines for facilitating Hong Kong organisations to establish their own quality management practices. Stage 3 was a pilot implementation programme that was launched in selected organisations in manufacturing sectors of electronics/electrical appliance and toys/plastic products. UMIST and City University of Hong Kong have assisted these companies to adapt the framework, through:

- 1) Reviewing their adoption status of the framework,
- 2) Assessing which features of the framework were already in place,
- 3) Prioritising those features that are not yet in place,
- 4) Suggesting feasible action plans for the introduction

在1997年，香港特別行政區工業及科技局批准一項工業支援基金(ISF計劃編號AF/252/97)。此計劃研究如何應用UMIST全面優質管理模式及定製本地製造業的全面優質管理推行架構。已有過百家製造企業曾參與不同階段為期28個月的計劃。所得經驗囊括起來協助製造商建立他們本身持續改善的模式，促進公司運作效率及成效。此章描述使用之方法及報告計劃的發現。

工業支援基金撥款贊助的推行全面優質管理計劃

這個“在香港製造工業推行UMIST全面優質管理模式”的ISF計劃共有四個主要階段。第一階段利用研討會、面試及問卷調查研究香港製造業在品質管理實踐的現況及特質。第二階段重點在發展全面優質管理推行架構及建立一套促進香港組織品質管理的指引。第三階段選擇電子/電器及玩具/塑膠等產品製造業組織開始試驗計劃。來自UMIST及香港城市大學的計劃顧問已協助這些參與公司利用以下方法應用該架構：

- 1) 檢討它們採用架構的狀況，
- 2) 評審架構那一些特性已在使用的，
- 3) 為未使用的特性定下優先次序，
- 4) 建議引用先優先特性的適宜行動計劃，
- 5) 監察它們的進度，
- 6) 識別使用全面優質管理推行計劃的問題。

- of the prioritised features.
- 5) Monitoring the progress of the action plans, and
- 6) Identifying problems in putting the plans into place.

In Stage 4, the findings and experiences from the project were consolidated. They were subsequently used to validate the effectiveness and applicability of the proposed guideline and finalise the framework for use in Hong Kong industry. The project findings have been also disseminated to the public by publications and various seminars/workshops.

Highlights of the ISF Project Deliverables

1) Introductory Seminars

In early 1998, two introductory seminars on the UMIST TQM model were organised to raise the awareness of TQM and introduce this proven continuous improvement model. Key features and elements of the UMIST model were discussed and the associated quality management practices were introduced to participants from a wide spectrum of industry sectors including the electronics, electrical appliance, computer, plastic product, toys and other related industries. The seminars involved more than one hundred industrial participants and provided them with a practical guidance regarding the introduction and development of a continuous quality improvement process. The seminars also focused on assisting participants develop an achievable TQM implementation plan in line with the application of the framework.

2) Company Interviews

In order to investigate the current quality status and common management practices in industry, twelve manufacturing enterprises were selected from two targeted industry sectors, namely the electronics/electrical

第四階段結合計劃的發現及經驗。它們用作確認有關建議指引的成效及可行性，最後修定成為適合本地製造業的全面優質管理推行架構。該計劃的發現已在出版物及各種研討會/專題討論會向公眾發表。

整個工業支援基金計劃的推行重點

1) 介紹的研討會

在1998年初，這計劃共組織了兩次“UMIST全面優質管理模式介紹”的研討會以提高全面優質管理的意識，及推介此驗證持續改善的模式，同時亦討論UMIST模式的關鍵特質及推介品質管理給製造同業，他們包括電子、電器、電腦、塑膠產品、玩具及其他有關行業。超過一百位業界參加者參與該兩次的研討會，會議內容包括引進及發展持續品質改善過程的指引，研討會亦集中啟導參加者如何根據架構的重點去發展有潛質的推行全面優質管理方案。

2) 公司面試

為了研究現時業界的品質狀況及共同的管理實踐，這計劃選擇了由兩類目標工業，包括電子/電器及玩具/塑膠產品共12家製造企業，邀請這些組織的高層管理、行政人員及/或它們的代表參與深入的面試。面試目的是評估他們組織內對持續改善的主動性及對全面優質管理方面的觀點。這包括所採取的途徑、引進全面優質管理的計劃所遇的困難，及推展全面優質管理所持的期望/獲

appliances and the toys/plastic products sectors. Senior management, executives and/or their representatives of these organisations were invited to attend an in-depth interview. The interview was intended to obtain the managerial views about the continuous improvement initiatives and TQM aspects in their organisations. They included the approach adopted, the plans for TQM introduction, the difficulties encountered, and the benefits expected/gained from TQM adoption. In addition, the interviewees were asked to conduct a critical pre-implementation assessment of the current status of TQM adoption in their organisations using a standard scoring sheet (see Exhibit 4.3). The interview was also used to assess the commitment of the senior management team to TQM and the needs of the project.

3) Pilot Implementation Programme

Following the interviews and self-assessments of current TQM adoption status of participating organisations, six companies proceeded to a subsequent pilot TQM programme using the customised TQM implementation framework and guidelines. These companies were selected not just solely on their good quality practices, but also their initiatives and commitment of active participation in the programme. In fact, two of the organisations have not yet been ISO9000 series certified and four only had minimal awareness of TQM before commencement of the programme. Among the six pilot programme members, two can be classified as small and medium sized enterprises (SMEs). A brief company profile of these pilot organisations is shown in Exhibit 6.1 below. The main role of the project consultants was to assist the organisations to formulate a TQM implementation time-scaled plan with respect to their organisational needs, resources and constraints. During

得的益處。除此之外，亦要求被訪問者利用一份標準得分表（見圖表 4.3）去評審他們推展全面優質管理的現況。作用是用來作評審這些組織的高層管理對全面優質管理的承擔及他們對參與該計劃的需求。

3) 試驗推行計劃

經過公司面試及自我評審的步驟後，有六家公司被邀參與全面優質管理的試驗計劃。選擇這些公司除了注意到它們現有良好品質實踐，也考慮它們的主動性及積極參與此計劃。事實上，其中兩家組織是仍未獲取ISO 9000系列的證書，其餘四家在計劃開始前時亦只有較薄弱的全面優質管理意識。六家試驗計劃成員中，兩家可以分類為小型及中型企業(SMEs)。圖表 6.1 顯示這些試驗組織的簡單公司資料。計劃顧問的主要角色是助協助它們敘述對於組織需求、資源及限制及製定全面優質管理的推行方案及時間。在這階段裡，該計劃亦繼續安排多次的研討會及專題討論。目的是推介給公眾及試驗計劃的成員組織有關全面優質管理的概念及推行方法。

該計劃亦曾安排多次探訪六家試驗組織。目的是檢視它們的生產過程及運作，同時亦評估它們的全面優質管理狀況。計劃顧問協助這些公司診斷它們的實力及弱點，提供配合全面優質管理原則及元素的改善建議。之後，這些公司是需要提交一份為期兩年的全面優質管理推行方案，包含有關的活動計劃及程序表。

Company 公司	Products 產品	Organisational Strengths 組織實力
A	Plastic Products 塑膠產品	<ul style="list-style-type: none"> Strong customer base 強大客戶基礎 Clear production flow / lines 清晰生產流程及生產線 Good factory environment 良好的工廠環境 Recognition of the importance of TQM 認識全面優質管理的重要性
B	Toys 玩具	<ul style="list-style-type: none"> Strong customer base 強大客戶基礎 Clear production flow / lines 清晰生產流程及生產線 Good factory environment 良好的工廠環境 Recognition of the importance of TQM 認識全面優質管理的重要性
C	Electrical Household Appliances 家庭電器	<ul style="list-style-type: none"> Strong product brand 強大的產品商標 Clear improvement objectives 清晰的改善目標 Willingness to adopt TQM 願意採納全面的優質管理 Good defect reporting mechanism 有效的缺點報告機制
D	Toys 玩具	<ul style="list-style-type: none"> Clear production flow 清晰的生產流程 Good customers relationship 良好的客戶關係 MIS for defects 使用MIS監察缺點 Rigorous product testing 嚴謹的產品測試 Sound quality control system 可靠的品質控制系統
E	Power Tools and Floor Care Appliances 電動工具及地板護理器具	<ul style="list-style-type: none"> Investment in technology 著重在科技上的投資 Visible management system 清晰的管理系統 People satisfaction 僱員滿意 Good 5S housekeeping 良好的5S管理 Use of statistical process control 使用統計過程控制
F	Batteries 電池	<ul style="list-style-type: none"> Good 5S housekeeping 良好的5S管理 Engineering operations 採用工程運作模式 TQM fundamentals are in place 已設置基本的全面優質管理原素 Adoption of SMED 採納SMED技術 Advanced quality planning 強化的品質計劃

Exhibit 6.1 Company profiles of pilot organisations
圖表 6.1: 試驗組織的基本公司資料

this stage, seminars and workshops about the TQM concepts and implementation methodologies were continuously organised to public as well as pilot programme members.

Several site visits were arranged to all six pilot organisations. The purposes were to review the production processes and operation practices and to evaluate the current TQM adoption status. Project consultants helped individual companies to diagnose their organisational strengths and weaknesses, and provided suggestions for continuous improvement in line with TQM principles and elements. Then, individual companies were required to prepare a 2-year TQM implementation programme with activity plans and schedule. In addition, potential problems were identified and possible solutions for improvement were suggested.

Being an integral part of the ISF project, the pilot organisations were invited to attend post company visit workshops in which they shared their experience in applying the TQM Implementation Framework approach. Project consultants provided professional advice specifically on what they need to do if they wanted to improve the operating efficiency in their business. By consolidating the assessment of pilot adoption experiences, the TQM implementation framework was customised for individual pilot organisations, and an accompanying guideline was provided to help them prepare their TQM implementation plans.

Phase/Stage 階段/時期	Responsible Parties 負責團體	No 項目	Item Descriptions of Steps 步驟描述	Implemented 已推行		Satisfied 滿意	
				Yes 是	No 否	Yes 是	No 否
Awareness 意識	Senior Executives 高級行政人員	1	Increase the Organisation's TQM Awareness 增加組織對全面優質管理的意識				
		2	Review the Organisation's Status of TQM Adoption 檢討組織採納全面優質管理的情況				
		3	Confirm Management Commitment to TQM 確認管理層對全面優質管理的承諾				
	TQM Steering Committee (+ External Consultants) TQM 領導委員會 (+ 外部顧問)	4	Create Corporate TQM Vision 創造公司的全面優質管理前瞻				
		5	Form Steering Committee 成立全面優質管理領導委員會				
		6	Formulate TQM Objectives and Strategies 製定全面優質管理目標及策略				
		7	Communicate TQM Campaign 推廣全面優質管理運動				
		8	Promote TQM Education and Training 促進全面優質管理教育及培訓				
		9	Identify Advocates and Resistors 識別擁護者及抗拒者				
Implementation: Planning 推行: 計劃	Departments / Project Teams TQM Steering Committee (+ External Consultants) 部門 / 專題小組 TQM 領導委員會 (+ 外部顧問)	10	Plan for Implementation 計劃推行的細節				
		11	Determine improvement projects 確定改善專題項目				
		12	Compose Project Team 組成專題項目小組				
Implementation: Execution 推行: 執行	Departments / Project Teams 部門 / 專題小組	13	Provide Team Training 提供小組的培訓				
		14	Activate Team Efforts 激勵小組的參與				
Implementation: Review 推行: 檢討	TQM Steering Committee (+ External Consultants) TQM 領導委員會 (+ 外部顧問)	15	Obtain Teams' Feedback 獲取小組的回饋				
		16	Obtain Users'/Customers' Feedback 獲取用戶/客戶的回饋				
		17	Obtain Employees' Feedback 獲取僱員的回饋				
		18	Assess Internal Business Assessment 評審內部的業務表現				
		19	Perform Competitive Benchmarking 執行競爭表性的借鑑分析				
Implementation: Modification 推行: 修改	TQM Steering Committee (+ External Consultants) TQM 領導委員會 (+ 外部顧問)	20	Benchmark World-class performance 借鑑世界級企業表現				
		21	Modify Organisational Infrastructure 修正組織的基礎結構				
		22	Refine Project Scope, Objectives and Methodology 改進專題項目範圍、目標及方法				

Exhibit 6.2 A 22-step evaluation sheet of TQM adoption
圖表 6.2 推展全面優質管理22個步驟評估表

Project consultants conducted several follow-up assessment meetings with individual pilot organisations to help monitor their adoption progress of the framework and review the achievements of their implementation plans. A 22-step evaluation sheet (as shown in Exhibit 6.2) was prepared for organisations to assess the progress as stipulated in their implementation plans. These organisations have to carefully identify their positions in relation to the adoption status of TQM practices. Project consultants also provided professional guidance on dealing with specific implementation problems.

Good Quality Management Practices Versus Obstacles

From the analysis of ISF project findings, the characteristics of TQM practices and several obstacles that were found to hinder organisations in adopting TQM were identified, see Exhibit 6.3. One key success factor of TQM implementation was management commitment and leadership. Another crucial factor was the maturity level of employees in terms of their experience and motivation. Their maturity level has to be considerably higher before TQM could be implemented effectively. In addition, the project results verify that it is crucial to have a common vision; to give employees a clear sense of direction; communicate the guiding principles; provide people with the tools they need to build a winning team, and establish boundaries of freedom throughout the organisation.

除此之外，顧問亦助它們識別潛在的問題並建議可行的解決方法。

隨著公司探訪後，這項 ISF 計劃亦邀請了試驗組織參加專題討論會分享它們應用全面優質管理推行架構的經驗。計劃顧問提供專業意見，特別是針對改善它們運作效率方法。經過評審有關試行經驗後，顧問對每家組織都提供定製全面優質管理架構的意見及協助它們推行相關的指引。

此外，計劃顧問亦與試驗組織進行多次跟進評審會議，監察它們採用該架構的進度及檢討它們推行計劃的成效。提供了一份22個步驟的評估表(在圖表6.2顯示)給它們評審推行計劃的進度。這些組織是須要識別它們在實踐全面優質管理的位置。在這方面，計劃顧問亦提供專業指引去處理它們相關的推行問題。

良好品質管理實踐與障礙對比

從 ISF 計劃發現，分析了一般的良好品質管理實踐特質及推行全面優質管理的主要障礙(見圖表6.3)。全面優質管理其中一項成功關鍵因素是建基於管理層的承擔及領導。其他決定性因素是在於僱員的經驗及動力成熟程度。他們必須到達高成熟程度，全面優質管理才可以有效地推行。除此之外，該計劃結果亦証實了幾個最決定性的成功因素。它們包括具有共同的前瞻、給僱員清晰方向感、傳遞指導原則、提供設立成功團隊的所需工具，及鼓勵組織內自發改善能力。

Characteristics of Good Management Practices 良好管理實踐的特質	Obstacles of TQM Practices TQM 實踐的障礙
<p>1 Mission statements that emphasise the achievement of quality through committed, empowered employees. 組織的使命聲明強調品質成就是由有賴肯承擔及有權責的員工參與。</p> <p>2 Maintain frequent, honest and open communication with employees to enforce the quality culture realignment. 維持與僱員經常、正直及公開溝通，促進品質文化再結盟。</p> <p>3 Encourage bottom-up communication 鼓勵由下而上溝通方法。</p> <p>4 Ensure that employee voices are heard in the managerial and executive suite. 確保管理及行政房間可聆聽僱員的意見。</p> <p>5 Motivate employee participation on advisory groups, task forces and cross-functional teams in problem solving and systems improvement. 激勵僱員參與諮詢小組、任務部隊及跨功能小組去解決問題及改善系統。</p> <p>6 Promote employee empowerment as an underlying theme. 促進授權僱員成為基本的管理重點。</p> <p>7 Encourage individual employees to solve problems and satisfy customers without time-consuming action approvals. 鼓勵僱員積極主動解決問題及滿足客戶的要求而不用浪費時間去等待批核。</p> <p>8 Focus training efforts on quality. 集中品質培訓的工作。</p> <p>9 Incorporate quality dimensions into performance review systems 結合組織的品質管理特點在表現檢討系統。</p> <p>10 Review individual performance that reflects the input of customers, both internal and external. 檢討個別員工的表現反映內部及外部客戶的滿意程度。</p> <p>11 Offer a variety of formal and informal financial and non-financial rewards for individuals and teams. 給予多種正式及非正式的財務及非財務獎勵給個人及小組。</p> <p>12 Set up a healthy and safe work environment that reaffirms the value of employees in creating a TQM culture. 建立健康及安全的工作環境，肯定員工在創立全面優質管理文化的重要價值。</p>	<p>1 Incompatibility of TQM principles against current organisational practices. 現時組織實踐與全面優質管理原則不相容。</p> <p>2 Lack of company-wide understanding about TQM concepts and its adoption. 對於採納全面優質管理及概念缺乏認識。</p> <p>3 Lack of management commitment and leadership towards TQM. 缺乏對全面優質管理的承諾及領導。</p> <p>4 Fail to adopt established quality standards. 不能有效地施行已建立品質標準。</p> <p>5 Fail to create and sustain any improvement initiatives (e.g., JIT, 5S, benchmarking) in a coherent way. 不能連貫地建立及維持相應的改良動力。(例如JIT、5S、借鑑)</p> <p>6 Employee involvement and participation is not promoted. 沒有促進僱員參與。</p> <p>7 Lack of employee education and training. 缺乏僱員教育及培訓。</p> <p>8 Low priority accorded to the quality of work life to employees. 忽略對僱員的工作生活品質的重視。</p> <p>9 Lack of proper communications and mutual trust among suppliers, dealers, management and work force. 供應商、經銷商、管理及工作力量間缺乏適當溝通及互相信任。</p> <p>10 Lack of investment in skills, technologies, research and development. 缺乏投資在技術、科技、研究及發展。</p> <p>11 Perception that attaining quality costs money. 存有獲得高品質是浪費金錢的謬誤。</p> <p>12 Perception that quality is optional for business development. 認為品質對商業發展是非必要的。</p>

Exhibit 6.3 Contrasting good management practices and TQM obstacles
圖表 6.3 良好管理實踐及全面優質管理障礙的對比

從採納全面優質管理
推行架構中學習

*Lessons Learnt from Adopting
TQM Implementation Framework*

The quest for high value-added, hi-tech, high quality and high-end production has been and is ever-increasingly stressed in Hong Kong. The ISF project (no. AF/252/97) has contributed a customised TQM implementation framework for Hong Kong industry. Adoption of the framework can assist organisations with the introduction and development of TQM practices, irrespective of their size, location and business nature. It provides an adaptable mechanism for implementing company-wide continuous improvement effort. Proper installation of the framework will help sustain good quality management practices among manufacturing enterprises, leading to an overall better performance of Hong Kong industries.

Benefits of Adopting TQM Framework

Although many adherents openly praise TQM, others have identified significant costs and implementation obstacles. Critics of TQM have suggested that TQM entails excessive retraining costs, consumes inordinate amounts of management time, increases paperwork and formality, demands unrealistic employee commitment levels, and emphasises process over results. These factors were also found in the ISF project. It was found that the shortcomings of TQM implementation or the reasons for its failure can be attributed to implementation problems. The reasons for friction or failure to implement TQM include a mismatch of organisational culture, a lack of management leadership, inadequate training, ignorance of employee involvement and participation, a lack of cooperation, and excessive time and financial commitments.

Building upon the Professor Dale's experiences in developing and applying the framework, the customised

香港不斷強調尋求高增值、高科技、高品質及尖端生產。這個 ISF 計劃(編號AF/252/97)已為香港工業製定了一個全面優質管理的推行架構。採納該架構可協助組織引進及發展全面優質管理，這架構適合任何大或小、不同位置及不同業務性質的組織。它提供公司推行全面化持續改善的推行機制。若能適當裝置此架構，有助製造企業保持良好品質管理，促進香港工業整體更佳的表现。

採納全面優質管理推行架構之裨益

雖然很多擁護者公開地稱讚全面優質管理，但有不少人亦指出這會有重大的成本需要，在推行亦會有很多障礙。從 ISF 計劃觀察到，大多數的批評者指全面優質管理需要沈重的再培訓成本、消耗過度的管理時間、加重文書上工作及會流於公式、要求不設實際的僱員承擔、及強調過程高于結果等。推行全面優質管理的缺點或失敗原因大多屬於推行問題範圍。錯誤結合組織的文化、缺乏管理領導、培訓不足夠、疏忽僱員的參與、缺乏互相合作及過份的時間及財務承擔等都會是導致推行全面優質管理失敗的原因。依照 Professor Dale 在推廣全面優質管理的經驗，所定製的全面優質管理推行架構可以幫助

TQM implementation framework can assist Hong Kong organisations to redefine organizational needs and diagnose implementation obstacles for introduction and development of TQM practices in their own continuous improvement journey. The correct use of the framework ensures that an organisation puts in place the key features of an improvement process. The following paragraphs are the benefits derived by the organisations that have used the framework:

1) Developing the framework provides a mechanism for debating continuous improvement strategies, plans, actions and initiatives and helps to generate a common level of TQM understanding and reconcile views and opinions. It also assists management to identify the factors that can slow down the process of improvement (e.g., inconsistent objectives, insufficient involvement and ownership, lack of data, lack of operator involvement, failure to complete projects and break-up of improvement teams). The framework helps to pinpoint and eradicate weaknesses in the current TQM approach of the organisation.

2) The framework provides the means for the management committee and/or the TQM Steering Committee to assess the progress made by the business against the plans developed and ensures that issues are followed through. In understanding this, task problems can be identified and appropriate countermeasures developed.

3) Use of the framework requires all members of senior and middle management to be involved in the planning process, thereby developing ownership of the resultant plans. The prioritising of the framework features, in

香港組織重新定義它們的品質需求，及在持續改善旅途中引進及發展切合它們的需要的全面優質管理運作。正確使用該架構可幫助組織利用其關鍵特質推展改善過程。以下段落導出組織從使用架構可獲取的益處：

1) 此架構的製定能提供持續改善策略、計劃、行動及創始力的辨論機制，有助產生對全面優質管理的共同了解及調解不同的觀點及意見。它亦幫助管理層識別減慢改善過程的因素(例如不一致的目標、不足夠的參與及擁有權、缺乏資料、缺乏操作員參與、未能完成專題項目及改善小組的解散等)。同時架構亦可助指出及根除現存組織的全面優管理的弱點。

2) 此架構提供管理委員會及/或全面優質管理領導委員會可行的方法去評審發展計劃的進度，確保所有事項順應計劃進行。它同時可識別任務上的問題及發展合適的對策。

3) 此架構需要所有高層及中層管理參與整個計劃過程，藉此發展結合計劃的擁有權。把架構特質按時間表定下優先次序，連結業務及商業需要，確保全面優質管理是業務計劃過程其中重要部份。同時，它亦可與其他策略相結合。

conjunction with business and commercial needs against a time scale, helps to ensure that TQM is part of the business planning process and integrated with other strategies.

4) The framework provides a means of communicating in organisation-specific terms, what is involved in a process of continuous improvement and provides the essential logic of why the organisation is adopting and progressing TQM and what is involved. It ensures that discussions on continuous improvement are both structured and specific.

5) The framework provides a common approach and language for the businesses of a multi-site operation, in particular between Hong Kong office and factories in the mainland. In this way, it avoids confusion with common suppliers and customers and presents a consistent approach and TQM image to both employees and the marketplace.

6) The framework can be used not only to assess the maturity of TQM but also to audit whether or not certain features of the framework are firmly in place. In this way, the next set of priorities can be identified.

7) The framework once developed and customised, becomes a reference point for current and future improvement initiatives. It builds on the quality initiatives already in place and guides the organisation's development of TQM in a formal manner.

Achieving Business Excellence through TQM

Manufacturing industries have been and will continue to be a mainstay of the Hong Kong economy. In order

4) 此架構提供有效的組織溝通的溝通方法，指出持續改善過程的需要，提供組織採用的全面優質管理的邏輯及進行的考慮等。它同時亦確保有完整及明確的持續改善討論。

5) 此架構提供跨地區運作業務上推展全面優質管理的共識途徑及語言，尤其是香港與大陸工廠之間的運作及溝通。採用該架構，亦可避免與供應商及與客戶之間有不必要的混亂，此架構亦能推介一貫的優質管理形象給僱員及市場。

6) 此架構不但可以用作評審組織品質管理的成熟程度，還可以審核組織內某些特質是否能堅定執行。從而識別一套推展全面優質管理的優先次序。

7) 當此架構到達成熟發展及應用時，它可成為啟動現時及將來品質改善的參考點。它植基於組織既有的改善品質的原動力上，同時引導組織方式發展全面優質管理。

透過全面優質管理獲取業務強勢
製造業曾是及仍會繼續成為香港經濟的其中主要骨幹。為了增強香港在國際市場的競爭力，很多人已強調需要發展高科技及高增值產品。引進新高技術及新生產

to enhance the international competitiveness of Hong Kong, many people have emphasised the need for the development of hi-tech and high value-added products. The introduction of new and high technologies and new production methods is undoubtedly important. Equally important is the adoption and implementation of an efficient and effective approach to the management of quality. TQM is both a support and a challenge to the new emphasis on firm-specific resources in sustaining organisational performance. Adoption of TQM can facilitate an adequate application of new technologies, equipment and production methods, allocation of resources, improvement of production and management efficiency, attainment of environmental, health and safety requirement, and enhancement of public and social accountability. To better accommodate the increasing need to improve quality performance of Hong Kong companies, a TQM implementation framework has been developed which is based on Hong Kong and Mainland China operating experience.

The framework can serve as a blue print for TQM-oriented performance improvement that help foster a total quality culture and promote continuous improvement practices in an organisation. It provides a holistic view of company-wide continuous improvement. The 3 phases (i.e., awareness, preparation and implementation) of TQM practices enable companies to drive the TQM adoption and sustain continual improvement through a stepwise self-assessment process. The 22-step implementation guideline helps companies to establish a TQM infrastructure and support improvement initiatives by setting a TQM platform for planned changes. The framework and accompanying guideline can be customised to suit different needs and

方法是無庸置疑的。同等重要的是推展有效率及成效的途徑來管理及改善品質。全面優質管理利用公司的整體資源支持及爭取持續的表現。推展全面優質管理可配合應用新技術、設備及生產方法、有效分配資源、改善生產及管理效率、切合環境、健康及安全等要求、至加強公眾及社會的義務等。為適應現今對品質表現的渴求，此書推介一套由UMIST全面優質管理模式發展而成的本地化全面優質管理架構。

此架構可作為全面優質管理表現的改善藍圖，它有助於培養全面品質文化及促進組織的持續改善。它提供整體公司化的持續改善意識。依照架構的三個階段（意識、籌備及推行）可助公司有效推展全面優質管理及逐步自我評審可持續的改善。有關22個步驟指引亦能有助建立全面優質管理基礎結構及裝置改變平台去支援改善的動力。整個架構及附隨的指引是可以配合不同組織的需要及要求。在此架構裝置後，組織只需遵照及維持推行它們的品質管理系統。無論組織的大小，所處的地點及業務性質，適當的裝置可助組織維持業務的表現改善及保持競爭優勢。

此書報告試驗組織在ISF計劃的經驗，在應用此架構後它們都能

requirements of individual organisations. The framework once installed, it can help organisations to sustain their performance improvement and secure a competitive position, irrespective of their size, location and business nature.

This book has also reported the experiences of the pilot organizations in the ISF project that have applied the framework to enhance their performance and attain continual improvement. The success provided insights of the effectiveness of adopting the framework that benefits the Hong Kong industries. This also leads to a positive “snowball” effect that help promote and facilitate the development and implementation of TQM in other organisations of different industry sectors, resulting in improved performance of Hong Kong industries.

提高表現及獲取持續的改善。整個計劃亦揭示採納架構的成效，有助於香港工業發展。它帶動了滾雪球的效應，有助促進不同工業領域組織發展推展全面優質管理，改善香港工業的整體表現。

全面優質管理架構之 二十八個主要元素

28 Key Elements of TQM Framework

The "Organising" Elements “組織” 元素:

1. Formulating of a clear long-term strategy for the process of continuous improvement, integrated with other key business strategies, departmental policies and objectives
明確的表達清楚長遠持續改善策略，整合在其他關鍵商業策略、部門政策及目標

Strategies are long-term approaches that the organisation intends to follow in order to achieve its long-term objectives. A long-term continuous improvement strategy should be formulated and integrated with the business plans, departmental policies, plans and objectives. It also includes the development of a quality policy and quality strategy. The aim should be to integrate TQM with the long-term business planning process. The strategy must then be developed into a series of continuous improvement plans and objectives for each department and function, and also for those areas and aspects of the business which have been identified as requiring improvement, and methods of monitoring and assessment developed. Such plans will result from the other three section elements of this framework, and also from actions and initiatives that are independent of it. Typical examples of long-term strategy include the establishment of a company-wide quality management system (e.g., the ISO 9000 series, SA 8000 and QS 9000), re-engineering of business processes, development of supplier-customer partnerships, and benchmark of world-class business and operations activities.

策略是組織為了完成長遠目標而意欲遵從的長遠途徑。一項長遠持續改善策略應明確地表達及結合著業務計劃、部門政策、計劃及目標。它亦包括發展品質政策及品質策略。應結合全

面優質管理及長遠業務計劃過程。策略需發展一系列為每部門及功能的品質改善計劃及目標、監察方法及評審，與及包括那些需要改善的業務方面及範圍。如此的計劃將會由架構其他三元素及其他獨立行動及動力產生。長遠策略典型例子包括建立公司品質管理系統(例如ISO 9000系列、SA 8000及QS 9000)、業務過程重組、及發展供應商客戶伙伴關係及借鑑世界級商業及運作活動。

2. Definition and communication of a common organisational definition of quality, TQM and quality 解釋及傳播組織的品質及全面優質管理統一定義

Organisations should define the terms used (e.g., TQM, quality performance, and continuous improvement, etc) that contribute to the improvement initiative or indeed whether a term is needed. The development of a glossary of quality-related terms should be considered; useful guidance is provided in ISO 8402:1994 and BS 4778 (part2): 1991. A lack of such definitions can hamper the progress of continuous improvement initiatives, it will also help prevent misunderstanding and different interpretations being made by the various functions and levels within the business. In particular, some people have difficulty in understanding the difference between TQM and an ISO 9000 series quality management system.

組織應定義所有供獻改善動力的述語(例如全面優質管理、品質表現及持續改善等)，及確定某一述語是否需要。應考慮發展品質有關述語的詞匯表，可用的指引由ISO8402:1994及BS4778(第二部份):1991提供。缺乏此等定義可以阻礙品質改善動力的發展，它會協助防止誤解及組織內在不同功能級別有不同的解釋。特別是部份人仕有困難了解全面優質管理及ISO 9000系列品質管理系統的差別。

3. Selection of an approach to TQM

選擇全面優質管理途徑

This will depend on the existing culture of the organisation as well as the preferences of senior management, but is an important element in its success. Whichever TQM approach is adopted (e.g. the use of a quality consultant, or the adoption of the writings and teachings of the quality management gurus), it should be flexible and capable of being fine-tuned to suit the business needs and objectives of the organisation.

此會依靠組織現時的文化及高層管理的偏好，但它是十分重要的成功元素。無論採用那一種全面優質管理途徑(例如使用品質顧問或採納品質管理方面的權威著作及教義)，它應是靈活的及有能力的為滿足業務上的需求及組織的目標而細緻調整。

4. Identification of the organisations and people (internal and external) who can be sources of advice on aspects of TQM

識別可以成為全面優質管理建議來源的組織及人們(內部及外部)

In an organisation which has a large number of relatively small locations or has a variety of

operating sites spread across a country, it is recommended that a "directory of resources and experiences" needs to be compiled to encourage co-operation and mutual assistance. Such advice is also required to develop the quality system to meet the requirements of the ISO 9000 series system standards and the application of particular quality management tools and techniques. 若組織有大量相對細小場所或在同一國家有多種類運作地點，建議它們編輯“資源及經驗指南”鼓勵互相合作及輔助。建議發展品質系統符合ISO9000系列系統標準及應用特別的品質管理工具及技巧。

5. Identification of stages of improvement activity, taking into account the starting point of the organisation, the motivation for continuous improvement and the tools that may be applicable

識別改善活動各階段，考慮組織的起點、持續改善的動力及可以適用的工具

Typically, continuous improvement activities will go through a series of stages encompassing awareness, education and training, consolidation, problem identification, improvement planning, implementation of quality plans and assessment. These stages should be identified at the outset.

A formal project planning methodology, which requires the identification of milestones and their ongoing monitoring, is also vital at this stage.

持續改善活動將會典型地經過一系列階段環繞意識、教育及培訓、團結、識別問題、改善計劃、推行品質計劃及計審，這些階段一開始便應要識別清楚。正式的計劃方法所需的時間表及不斷監察亦是十分重要。

6. Recognition of executive leadership, tangible commitment, and support as being crucial at all stages

認知行政領導能力、確實的承諾及支持是所有階段的關鍵

Such commitment should be demonstrated in actions such as allocating time to understanding and becoming involvement in continuous improvement, being visible and accessible, holding discussions with people at the operating level of the business, providing words of encouragement and advice, and placing "quality" issues at the top of every business agenda. Management should identify key performance measurements, promote the use of quality management tools and techniques in everyday work activities, develop personal action plans, and seek feedback on their management style. They also need to act as a mentor to quality improvement teams, attend training sessions, write articles on "quality" issues in the company newsletter, and more importantly, ensure that decision made are constant with the agreed objectives and plans, and exhibit a passion for TQM.

承諾應以行動證明例如分配時間了解及參與品質改善、成為可見的及易接近的、與業務運作級別人員開會討論、提供獎勵及建議忠告、安排品質問題在每次業務會議議程的最高地位。管理應識別關鍵表現測量、促進日常工作活動使用品質管理的工具及技巧、及發展個人行動

計劃及尋求他們管理風格的反饋。他們亦需要扮演品質改善小組指導者角色、參加培訓會議、在公司刊物編寫品質問題的文章，更重要的是確保所作決定是與已同意的目標及計劃一致，及展示對全面優質管理熱心。

7. Development and communication of vision and mission statements that are concise and understandable to all employees

發展及傳播簡明及所有僱員可以理解的遠景及使命聲明

It is important to help employees understand, identify with and relate to the vision and mission, and also to outline what needs to be done to make these statements become a reality. This will, in turn, help to unite and focus employees on where the organisation is heading. Such communication should include the benefits that will accrue from TQM and how it will affect the way employees go about their jobs. The format and timing of education/awareness raising events should also be outlined. The influence of the historical culture of the organisation, its people, processes, technology, product/services and the views of its current senior executives must not be underestimated in this process. Regular assessments should also be carried out to see whether employees believe that the organisation is getting closer to achieving the objectives outlined in these statements. Effective communication is a key component of TQM, and that should be two-way and use jargon free language. It must be good enough to win the "heart and minds" of all employees. The means of communication should include both written and verbal mediums (e.g. notice boards, white-boards, newsletters, booklets, team meeting minutes, breakfast and birthday meetings, etc).

協助僱員了解及識別有關遠景及使命是十分重要，並概述需要做些什麼使這些聲明成為事實，最終協助聯合及集中僱員朝向組織的方向。此類溝通應包括全面優質管理自然增長的益處及怎樣影響僱員執行工作，亦應概述提高教育/意識事項的格式及時間。過程中不要低估組織歷史文化、它的人員、過程、技術、產品/服務及現時高層行政人員觀點對過程的影響。應執行定期評審理解僱員是否相信組織接近完成聲明概述的目標。有效溝通是全面優質管理的關鍵零件，應該相向及使用沒有專門術語的語言。它必須充份的獲得所有僱員的“熱心及思想”。溝通的方法應包括同時書面及口述媒介(例如報告版、白版、刊物、小冊子、小組會議記錄、早餐及生日會議等)。

8. Establishment of a formal programme of education and training

建立正式的教育及培訓計劃

This is important to build the skills and confidence of employees and should involve basic job and process training, including induction, TQM awareness, and training in the use of tools, techniques and systems. It must provide a common message and encompass the whole organisation starting with the senior management team and members of the TQM Steering Committee. Training should also aim to identify potential improvement projects.

建立僱員技術及信心是十分重要，應包含基本工作及過程培訓，包括就職、全面優質管理意識及使用工具、技巧、及系統的培訓。它必須提供共同訊息及圍繞整家組織，並由高層管理小組及全面優質管理委員會成員開始。培訓應針對識別有潛力的改善計劃。

9. Establishment of an organisational infrastructure that will ultimately facilitate local ownership of continuous improvement

建立最終會促進局部持續改善所有權的組織基礎結構

The TQM Steering Committee should provide the direction, and actions include the decisions on the Committee membership, the role and meeting frequency. In some companies, it may be more appropriate for TQM Steering Committee issues to be discussed as an agenda item as part of the monthly management/Board of Director meetings. The setting up of local steering groups and identification of improvement coordinator, facilitators and team leaders along with clear definition of their roles is also required. They help ensure that the continuous improvement actions that have been agreed can be carried through with the agreed budgets. It is also important that the improvement structure does not duplicate the existing management structure.

To avoid any potential management discrepancies, an assessment of the current organisational structure is needed in terms of its suitability for starting and sustaining.

全面優質管理領導委員會應提供方向及行動包括決定委員會成員、角色及會議頻率。在部份公司全面優質管理委員會的事項可能比較適合成為每月管理/董事局會議其中一項會議議題，亦須要成立局部領導小組及識別改善協調者、促進員及小組組長，清楚訂明他們的角色。它們確保持續改善行動已被同意及在已同意的預算內推行。改善結構沒有與現時管理結構重復是十分重要。為避免任何潛在管理差異，需要評審現時組織結構是否適合開始及維持品質改善。

10. Establishment of teamwork that is designed to become part of the organisation's method of working

建立設計成為組織工作方法的團隊

In the first place, a review is needed for any teams that are already established, in conjunction with their previous and current projects. Following this, taskforces/project teams and cross-functional improvement teams should be established to address the major problems facing the organisation, followed by the setting-up of department improvement teams. It is important that the organisational infrastructure can adapt to the changes which teamwork will bring. The operating characteristics of the teams to be employed in continuous improvement should be defined and communicated, along with the role of sponsor, facilitator, leader and member. It is also essential that participants in teams and other continuous improvement activities are volunteers, not "conscripts".

首先需要檢討已成立的小組與以往及現時計劃的關連。然後成立任務部隊/專題小組及跨功能

改善小組找出組織面對的主要問題，繼而成立部門改善小組。組織基礎結構可以順應小組帶來的改變是十分重要。應訂立及傳播小組使用的改善運作特質及贊助人、促進人、組長及成員的角色。小組參與者及其他持續改善活動是自願者而不是被徵召是十分重要。

The "System and Techniques" Elements “系統及技巧”元素

11. Identification of the tools and techniques applicable at different stages of the process of continuous improvement

識別持續改善過程不同階段合適的工具及技巧

A considerable number of tools and techniques have been developed to assist with the introduction and development of TQM. They help organisations to improve performance in the following key areas: to manage processes (e.g. Statistical Process Control), to translate customer requirements to product design (e.g. Quality Function Deployment), to achieve practice breakthrough (e.g. Process Reengineering), and to assess progress and identify strength and areas for improvement (e.g. Self-assessment tools). The areas/projects for the application of these tools and techniques and the conditions (i.e. organisational and people) necessary for the successful application of each tool and technique have to be identified. In the first place, consideration should first be given to identify which tools and techniques employees are familiar with and those that are in regular use. Tools and techniques should be classified as core and optional, depending on their nature and impact on the environment (e.g. manufacturing or service) in which they are being applied.

現時已有相當多數量的工具及技巧協助引入及發展全面優質管理。它們協助改善以下主要範圍的表現：管理過程(例如統計過程控制)、轉變客戶要求為產品設計(例如展開品質功能)、完成實踐突破(例如過程重組)、評審進度及識別強度及改善範圍(例如自我評審工具)。要成功應用每一項工具及技巧就要清楚識別應用這些工具、技巧及條件(指企業組織及人員)的範圍/專題項目。應首先考慮使用僱員熟識及組織常使用的工具及技巧。工具及技巧應分別為核心及可選擇的，視乎它們的性質及應用時對環境(例如製造及服務)的衝擊。

12. Development of the appropriate type of training in the use of tools and techniques, targeted at the right people

發展合適種類工具及技巧的培訓，對準正確的人們

The right type of training helps stop the misuse of tools and techniques that can create an additional set of problems in the introduction of TQM. It is important to select, develop, and customise suitable training packages on tools and techniques for the organisation. There is no correct "formula" for training, since each organisation will be starting from a different position and will have different needs, audiences, topics and views on the delivery mechanisms. However, good performing companies should have well-developed, cyclical formal training

programmes for TQM and have mechanisms in place for determining the effectiveness of the training.

正確種類的培訓協助停止錯誤使用工具及技巧，及避免引入全面優質管理時創做另一套問題。選擇、發展及定製適合組織的工具及技巧培訓套裝是十分重要。既然每家組織會由不同位置開始及有不同的需求、聽眾、題目及觀點，所以不會有正確的培訓程式。但是良好表現的公司應有已發展、循環的全面優質管理正式培訓計劃及決定培訓成效的機制。

13. Consideration of the use of a formal quality system, if one is not in place

考慮使用正式的品質系統，若果沒有一個適合

If such a system is already in use, then some evaluation of its contribution to continuous improvement is vital; the objective should be to continually improve and strengthen the quality system and ensure that any improvements made are built into the system. The requirements outlined in the ISO 9000 series can be used as a good starting point.

如果已推行一個系統，評審它對持續改善的供獻是十分重要。目標應該是不斷改善及強化品質系統及確保任何改善都建立在系統內。ISO9000系統描述的要求可以是很好的起點。

14. Identification and implementation of other systems and standards that may be required by customers, legislation, or in order to compete

識別及推行其他系統或標準，可能是客戶、法律要求或為了競爭

Any other systems and standards that may be required as part of future contractual or legislative requirements, or simply in order to complete in certain markets should be identified and implemented. Examples include ISO 14001:1996 Environmental Management System, OHSAS 18001: 1999 Occupational Health and Safety Management System, and others standards and code of practices (such as, BS 8800, SA 8000, and QS 9000, etc). Besides, ethnical, social and political issues will also have to be considered.

識別及推行任何其他系統及標準可能是將來合約及立法要求的部份，或簡單地是為了某一競爭市場。例子包括ISO14001:1996環境管理系統、OHSAS18001:1999職業健康及安全管理系統及其他實踐準則(例如BS8800、SA8000及QS9000等)。除此之外，亦要考慮民族的、社會的及政治的問題。

15. Adoption of process analysis and improvement as a continual part of the organisation's quality improvement process

採納過程分析及改善，作為組織品質改善過程繼續的部份

A focus needs to be placed on processes (e.g. order generation, business planning and control) rather than functions. Process analysis gives emphasis to the centrality of quality throughout the business process, and also focuses attention on customer and supplier relationships. Once key business processes have been identified along with their process owners, rationalisation,

simplification and identification of key performance measures can occur. This forms the basis for improvement actions.

寧願焦點放在過程(例如產生訂單、業務計劃及控制)而非功能。過程分析強調業務過程以品質為中心，及集中注意力在客戶及供應商關係。當已識別關鍵的業務過程連同它們的過程擁有者，合理化、簡單化及識別關鍵表現量度是可以隨之發生。

The "Measurement and Feedback" Elements “量度及反饋”元素

16. Identification and definition of key internal and external performance measures to assess the progress being made and to ensure customer satisfaction

識別及定義關鍵內部及外部表現標準來評估進度及確保客戶滿意

Key internal and external performance measures should be identified and defined to assess the progress being made with continuous quality improvement. The measurement process involves a two-way flow of information between the organisation and its customers and suppliers.

These parties should be consulted as part of the process of deciding what measurements to make. Care must be taken to ensure that appropriate measures are developed, defined clearly and used. In other words, the measures should be visible, involved all those concerned, have a common goal, have an undistorted collection of data and be simple for presentation. The chosen performance indicators must be monitored and communicated on a regular basis. Four typical performance parameters are defined targeting the end users, shareholders, employees and the community. The first measure relates to the performance of actual product or service in terms of customer satisfaction and specific features/characteristics and attributes defined by customers. The second is the performance of financial return in areas of costs, prices, sales volume, profits, productivity, efficiency, capital utilisation, and return on investment, etc. The third regards employee satisfaction in terms of job satisfaction, and specific needs and values defined by employees. The fourth measures the social impact such as atmosphere emissions, liquid discharge, and waste disposal and recycling, etc.

People are encouraged when they are able to see the results of their activities and efforts on key result areas and measures. It is useful to feed back data on typical mistakes and what long-term corrective action has been taken to avoid them being made again; and achievable goals and targets should be established. It is also important to build results and corrective actions into improvement plans and standardise the improvements across the organisation. Senior management must recognise that gathering data for external measures is time-consuming and extra resources may be needed. Assessment of supplier performance and feedback of any measurements along with corrective actions is the key for performance improvement.

應識別及定義關鍵內部及外部表現量度及評審不斷品質改善的進度。量度過程包括組織及它的客戶及供應商資料雙向流動。在決定使用什麼量度時應諮詢這些團體。必須小心確定發展、清楚定義及使用合適的量度。換句話說，量度是應該是易見的、有關的人員都參與、有共同目標、收集資料時沒有失真及容易陳述。已選擇的表現指示器必須定期監察及傳播。四種典型表現變數是定義目標使用者、股東、僱員及社團。首先量度客戶定義的特性/特質及屬性，客戶滿意的產品或服務表現。其次是財務回報的表現，範圍包括成本、價格、銷售量、利潤、生產力、效率、資本利用及投資回報等。第三是注視僱員的滿意，參照工作滿意及僱員定義的特別需求及價值。第四是量度社會的沖擊，例如氣體散發、液體排放、廢物處理及循環再用等。

當人們看見他們活動的結果及努力範圍及量度的結果，他們會感到鼓勵。反饋典型錯誤的資料及採取過什麼長遠糾正行動避免它們再發生是十分有用，同時應建立可完成的目標。結果及糾正行動建立於改善計劃及組織的改善標準化亦十分重要。高層管理必須認可收集外部量度資料不是浪費時間及需要額外資源。評審供應商表現及反饋任何沿著糾正行動的量度是改善表現的關鍵。

17. Discussion with customers, about expected performance, needs, and expectation, using a variety of techniques

使用多種的技巧與客戶討論期望的表現、需求及期望

This must be an ongoing exercise to ensure that gaps between actual performance and customer needs and expectations are identified and analysed, and actions put in place for closing the gap. There must be a methodology and system for analyzing and feeding back the data gathered from customers by such means; the same applies to data on competitors.

必須不斷識別及分析實際表現與客戶的需求及期望之差別，及執行結束差別的行動。必須有方法及系統地分析及反饋收集自客戶的資料，亦適用於競爭者的資料。

18. Consideration of benchmarking, once the organisation has taken some steps down the continuous improvement journey

當組織在持續改善旅程已展開一些步驟，考慮典範借鑑

The concept of benchmarking is a proven technique for assisting companies with a continuous process of quality improvement. It is a process whereby internal performance and practices are compared to other companies, including the superior performing companies, in a bid to develop, improve and achieve best practice that lead to improved performance.

借鑑的概念已証實是協助公司持續改善品質過程的技巧。它是內部表現及實踐與其他公司比較，包括表現出眾的公司，以求獲得發展、改善及完成最佳實踐達至改善表現。

19. Consideration of various means for celebration and communication of success, and the development of methods for recognising the efforts of teams and individuals

考慮各種方法慶祝及傳播成功，發展認知團體及個人努力的方法

The issue of ownership for quality assurance and improvement is linked to providing adequate recognition, rewards and incentives for quality efforts and in this way the message that quality is a strategic concern is reinforced. Publishing successes and awards attained would be an effective means of communicating how people have tackled continuous improvement. It helps to build in people's minds that beneficial changes have started to take place, things that at one time appeared impossible are now possible and helps convert the cynics - with published evidence of success that they cannot say TQM is not working. Recognition and communication of success can be facilitated in a number of ways. Examples include publicity in the company newsletter, personal "thank you" and "praise" notes, small tokens of appreciation (such as meals, certificates and trophies), special functions (such as celebration days presentations, dinners, overseas trips), allocation of shares in the company, and there is also recognition of performance by customers. In some organisations, people do not welcome individual recognition as they may feel uncomfortable by peers but in others, tokens of recognition are warmly desired and appreciated. To help in deciding the most appropriate way to celebrate success, it is recommended that views from employees should be sought.

品質保證及改善的擁有權連結著提供合適認知、獎勵及激勵的品質動力，以此方向可加強品質是策略的關注的信息。公布取得的成功及獎項將會是有效方法傳播人們怎樣推展持續改善。它協助建立人們的信念，有益的改變已開始執行、曾經是不可能的事現在已有可能，及協助轉變好譏諷的人-以已公佈成功的証據使他們不可以說全面優管理是不可行。認知及傳播成功可以有很多途徑促進。例如包括在公司刊物宣傳、個人“多謝你”及“讚美”便條、感謝的小象徵(例如聚餐、証書及紀念品)、特別節目(例如慶祝日演出、晚餐、海外旅遊)、分配公司股份及客戶讚譽表演。部份組織內，部份人事不歡迎個人讚譽因為他們可使同事感覺不舒適，但在其他組織，感謝的象徵是熱心的期望及欣賞。建議從僱員觀點尋找合適方法慶祝成功。

20. Consideration of linking rewards to continuous improvement activities and results

考慮聯系獎勵及持續改善活動及結果

Continuous improvement should be a natural part of every person's job but people at different levels of the organisations have widely differing expectations of what continuous improvement means to them personally and the company. Financial reward for participation in improvement activities should be discouraged but perhaps not overlooked.

持續改善應該是每位人仕工作自然的一部份，但在組織內不同級別的人員對個人及公司持續改善的意義有廣大不同等期望。參與改善活動的財務獎勵應該不鼓勵，但或許不能忽視。

21. Utilisation of some means of assessing the progress towards world-class performance

利用一些方法評估邁向世界級表演的進度

Once some of the basic steps in the continuous improvement process have been in place, the proven means of assessing the progress of business towards world-class performance should be used. For example, the Malcolm Baldrige National Quality Award, the European Quality Award, or other national and regional quality excellence awards should be considered.

當已執行部份持續改善過程基本步驟後，應使用已驗證方法評審公司邁向世界級表現的進度。例如考慮Malcolm Baldrige National Quality Award、European Quality Award 或其他國際及區域品質卓越獎。

The "Changing the Culture" Elements “改變文化”元素

22. Assessment of the current status of organisational culture before developing and implementing for change

評估現時組織文化的狀況以作發展及推行改變

An assessment, from both management and employee perspectives, of the current status of the organisational culture and employee satisfaction should be undertaken before firm plans for change are developed. An organisation needs to be able to measure all the culture changes during the improvement process. It is important to have hard data rather than a vague impression of prevailing attitudes and levels of job satisfaction. By clearly identifying current attitudes and levels of job satisfaction, an organisation can establish a baseline against which to measure future gains. Senior management must be prepared to resolve conflicts, and resistance to change which is identified in the assessment.

發展穩固改變計劃前，應從管理及僱員觀點評審現時組織文化現在狀況及僱員滿意。組織需要有能力量度所有改善過程的文化改變。寧願持有實質資料而非流行態度及工作滿意程度的含糊印象是十分重要。清楚識別現時態度及工作滿意程度，組織可建立量度將來增益的底線。高層管理必須預備解決評審時識別出的矛盾及改變的阻力。

23. Recognition of the ongoing nature of culture change rather than a prerequisite for TQM

寧願認知自然進行的文化改變而非全面優質管理必須的

Culture change must be recognised as ongoing, rather than a pre-requisite to the introduction of TQM. Some degree of culture change in terms of senior management commitment and leadership and provision of adequate resources must however take place prior to and as part of the Organising stage. In planning any culture changes, it is useful to develop thinking along the lines of "where are we now?" and "Where do we want to be?" Middle management must be involved in the planning process since the burden of change falls on them.

文化改變必須是不斷進行，而非只為引入全面優質管理前必要的。部份程度的高層管理承諾

及領導文化改變及供應合適的資源則必須在組織階段或之前執行。計劃任何文化改變時，沿著“我們現時在那處？”及“我們希望朝向那處往？”的思想發展是十分有用處。中層管理必須參與計劃的過程因為改變的擔子落在他們身上。

24. The development of plans for change that enable it to take place in a consistent and incremental manner

發展改變計劃使它以前後一致及增長方式進行

Experience indicates that if the change is too great and unplanned, the organisation will revert back to the status quo. Change should be planned and take place in a consistent and incremental manner. Clear and public displays of key indicators and "how are we going" data help to ensure that the changes which are made are real and that no slippage occurs. Plans for changes must be outlined in specific terms and, where possible, qualified against a time scale. A learning process must also be set up within a context of coordinated organisational and managerial initiatives, to promote the spread of the new culture and the development of new attitudes. Strategies also need to be established for overcoming resistance to change and helping to create a climate conducive to change.

經驗顯示若改變太大及沒有計劃，組織將會恢復原狀。應以一致及逐步增加方式計劃及執行改變。清晰地展示關鍵指標及“我們怎樣前往”資料可以協助確保實質執行改變及沒有滑動發生。改變計劃必需以特定述語描述，如有可能以時間衡量。學習過程必須建立在綜合組織及管理主動背景內，促進新文化傳播及發展新態度。亦需要建立策略克服改變的阻力及協助創造有助於改變的氣候。

25. The recognition of the role of people within the organisation

認知人們在組織內的角色

If culture change is to be successful, the people-based factors in the organisation must be taken into account. The way people are treated is vital, since they are an asset whose value to the organisation can be increased by careful nurturing or decreased by poor management. It should be recognised that most organisations comprise people of differing ages, background, skills, abilities, levels of enthusiasm, levels of flexibility and ability to accept change. The means of developing and involving people must be identified; a skills audit is a useful starting point for this. For example, employees will be more motivated to accomplish organisational goals and objectives if they have the authority and are empowered to make decisions.

若要成功改變文化，必須考慮組織內以人為本的因素。待人的方法是十分重要，因為他們是組織的資產，小心的培養可令它增長，差劣的管理會令它減少。大部份的組織包含不同年紀、背景、技術、能力、熱心程度、適應性程度及接受改變的程度，必須發展使各人員參與的方法，技術審核可以是十分有用的起點。例如僱員會更加激勵地完成組織的目標若他有權及獲授權作出決定。

26. Identification of the interrelationships of all activities, and the way in which they contribute to quality within the organisation in order to minimise conflict

識別所有活動的相互關係及他們對組織內品質的供獻來減少矛盾

Conflicts may arise where the impact of strategic initiatives meets the problems of day-to-day running of an organisation. There will also be a variety of initiatives going on at one time, many of which will affect staff directly (e.g., installation of new computer systems, development of information technology, cost-cutting exercises, and marketing promotions, etc), and others may indirectly contribute to the quality of product and service provided. It is important that management and staff understand the relationship between them and the formal continuous improvement initiatives, otherwise they may be perceived as being in conflict and overlap, and thus result undesirable outcomes. The inter-relationships of all activities in the organisation and the way in which they contribute to improvement should be identified, so that conflicts minimised and quality becomes part of the way in which the business is run.

策略始創力沖擊著日常的問題是可引起矛盾的。多種的始創力會同時進行，大部份會直接影響職員(例如裝置新電腦系統，發展資信科技，減低成本和市場推廣等)，其他可能間接供獻產品及服務品質。管理及職員了解他們間的關係及持續改善始創力是十分重要，否則他們可能感覺矛盾及重疊而演變出不良的結果。應識別出組織內所有活動的相互關係及它們供獻改善的方法，使矛盾減少及品質成為日常業務的一部份。

27. Identification of factors that indicate that TQM has started to change culture

識別顯示全面優質管理已開始改變文化的因素

Without the identification of these factors it is difficult to know whether culture changes is taking place, and the concept may be undermined by "lack of results", Factors that indicate that culture is changing, include:

- People see for themselves the need for quality management tools and techniques
- Motivators and champions start to emerge from various parts of the organisation.
- People talk processes and not functions
- Changes to procedures and systems are easier to make
- People are not afraid of expressing their views
- People show a positive response to recognition
- Employees are viewed by senior management as an asset and not a cost
- People volunteer to take on tasks which previously they would have said "It is not my problem" and have involved considerable negotiations between management and Unions
- Stop stewards assisting management to explain new procedures
- Ideas and suggestions start to flow from the shop floor
- Teams meeting without pay in their own time
- The distinction between the "manager" and the "managed" becomes hazy

- TQM continues and middle management stay committed in the face of organisational instability
- Quality circles asking management to suggest projects
- Senior management shifts their attention from TQM to concentrate on other things and improvement activities continue.

沒有識別這些因素，是十分困難知道文化是否正在改善，概念會被“缺乏結果”逐漸損壞。

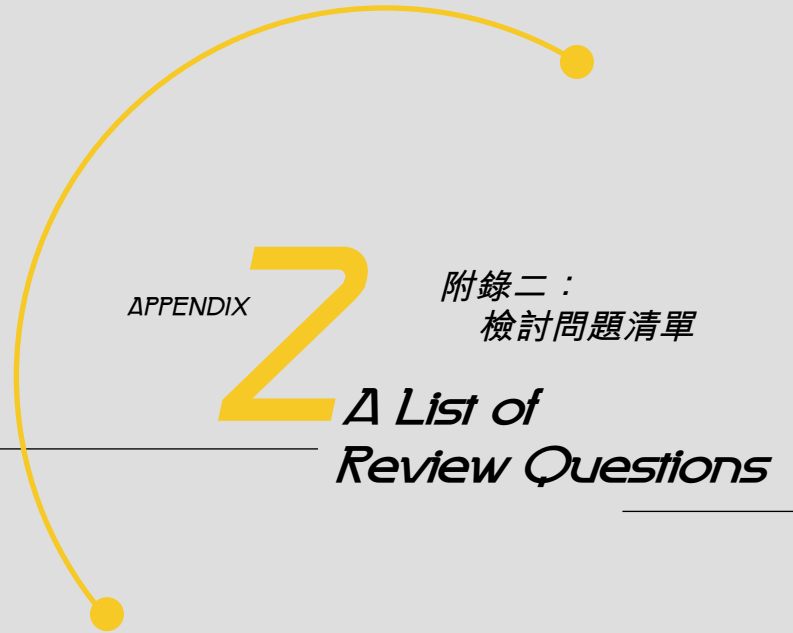
顯示文化正在改變的因素包括：

- 人們看見自己需要品質管理工具及技巧
- 激勵者及擁護者在組織內不同部份顯現出來
- 人們講求過程而不是功能
- 更容易改變程序及系統
- 人們不害怕表達他們的觀點
- 人們對被認知表達正面反應
- 高層管理視僱員為資產而非成本
- 人們願意承擔任務，以往他們會說“它不是我的問題”，在管理及工會間參與相當的談判
- 停止籌備員代管理解釋新程序
- 意見及建議由車間開始流動
- 小組會議不再使用他們本身時間
- “經理”及“被管理”的區別變得模糊
- 全面優質管理繼續，中層管理在組織不穩定情況保持承諾
- 品質圈要求管理建議專題項目
- 高層管理轉移注意力，由全面優質管理轉為專注其他事項，及改善活動繼續執行

28. Consideration of the culture of a country and its people in planning for change 計劃改變時考慮國家及其人民的文化

In planning for change, thought needs to be given to the culture of a country and its people and also to the culture within a geographical region of a country. For example, there is a tendency for Chinese people not to be open in reflecting opinions and ideas, whilst Hong Kong people are receptive to change but look first for personal monetary reward and benefits such attitudes can be in conflict with culture change which is a longer-term process.

改變文化時，需要考慮國家的文化及它的人民，及國家地理區域內的文化。例如中國人仕傾向不開放地反映主張及意見，雖然香港人仕願意改變，但他們大多首先注視個人金錢的獎勵及益處，此態度可與較長期文化改變過程產生矛盾。



- 1 How should an organisation formulate long-term strategies for continuous improvement?
企業組織應如何建立長遠持續改善的策略？
- 2 How should these strategies be integrated to the implementation of TQM?
這些改善策略應怎樣結合在全面優質管理的實施內？
- 3 Which tool or technique should be chosen for specific circumstances of TQM adoption?
如何選擇合適的工具或技巧去配合全面優質管理的實施？
- 4 How should the tools and techniques be monitored to determine if they are being applied in an appropriate manner?
應怎樣監察這些工具及技巧在推行全面優質管理的效用？
- 5 How should appropriate performance measures be developed?
應怎樣設立評估企業表現標準？
- 6 What measures will be taken to insure that appropriate regulatory requirements are met?
如何取決那些評估基制是乎法律上的規定？

- 7 How should the current status of the organisational culture be evaluated?
應怎樣評核組織文化的現況？
- 8 How can the planned change be made in a positive manner?
怎樣可有效地推行對公司有正面導向的計劃改變？
- 9 What are the objectives needed to satisfy customer expectations and provide improvement in overall business efficiency?
怎樣設定公司的目標去滿足客戶期望及提高整體業務效率？
- 10 Is the management commitment and leadership in the TQM drive to the visible degree?
公司的管理層對全面優質管理推行的承諾及領導是否明確易見？
- 11 Have the management defined the responsibility, authority and relationships that affect the adoption of TQM practices in the organisation?
管理層是否已確立對全面優質管理實踐的責任、權力及關係？
- 12 Have the management planned for the provision of resources in training, work space, recognition and rewards, etc for executing TQM implementation plan and programmes?
管理層是否已為執行全面優質管理推行所需的員工培訓、工作空間及獎勵等資源作充份的預備？
- 13 Have the management prepared a documented procedure for the conduct of management reviews and evaluation of the TQM adoption status?
管理層是否已設立整套執行管理檢討及評審全面優質管狀況的文件化程序？
- 14 How can the interface between departments/functions be identified, and how can the information passing across the interface be controlled?
各部門與功能之聯繫應怎樣確定，及當中有關全面優質管理的資訊傳遞應如何控制？
- 15 Are personnel assigned in their jobs, because they have the necessary skills, experience and knowledge?
職員被指派工作是否因應他們具備所需技術、經驗及知識？
- 16 How should the training programmes be designed for the executives, middle management, supervisors and workers to meet the needs of TQM implementation?
行政人員、中層管理、主管及工人的培訓計劃應怎樣設計以配合推行全面優質管理的需求？

Glossary

詞匯表

Glossary

Best Practices 最佳實踐

- Business and/or quality management practices that are proven to be successful by demonstrating results. 有成功結果証實的商業及 / 或管理運作。

Critical Business Issue 關鍵業務結果導嚮

- An opportunity or problem that is key to the overall success of an organisation. 家組織業績成功的重點機會或問題。

Goals 目標

- Statement of what must be achieved long-term (3 to 5+ years). Goals are frequently expressed numerically. 長遠地(三至五年內)要達成什麼項目的聲明。目標通常以數字形式表達。

Measures 量度

- Quantifiable dimensions and events to indicate progress or predict success of goals and objectives. The specific parameter to be used to determine progress toward achieving an objective or a goal. Measures support the identification and analysis of gaps. 量化的尺寸或事項作為顯示進度或預測目的或目標的成功。確定完成一項目的或目標的進度所使用的變數。量度能支援分辨及分析差別。

Mission 使命

- A company's driving purpose and strategic direction, its reason for existence, encompassing its contribution to the strategic intent. 一家公司的前進決心及策略性方向，它存在的原因，圍繞著策略性意欲的貢獻。

Objectives 目的

- What must be achieved in support of the goals and strategies during the next year. 為支持隨後一年的目標及策略而要完成的項目。

Plan 計劃

- Statement of the means to achieve objectives. Documented, agreed upon activities by which the group or individual will accomplish the objectives within a specific period of time. 使用什麼方法完成目的之聲明。由組別或個人同意及文件化的活動，在具體時間會完成所訂目的。

Self-assessment 自我評審

- A comprehensive diagnosis and review of an organisation's activities and results against a predetermined assessment criteria or a systematic model of business excellence.
廣泛地以預定的評審標準或商業卓越的模式來診斷及評審組織的活動及結果。

Strategic Direction 策略性方向

- The corporate strategic direction communicates the long-term goals for customer satisfaction, employee motivation and satisfaction, market share, return on assets and productivity.
企業的策略性方向傳達客戶滿意、僱員的動力及滿意、市場佔有率、資產回報及生產力方面長遠的目標。

Strategy 策略

- Statement of means that is to achieve the predetermined goals.
使用什麼方法完成預定目標的聲明。

Total Quality Management 全面優質管理

- The mutual cooperation of everyone in an organisation and associated business processes to produce products and services that meet the needs and expectations of customers.
所有員工在企業內及關聯業務的過程內提供的產品及服務的符合客戶的需求及期望。

Values 價值

- Underlying attitudes and beliefs that shape the fundamental approach of the organisation to its business.
組織形成它本身業務的基本態度及信念。

Vision 前瞻

- A statement of direction that provides a vivid picture of a desired state that is both challenging and achievable.
能鮮明地描述挑戰性及可完成的願望的聲明。

Voice of the Customer 客戶的聲音

- Feedback, or stated customer requirements, in the actual words of the customer.
客戶真實地反饋或表達要求的信息。

Chin, K.S. and Dale, B.G.,

Interim Report on ISF Project: Implementing the UMIST Total Quality Management Framework in Hong Kong Manufacturing Industries, December, 1998 (a Government funded project approved by the Industry and Technology Development Council).

ISF 計劃中期報告: 在香港製造工業推行 UMIST 全面優質管理架構, 1998年12月 (由工業及科技發展局核準的政府資助計劃)

Chin, K.S., Dale, B.G. and Chan, K.M.,

TQM Adoption Levels in Hong Kong Manufacturing Industries: An Examination, Proceedings of 3rd Annual International Conference on Industrial Engineering Theories, Application and Practice, December, 1998.

香港製造工業採納全面優質管理的程度: 檢驗。 Proceedings of 3rd Annual International Conference on Industrial Engineering Theories, Application and Practice, December, 1998.

Dale, B.G. and Boaden, R J.,

Quality Improvement framework, TQM Magazine, Vol.5, No.1, 1993, pp.23-26.

全面優質管理改善架構。 TQM Magazine, Vol.5, No.1, 1993, pp.23-26.

Highgrade Resources Limited,

Interpretation and Application of Professor Barrie Dale's TQM Framework, CD-ROM edition, 1999.

說明及應用Barrie Dale教授的全面優質管理架構, 光碟版, 1999.

索引
References

References