



香港城市大學
City University
of Hong Kong

典範借鑑

香港生產力促進局亞洲典範借鑑中心

BOOKLET on BENCHMARKING

Asian Benchmarking Clearinghouse of the Hong Kong Productivity Council

優質變革系列

Quality Transformation Series

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Quality Transformation Series 優質變革系列

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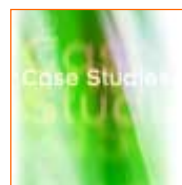
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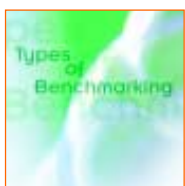
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Foreword

典範借鑑是個不斷學習的過程。競爭形勢不斷變化，如果我們只懂閉門造車，自己走前一步，別人可能已經跨進兩大步。我們必須不斷向優勝的企業借鑑學習，才能趕上對手，超越對手，然後長久維持競爭優勢。

歐美發達國家的經驗說明典範借鑑是提高企業表現的有效手段。本地一些規模較大的機構使用典範借鑑方法多年，促成了多方面的改進。從香港工商業整體來看，這套方法卻似乎還未得到廣泛的利用。

但典範借鑑的功用已引起政府和一些工業扶助機構的注意。香港生產力促進局得到政府工業支援資助計劃的撥款，正為電器業和玩具業各制定一個運作效益評估系統。每個系統包含一套量度企業表現的指標，企業可以依據這套統一的標準評估自己和同業的差別，作為制定改善方案的依據。

香港城市大學出版的這本《典範借鑑》亦得到工業支援資助計劃的資助。這本書對典範借鑑的原理、目標和實行步驟作出了簡明的論述。讀者看完本書後，必會得到這樣的印象：典範借鑑是一套非常有系統、有理論依據、有實效的企業改善方法。

我認為《典範借鑑》一書可以發揮傳播知識的作用，鼓勵企業認識和使用典範借鑑方法。書裡特別提到比較借鑑只是手段，目標是改進自己，超越別人。我相信香港每家企業都是以此作為目標。

鍾志平

香港電器製造業協會會長

Benchmarking is a continuous learning process. Competitive conditions change. It pays to know what other people are doing for not to lag behind. We need to learn from the best in order to catch up and outperform our competitors, and continue to maintain our competitive advantage.

Companies in the developed countries have demonstrated that benchmarking is an effective way to improve performance. Some local leading organisations have used benchmarking for years and achieved results. For the Hong Kong economy as a whole, benchmarking is not widely practised.

Still the benefits of benchmarking have attracted the attention of the Government and some industrial supporting organisations. The Hong Kong Productivity Council, with the support of the Industrial Support Fund of the Hong Kong SAR Government, is developing two benchmarking models, one for the electrical appliances industry, and the other for the toys industry. Each model includes a set of performance indicators. Companies can use it as a standard for performance benchmarking with their counterparts in the industry. The results may lead to improvement plans.

The Industrial Support Fund has also supported the City University of Hong Kong in publishing this benchmarking booklet, which gives a precise introduction to the concept and objectives of benchmarking and provides a step-by-step guide to its implementation. Readers will find that benchmarking as a structured improvement tool is well founded and practical.

I believe the booklet will help transfer the knowledge and encourage the understanding and use of benchmarking. The authors emphasize benchmarking as a means to improve and excel. I think this is a common goal of all organizations in Hong Kong.

Roy Chung
President
Hong Kong Electrical Appliances Manufacturers Association

Foreword by the series editor

系列主編序言

優質變革系列

不斷增加的競爭壓力、動蕩不定的商業環境、持續變化的市場需求和日益提高的質量要求使得全球製造業的營運更為複雜。這些壓力迫使製造商集中精力制定可行的策略和戰術以獲得和保持競爭力。香港正在經歷由低成本組裝轉到高附加值製造的重要轉型期。為了成功轉型，香港製造商必須比它們的競爭者更快及更便宜地提供更高質量的產品。實施有效的質量策略和管理是成功的一個關鍵因素。

“優質變革系列”是在香港特別行政區政府工業支援基金支持下所制作的質量推廣和教育材料，其中包括：與質量有關的小冊子、錄像和其他媒體。它的目標是使公司主管明白推行質量提升的重要；介紹現代質量改進工具、模式和方法給香港製造商；和提供香港的最佳質量管理實踐的案例。

隨着這個系列的發行，我們希望能夠鼓勵和促進香港製造商進行優質變革。

錢桂生博士
系列主編

Quality Transformation Series

Global manufacturing competitiveness has been complicated with the accelerating pressures of industrial transformation, dynamic trading conditions, ever-changing market demands and uplifting quality requirements. These pressures have sharpened the industry's focus on developing viable strategies and tactics in gaining and retaining their competitiveness. Hong Kong is now undergoing a critical transformation from low-cost assembly to high-value-added manufacturing. For a successful transformation, Hong Kong manufacturers must provide better quality products faster and cheaper than those of their competitors. Adoption of effective quality strategies and practices is one of the crucial factors for success.

This Quality Transformation Series® is supported by the HKSAR Government Industrial Support Fund to develop promotional and educational materials, such as booklets, video and other multi-media in quality topics. It aims to make the company executives more aware of their crucial role in leading successful quality transformation in their companies; to introduce modern quality improvement tools and methodologies to Hong Kong manufacturers, and to provide examples of best quality management practices in the Hong Kong environment.

With the launch of this series, we hope to encourage and facilitate Hong Kong manufacturers in making the quality transformation.

Dr. K S Chin
Series Editor



Preface

Preface

前言

管理風尚來得快去得快，典範借鑑卻仍能在企業管理中扎下根來。這方法的道理很簡單：誰做得比你好，就向誰學習。這不只是趕上別人的手段，還可以讓你開拓眼界，在企業裡培養一種學無止境的文化，帶來長期的效益。

本書的目標讀者大致分兩類，一是初次進行典範借鑑活動的企業，另外就是希望將典範借鑑活動變得更有系統的企業。對於這些機構，本書提供的逐步指引應具有參考價值。這並不是萬靈的成功秘笈，亦不是必須硬性遵從的規定，但可以給企業提供一個簡明的綱領，幫助他們更好地計劃和實施借鑑項目，提高成功的機會。書裡亦提出了一些需要注意的成功因素，例如重視學習的文化和有效的表現量度系統。

書後的案例研究顯示一些企業實踐典範借鑑的情況，特別提到了借鑑程序的一些要點，例如認定主要的經營程序，定立主要的量度項，選擇適合的借鑑方式和借鑑對象，

這些研究對象規模較大，樂意交流心得。公司高級管理人員撥出時間與作者會面，提供資料和核證資料。對他們的支持和協助，謹致萬分謝意。

我們亦感謝何廣明博士審閱文稿，提出技術和編輯方面的意見。

希望本書內容能對讀者帶來裨益。如有粗疏不足之處，敬請讀者指正。

作者

2000年9月

Management fads come and go. Benchmarking remains firmly in strength. It applies this good old wisdom: learn from those who have done better than you. Apart from closing the performance gaps, it opens your mind and creates a learning culture in your organisation that produces lasting benefits.

This book is intended to be a reference for organisations that are starting their benchmarking effort or looking for a more systematic approach to benchmarking. A step-by-step guide is provided. It is not a prescription for business success, but serves as a reference framework for organisations to better plan and organise their benchmarking activities so that results are more readily assured. Some success factors, such as a learning organisation and a performance measurement system, are emphasized throughout the text.

The case studies in this book show how organisations practice benchmarking in an effective manner. Attention has been paid to some important points in the benchmarking process that ensure success, such as identifying the key business processes, establishing key measures, selecting the right type of benchmarking and the right partners.

The subjects for study include mostly established companies who are more mature in terms of benchmarking practices and are most ready to share experience. Interviews with their management were conducted to collect and confirm information. We greatly appreciate their assistance and contribution to the making of this book.

We are also indebted to Dr. Samuel Ho for his contribution through technical and editorial review.

We hope that the following chapters will fulfil our objectives. We welcome comments from the readers.

The authors

September 2000

Introduction

引言

七十年代，施樂公司被日本對手搶去市場領導地位，他們的生產力水平雖然持續上升，但利潤增長率大幅度下降。施樂為了查明原因，將美國的設施和日本的設施（Fuji Xerox）作了一次比較，結果發現美國的生產成本大約相等於日本的产品售價，美國的生產周期是日本的兩倍，品質水平卻只得一半。

施樂公司奮力求存，吸收了這次內部借鑑的成果，發展出同業借鑑（competitive benchmarking）的方法，並利用這種方法，扳回了競爭優勢。施樂贏得美國鮑德里奇品質獎（Malcolm Baldrige Award）後，表示典範借鑑方法幫助了他們起死回生。後來，典範借鑑納入了鮑德里奇獎的評核標準，多個國家的品質獎項亦多了類似的要求。

一項研究指出，鮑德里奇獎評審標準內超過一半的分數或多或少與典範借鑑有關，除典範借鑑外，沒有一種管理概念能對這個廣泛使用的管理模式有這麼大的影響力。

什麼是典範借鑑

很多人同意典範借鑑是有效改進業務表現的工具。借鑑的原理很簡單：別人做得比我們好的，我們向他們虛心學習。典範借鑑就是要不斷找出其他機構的優良作業方法，了解這些方法收效的原因，然後借用這些方法，提高自己機構的表現。

有些人認為典範借鑑就是競爭力分析，這是錯誤的。競爭力分析只比較機構的表現，但沒有探究為什麼這機構做得比另一些機構好。典範借鑑不只是比較，知道自己和別人的差別後，還須要探求差別的原因，深入了解別人做了哪事、利用了哪些促成手段達到更高的表現，掌握了這方面的知識後，再定出改進良方。

總括來說，知道典範水平只是個開始，其後還須要認清自己目前的狀況，借用求得的優良作業方法，落實改進工作。

In the 1970s Xerox lost out its market dominance to the Japanese and experienced a sharp decrease in profit growth even though their productivity had been increasing. To find out what was happening, Xerox compared Xerox US to Fuji Xerox in Japan. They found that US production costs were about the same as the selling price of Fuji Xerox's equipment. The cycle time of Xerox US was two times as long and the quality twice as bad.

To strive for survival, Xerox built on this internal benchmarking activity and developed competitive benchmarking as one of the major tools to restore competitiveness. When Xerox won the Malcolm Baldrige Award, they attributed their dramatic turnaround to the use of the benchmarking process. The award criteria were later changed to include benchmarking. Since then the requirement for benchmarking has been included in many other international quality awards.

A study pointed out that benchmarking influenced over 50% of the total points of the Baldrige criteria. No other business concept has wielded such a broad range influence in this widely adapted management model.

What is Benchmarking

Now many people accept benchmarking as a powerful tool for improving business performance. The philosophy behind the concept is simple. It requires that we are humble enough to learn from others what they are doing better than we are.

Benchmarking is the process of continuously identifying, understanding and adapting outstanding practices of other organisations in order to help your own organisation improve its performance.

People often mistake benchmarking for competitive analysis. The latter typically compares performance measures but does not tell how performance is achieved. Benchmarking goes far beyond this. Through benchmarking, an organisation also looks into what causes the difference in performance. It then tries to understand the best practices and enablers that lead to the higher performance and use this knowledge for improvement action.

All told, benchmarking does not end with knowing the benchmark. An organisation needs also to know how it is currently working, and to improve it, adapt the identified best practices that are critical to its success.

典範借鑑的效益

典範借鑑有個明顯的好處，就是不會閉門造車。看看別人的做法，可以擴闊眼界，激發創新的構想。典範借鑑因此很多時促成變革和突破性的改進。

典範借鑑亦是趕上競爭對手的好方法。機構知道自己和典範水平的差距後，便有了具體的改善目標。管理人員自知不足，自然趕緊作出改進。機構可從容易處入手，先進行內部部門的相互借鑑，或找表現水平稍高的機構作為比較對象，然後逐漸向更高的水平看，向更優秀的機構借鑑，最終可和世界級的機構一較高下。

典範借鑑亦發揮培養管理人員的作用，如全機構員工貫徹進行借鑑活動，可促成求知的文化。員工借鑑得來的知識全部和業務有關，機構會直接得益。

但機構必須具備一些適當的條件，才能發揮典範借鑑的最大效用。美國生產力及品質中心的國際典範借鑑中心進行了一項典範借鑑效益的調查，調查結果顯示「成熟」的機構從典範借鑑活動取得較大的回報。「成熟程度」決定於多種因素：

1. 員工普遍認識典範借鑑概念
2. 高級管理人員支持典範借鑑活動
3. 對自己的優良作業方法作出了記錄
4. 具備內部交流優良作業方法的條件
5. 具備和外界機構交流的條件

有效的知識管理系統能擴大借鑑的效益。借鑑得來的優良作業方法可通過知識交流活動傳到所有部門和功能單位，以便充份利用借鑑成果。

Benefits of Benchmarking

An obvious benefit of learning from others is that you do not have to reinvent the wheel. The act of looking at how other people are doing will expose a person to new perspectives and induce out-of-the-box thinking. Because of this, the results of benchmarking are often associated with innovation and breakthrough improvement.

Benchmarking also helps an organisation to keep up with competition. It allows an organisation to identify its performance gap against benchmarks, to adapt best practices and close the gap.

Knowing one's inadequacy provides a sense of urgency for management to improve.

A new benchmarker may want to start with internal benchmarking or comparing with like performers. Then by continuously benchmarking with higher performers, the organisation will be able to approach world class.

Benchmarking provides an opportunity for management development. The systematic and pervasive use of benchmarking often encourages a culture that is characterised by curiosity, discovery and constant learning. What people learn from benchmarking projects is directly related to their work and, therefore, directly beneficial to the organisation.

To obtain full benefit, an organisation may need to look into some success factors for benchmarking. A survey conducted by the International Benchmarking Clearinghouse of the American Productivity and Quality Center showed that "mature" benchmarkers have reported a much higher payback from benchmarking projects.

"Maturity" is defined by a number of conditions:

1. a general awareness of benchmarking concepts,
2. support of benchmarking from senior management,
3. documentation of one's own best practices,
4. an environment that supports internal sharing of best practices,
5. an environment that supports sharing with external organisations.

One important factor here is a knowledge management system. So that the best practices identified and adapted in a benchmarking project can be transferred internally across divisions and functions to achieve the highest leverage.



Types of Benchmarking

Types of Benchmarking

典範借鑑的種類

借鑑對象可以是內部部門或外界機構。外界的借鑑對象可以是同行業的公司，亦可以不理會行業，只選擇有類似程序的機構。

Benchmarking may be conducted internally or externally. When conducted externally, it can be competitive benchmarking (within the industry) or process benchmarking (regardless of industry).

Types of Benchmarking

內部借鑑

這是機構內進行的借鑑活動，多個部門或分公司相互比較類似的操作程序，定出機構內部的典範水平，然後分析部門表現的差距，探究原因，找出優良作業方法，在全機構實施。例如，柯達公司全球的業務單位相互比較，選出「柯達級」的優異表現水平，作為全機構的借鑑目標。

內部借鑑未必可以激發全新的想法，促成大幅度的改善，要做到這一點，必須向外借鑑。但機構可先從內部借鑑入手，建立有系統的借鑑方法，員工熟習後，始展開向外借鑑的活動。內部的項目亦較容易得到管理人員和員工的支持，容易爭取他們接受典範借鑑促成的變革，最後讓典範借鑑成為他們慣常的活動。

內部借鑑可作為向外借鑑的早期工作，但內部借鑑本身亦有獨特的用處。一些人認為內部借鑑是知識管理的一個組成部分，機構通過內部借鑑可以充份利用獲得的知識擴大競爭優勢。一方面，內部借鑑為向外借鑑作好準備，另一方面，向外借鑑得來的知識可通過內部交流讓整個機構都能利用，保證借鑑活動發揮最大的效益。

Internal benchmarking

Internal benchmarking is conducted within an organisation. Different branches or divisions compare similar operations to establish internal performance benchmarks. The causes of differences in performance are evaluated to identify best practices. These practices are then implemented across all areas. For example, Eastman Kodak's business units across the world benchmark against each other to produce "Kodak Class" performers, which represent the best practices within the company.

You may eventually realise that only through external benchmarking can stimuli for significant improvement be found, but internal benchmarking is the best place for an organisation to begin its benchmarking programme. Starting with an internal project, an organisation has the opportunity to establish the system and learn the process before taking a full external initiative. Because of the internal nature, it is easier to gain management's and employees' acceptance of change and eventually their buy-in to benchmarking practice.

It may be seen as a prelude to external benchmarking, but internal benchmarking is significant in its own right. Some consider internal benchmarking an important part of knowledge management. Through internal benchmarking, an organisation spreads and leverages the knowledge that is critical for it to compete. While internal benchmarking helps prepare external initiatives, the learning from external benchmarking projects should also be shared within the organisation to achieve the highest payback.

同業借鑑

同業借鑑就是說，與外界的同行機構比較類似的操作程序。這種比較可以找出機構在行業內或市場內的位置。借鑑對象可能是直接的競爭對手，因此借鑑活動通常由行業團體發起或由獨立機構居中統籌。

如能說服競爭對手合作，這種借鑑活動會很有效用。不同地區或不同市場的同類機構並不直接競爭，通常較願意合作，不同國家的公用事業機構便經常進行借鑑活動。香港的地下鐵路公司是 CoMET (Community of Metros) 的成員，這個組織包括十間地鐵公司，有的成員來自墨西哥和巴西，他們進行定期的借鑑活動。

程序借鑑

程序借鑑 (process benchmarking) 又稱一般借鑑 (generic benchmarking)，借鑑對象不分行業，只選指定程序上有突出表現的機構，與他們比較這程序的活動和表現。

程序借鑑大致可分成兩類：

相似的行業 - 很多徹底改進的構思都是從這方面得來。同行業的公司通常用同一種方法處理同一問題，但經營相似業務的公司可能使用非常不同的方法。例如，管理英個七個機場的 BAA 公司與溫布萊球場的管理公司經常進行典範借鑑。

Competitive Benchmarking

An organisation conducts competitive benchmarking to compare similar operations with outside organisations that provide the same service. It is useful in positioning the organisation in the industry or market. Because it may involve direct competitors, competitive benchmarking is often initiated by industry groups or conducted by third-parties.

Benchmarking with direct competitors is fruitful if you are able to open a dialogue with them. However, the barrier of access will usually be lower if the counterparts operate in different regions or markets. National utility companies often collaborate for benchmarking. The MTR Corporation of Hong Kong, for example, conducts continuous benchmarking among the Community of Metros. This group consists of ten metro organisations that come from as far as Mexico and Brazil.

Process Benchmarking

Process benchmarking, or generic benchmarking, compares process performance and functionality against organisations that excel in this process regardless of industry.

Process benchmarking can be further divided into two broad types:

Parallel industries - Many of the best ideas for radical improvements come from this source. While companies in one's own industry will generally tackle the same problems in the same way, companies in parallel industries may have very different approaches. For example, BAA, which administers seven British airports, benchmarks itself against Wembley Stadium.

Types of Benchmarking

Totally different industries - Here one will want to compare against very specific activities. Motorola, for example, exchanges information with other companies on the time between customer order and delivery. Among them are some of the best manufacturers of fast moving consumer goods, such as food supplied to supermarkets.

There are good reasons why an organisation should benchmark outside the industry. Today's competition requires an organisation to achieve constant breakthrough in running the business. When breakthrough improvement is expected, it is foolhardy not to look at how others get things done and reinvent the process all by yourself.

And by extending the scope of research, you can step outside your well-worn thinking and look at brand new approaches. So a bank would compare its over-the-counter services with an airline. And an airline would reduce maintenance turnaround by learning from a race car pit crew. An organisation cannot beat competitors or head off newcomers by following current industry practices. As what have been witnessed in the telecommunications market, somehow a new competitor moved in and changed the rules for the industry.

完全不同的行業 - 不同行業的公司可以互相比較一些指定範圍的活動。例如摩托羅拉會和其他公司比較顧客下定單到送貨給顧客需要的時間，這些公司中有的生產周轉很快的消費品，例如供應超市的食品。

向其他行業借鑑有不少益處。今天的競爭形勢迫使機構不斷爭取突破性的表現，要實現突破性的改進，最好能先看看別人的做法，不一定要自己重頭設計工作的程序。

擴闊借鑑範圍，亦可幫助我們跳出陳舊的想法，接受全新的構思。因此，銀行可以向航空公司學習櫃台服務，航空公司可向賽車隊學習縮短維修時間的方法。跟從行內慣常的做法決不能超前競爭對手或擊退新的對手，就象目前的電訊市場，一個新對手加入，住住改變了整個行業的局面。

典範借鑑的種類

A Systematic Approach to Benchmarking

有系統的典範借鑑方法

典範借鑑活動應跟從明確的程序，讓工作變得清晰，步驟一致，並分清階段，有利監察進度。本書作者參考美國生產力及品質中心和施樂公司的典範借鑑方法進行借鑑研究項目，總結了這方面經驗，定出了有實效的五個階段的借鑑程序。

A structured process for benchmarking is important. It standardises action and provides clear steps. It also sets milestones against which to monitor progress. Based on our experience of applying the benchmarking models of the American Productivity and Quality Center and Xerox Corporation in study projects, we have arrived at a five-stage benchmarking process proving to be successful.

第一階段是策略層次的工作，目的是保證借鑑項目能為機構創造成功的條件，幫助機構達到願景 (vision) 和策略目標。

The first stage takes place at the strategic level. Its accomplishment

ensures that benchmarking projects are driven by the corporate vision and strategic goals and, therefore, best fit for the organisation to achieve its success.

第一階段決定了借鑑題目，以後四個階段就是實施的工作。這四個階段跟從戴明博士的循環改善方法 (Plan-Do-Check-Act Cycle)。

In the strategic stage, we decide what to benchmark. The next four stages describe how a benchmarking project is actually carried through. They follow Deming's Plan-Do-Check-Act cycle for continuous improvement.



Figure 1: The Five-Stage Benchmarking Process
圖一：五個階段的典範借鑑程序

Approach Benchmarking

Stage 1: Decide What to Benchmark

When deciding what to benchmark, an organisation focuses on areas that will give it success. Firstly, it needs to know which factors are critical to its business success. Secondly, it tries to find out how well its processes are contributing to these success factors. Processes that perform badly require benchmarking for improvement.

Determine Critical Success Factors and Key Performance Indicators

Critical success factors (CSF) are the few areas where satisfactory performance is essential for an organisation to succeed. They should always have a customer focus. In particular, they are variables that have a direct influence on customer's satisfaction with a specific business process. Product quality, order fulfilment and service responsiveness are some common CSFs. The number of CSFs will probably be five or six.

第一階段：決定借鑑題目

機構應從業務成敗的角度決定典範借鑑的題目。首先，機構需要知道哪些是關係成敗的因素，其次，要知道目前的工作程序是否能產生這些成功要素。然後機構可展開針對性的典範借鑑活動，改善那些表現差的程序。

判斷成功要素，定立主要表現指標

成功要素是指那些關係業務成敗的重點範圍，機構必須在這些方面取得滿意的表現，業務才有可能成功。任何成功的機構都不能忽視顧客，因此成功要素應是業務程序中那些直接影響顧客滿意程度的因素。產品品質、定單完成率、服務回應速度是一些常見的例子。成功要素通常不超過五、六個。

Categories 類目	Key Performance Indicators 主要表現指標
Asset / Capacity Utilisation 資產 / 設備使用率	Capacity km per track km 載客量公里 / 軌道公里
Reliability 可靠性	Percentage of train on time 準時的列車百分比
Service Quality 服務品質	Total passenger hours delay per 1000 passenger journey 總乘客延誤時數 / 1000 乘客車程
Efficiency 效率	Total passenger journeys per total staff + contractors 總乘客車程 / 員工 + 合約員工總時數
Financial Performance 財政表現	Service Operation cost per car operating km 服務營運成本 / 列車營運公里

Table 1: Examples of KPIs of MTR Corporation
表一：地鐵公司的一些主要表現指標

主要表現指標用於量度某個程序或範圍的表現，例如，產品設計到上市需要的時間是量度產品開發表現的一個重要指標。

主要表現指標是判斷機構是否能創造成功要素的依據。指標數目不應太多，每個成功要素定出四至五個指標已經足夠。

典範借鑑活動需要表現量度系統的配合。借鑑活動（或其他改善活動）展開後，機構必須量度新的工作表現，了解投入了的資源有沒有產生預期的成效，如表現達不到指標，即採取糾正措施。

量度表現的活動和典範借鑑活動應相互結合起來。量度表現雖然可知道自己是否達到指定標準，但無從知道這個標準水平是否及得上競爭對手或達到領先水平。典範借鑑將比較範圍伸延到機構外面，通過向外借鑑，機構可按競爭情況定立趕上對手或領先對手的表現指標。

成功要素和主要表現指標應按願景、使命、策略指引的方向定出。機構須依靠這些要素和指標判斷成敗，如這些要素和指標不能體現策略方向，機構很容易走上歧路，參照這些指標定出的借鑑範圍亦不會是那些最需要改善的地方。

如機構還沒有明確的願景和策略方向，可把握典範借鑑的機會一併制訂下來。

Key performance indicators (KPIs) are measures which tell how well an organisation is performing in a particular process or area. For example, time to market may be a KPI for new product development. An organisation uses KPIs to measure how it performs in CSFs. It is useful to limit the number of KPIs to the minimum required. Four or five KPIs per CSF is seen as sufficient.

A performance measurement system has to be in place. Once the process of benchmarking or any other improvement initiatives has started, an organisation needs to measure what improvement it is making and whether the inputs are producing the expected outputs. If performance is below target, corrective action can be initiated.

In fact, performance measurement and benchmarking should work as an integrated system. Internal measurement monitors how the organisation is working towards given standards, but it does not indicate whether these standards compare favourably to those of competitors or industry leaders. Benchmarking is an extension of internal measurement in this sense. Through external benchmarking, an organisation is able to set performance standards that it has to achieve in order to catch up with competitors or to protect its lead.

CSFs and KPIs should be developed from the organisation's vision statement, mission statement and strategic plans. An organisation gauges its success by looking at its performance in CSFs and KPIs. If the CSFs and KPIs do not reflect the strategic intent, the organisation will very likely go off in the wrong direction. The benchmarking scope determined upon these indicators would not be those areas that need improvement most.

If the organisation has not had a clear vision and strategic direction, a benchmarking initiative will provide an opportunity to do so.

Measure the Performance

Next an organisation needs to know how it is compared to competitors. The success factors and performance measures identified in the previous step provide the basis for comparison. Data of competition may come from customer surveys, market surveys and analysis.

A spider chart can be used to visually display the organisation's competitive position across the key performance measures. It tells what is the relative position of the organisation in the industry and where are its strengths and weaknesses.

量度表現

下一步，機構需要知道自己和競爭對手誰優誰劣。成功要素和主要表現指標可作為比較的基礎。機構可通過顧客調查、市場調查、分析活動獲取競爭對手的資料。

網形圖能直觀地顯示機構和競爭對手在各表現項目中的優劣。機構可從中判斷自己在行業內的位置，以及自己的強項和弱點。

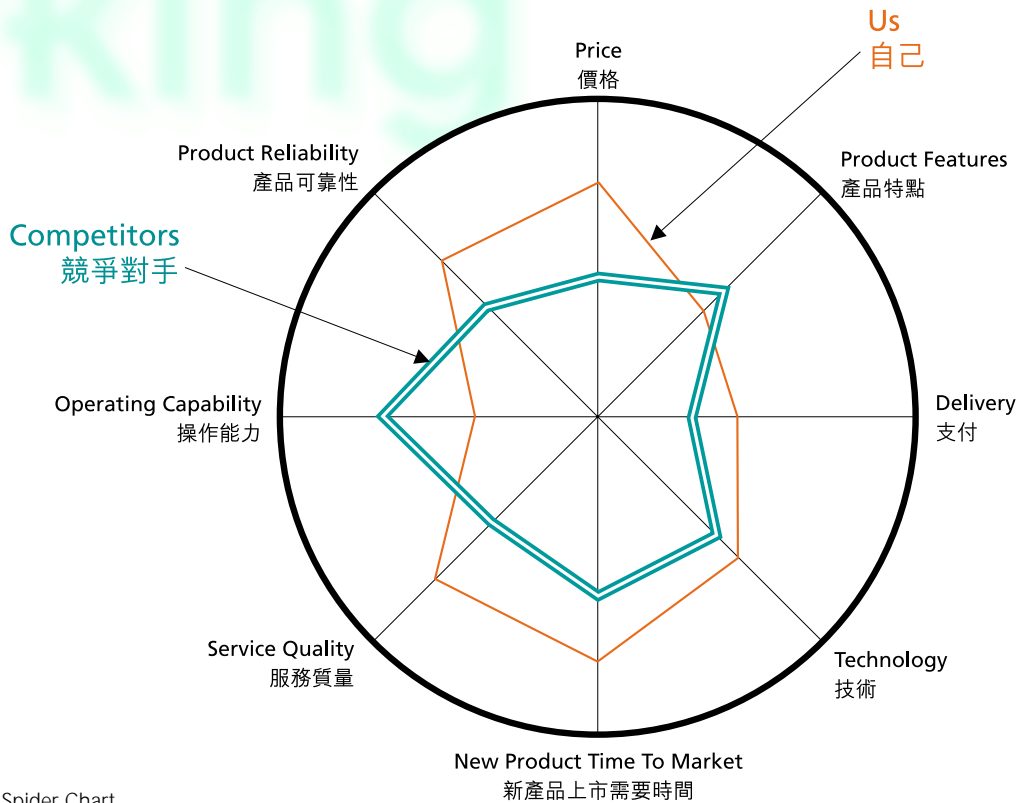


Figure 2: Spider Chart
圖二：網形圖

Each spoke in the chart represents a key measure. The closer to the centre, the higher the level of performance. By plotting its performance against comparative data (the best performance level among competitors) for individual measures, an organisation can identify those areas where benchmarking is needed for quick and significant improvement.

圖上每一輻條代表一個量度項，愈接近中心點，表現水平愈高。在每個項目同時畫上自己的表現水平和比較水平（每個項目中最強競爭對手的表現水平），很容易便能看出哪些範圍需要趕快作出大幅度的改善。

確定最影響成敗的主要業務程序

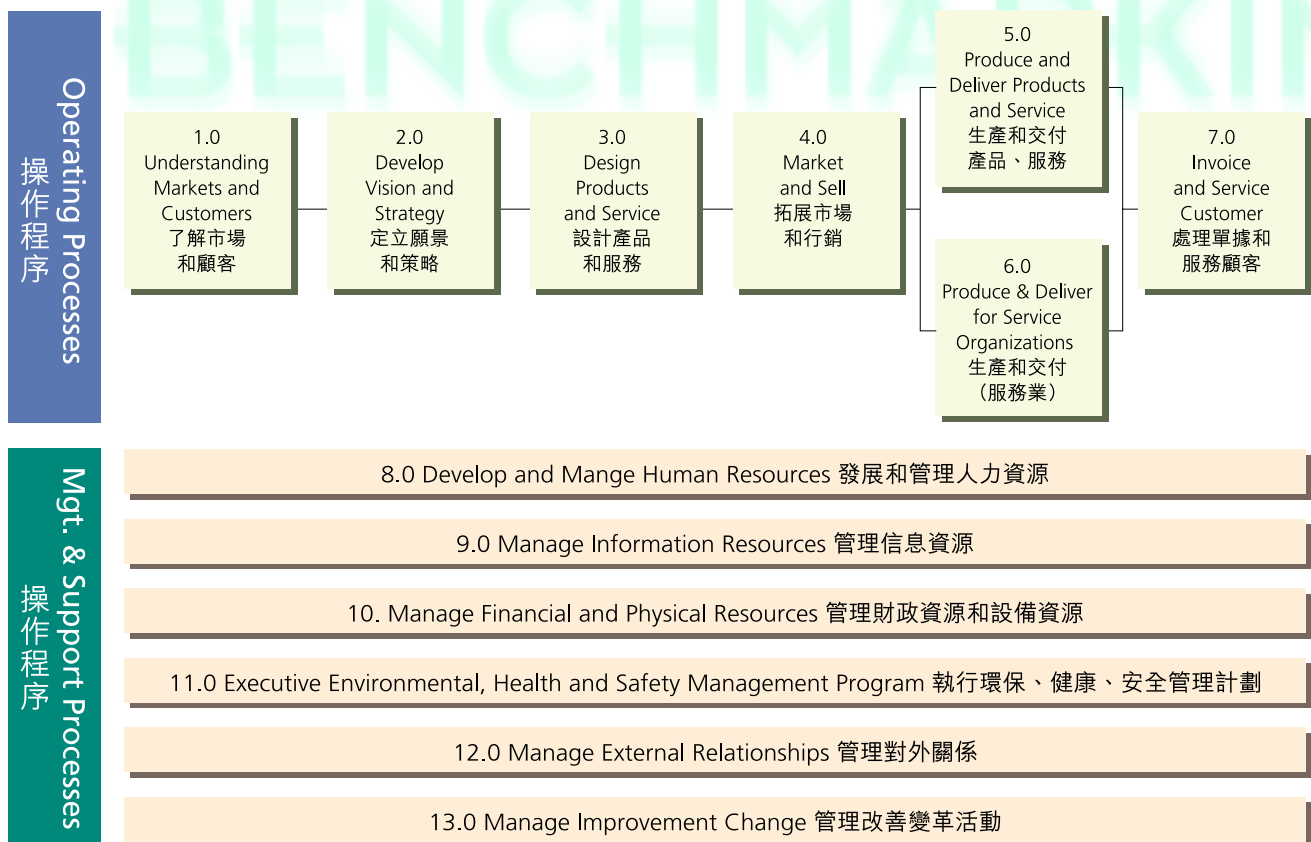
知道弱點後，還需要找出哪些最影響弱勢範圍的主要程序，然後有針對性地展開借鑑活動，促成改進。

為保證借鑑範圍明確，應使用有系統的方法將主要程序清楚地劃分開來。定立自己的一套詳細分類法時可參考圖三的程序分類大綱。

Identify Core Business Processes that Impact CSFs

Having known its weaknesses, an organisation goes on to identify the core processes that have the greatest impact on the weakness areas. The organisation can then direct benchmarking effort to improve.

It is useful to make a structured description of the key processes that make up the business. This will help in defining the areas for benchmarking with precision. A process classification framework such as the one shown in Figure 3 can be used as a model to develop your own more specific framework.



Source: American Productivity and Quality Center and Arthur Andersen
資料來源：美國生產力及品質中心和 Arthur Andersen

Figure 3: Process Classification Framework
圖三：程序分類大綱

Prioritise Processes to Benchmark

A clear definition of core processes makes it possible to compare the performance and impact of distinct processes. Tools such as Core Process Ranking and Criteria Testing Matrix are helpful to determine the level of impact and hence the priority for improvement.

決定哪些程序最需要進行典範借鑑

主要程序劃分清楚後，便容易比較各程序對業務成敗和表現的影響力大小。主要程序評級法（core process ranking）和標準檢驗矩陣（criteria testing matrix）等工具可幫助找出影響最大、最需要改進的程序。

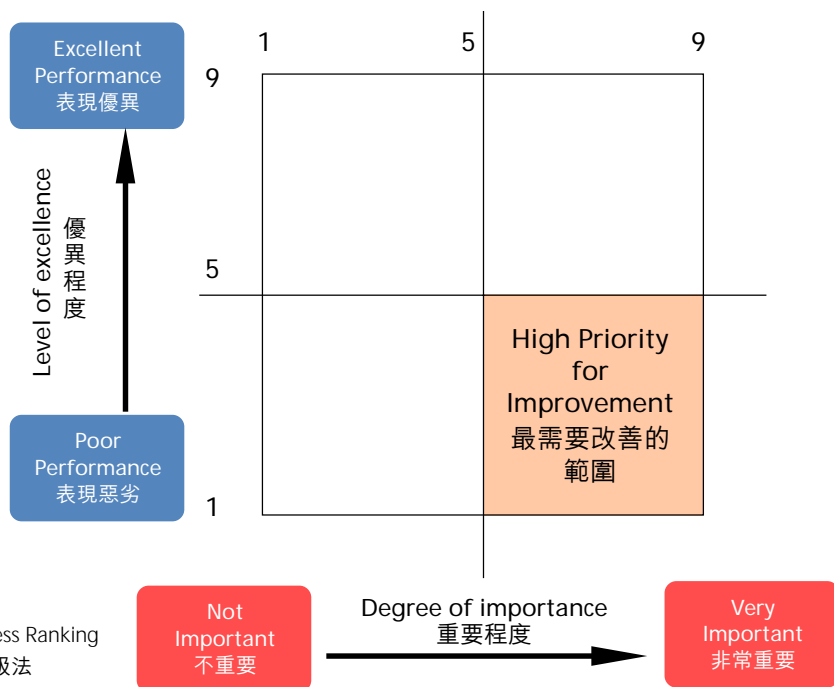


Figure 4: Core Process Ranking
圖四：主要程序評級法

Processes with the greatest impact and poor current performance have high priority for improvement. Their urgency for improvement and potentially high return from improvement would justify the resources to be put in a benchmarking initiative.

表現差、影響大的程序應納入優先改善範圍。表現差，因而急切需要改善；影響大，表示改善後的得益理應較高，使投放到典範借鑑活動的資源得到合理的回報。

Before moving on, some conditions may worth considering. They are necessary to ensuring that benchmarking is practical for the selected process.

對選定程序展開實際的借鑑工作前，還須要考慮一些條件，有了這些條件才能保證借鑑活動產生效用：

- The process has been clearly defined.
- The staff involved are open to benchmarking and learning activities.
- Preliminary observations indicate that significantly better performance of the process exists in other organisations and best practice benchmarking partners may easily be found.

- 程序已有明確的定義和說明。
- 有關的員工願意投入借鑑、學習的活動。
- 初步觀察結果顯示其他機構在這程序的表現明顯地超過自己的機構，容易找到借鑑的對象。

第二階段：計劃借鑑項目

決定了借鑑題目後，應成立專責的借鑑工作小組。小組首先要了解選定了的程序，將程序解剖，每個步驟劃分清楚，記錄下來，方便作出精確的比較，然後定出比較表現水平的量度項，編寫研究計劃。

成立借鑑工作小組

每個借鑑項目應由專門成立的工作小組負責，組員通常來自有關的功能部門或工作程序，亦可包括一至兩名曾有典範借鑑經驗的員工。

小組應包含具備下列特質的組員：

知識 - 對借鑑題目和借鑑方法有深厚的認識。

創造力 - 借鑑的目的是發掘新構思和接納新構思。組員必須勇於尋找優越的工作方法，打破常規，促成變革。

溝通技巧 - 良好的聆聽和溝通技巧能幫助了解和接納別人的想法。

專門技能 - 借鑑活動包含收集資料、分析、報告等工作，小組可能需要一些懂得調查、統計、電腦出版、電腦繪製圖表等技能的組員。

Stage 2: Plan the Study

When it is clear what to benchmark, a benchmarking team is formed to carry out the study project. The team starts with understanding the organisation's own activities. The process to be studied is mapped and documented to allow a precise comparison with benchmarking partners. The team then establishes benchmarking measures and prepares the study plan.

Form the Benchmarking Team

Each benchmarking project needs a project team that is selected specifically for the job. There should be representatives from each of the functions or processes to be benchmarked, although it is desirable to have one or two team members who have been involved in previous benchmarking projects.

For effective implementation, team members should be a combination of these attributes:

Knowledge - Members should have a solid understanding of the process being benchmarked as well as the benchmarking process itself.

Innovative - Benchmarking is about seeking and adapting new ideas. Members should be willing to discover superior practices and break through existing paradigms, and be able to effect change.

Communication skills - Good listening and communication skills allow members to capture and accept other people's ideas.

Practical skills - A benchmarking project involves such chores as data collection, analysis and reporting. It may be useful to have on the team people with expert skills in research, statistical analysis, desktop publishing or computerised data mapping.

Each benchmarking team will have a team leader, who is responsible for organising the team, negotiating resources, delegating tasks and promoting team progress.

A facilitator may be used to speed up the benchmarking process or make the process easier for the team. Its role is to assist the team in team building, effective meeting, decision-making, resolve of conflicts and application of quality tools and problem solving skills.

There should also be a number of supporting roles. Unlike benchmarking team members, these are ongoing roles.

Benchmarking champion - An executive supporter who serves as the advocate and defender of benchmarking activities.

Project sponsor - The individual who assumes the responsibility of the benchmarking project. He should have the authority to approve financial support for the project. The sponsor may be the head of the functional area where the benchmarking project takes place.

Process owner - The individual who takes possession or control over the process being benchmarked. As the process owner is a user of study results, it is important to obtain his buy-in to the project.

There can be substantial overlap between the roles. In a smaller organisation, the champion, sponsor and team leader may be the same person.

組員中一人擔任組長，負責管理小組，索求資源，分派工作，保證工作進度。

機構亦可派出指導員幫助團隊展開借鑑活動，他的職責是協助團隊凝聚力量，提高會議效能、作出決定、調解糾紛、運用品質工具和解決問題技巧。

另外，一些擔任特殊角色的員工會對借鑑活動起著支持作用。這些角色是常設的，不是專為某個借鑑項目委派。

提倡者 - 來自管理高層，負責鼓吹和解釋典範借鑑活動。

支助人 - 通常是和借鑑範圍有關的部門主管，對借鑑項目負責，必須擁有調配資金進行借鑑活動的權力。

程序負責人 - 掌管或控制程序的人員，是借鑑結果的使用者。由於借鑑項目是針對他的程序進行的，因而必須爭取他的支持。

分析程序

小組的第一項工作是詳細分析現時的工作程序。清楚知道了程序的具體細節後，才能進行實質的借鑑活動。

分析工作可從高角度入手，然後逐步深入。

全機構層次 - 用關係圖畫出程序中各功能單位的關係，以便分析各功能單位相互的輸入和輸出。

跨功能層次 - 用跨功能流程圖（圖五）畫出程序的步驟和負責的部門或功能單位。

線性層次 - 繪畫詳細的流程圖，精細地劃分程序的所有步驟。

Document the Process

The benchmarking team starts the study by making a detailed evaluation of the existing process. It is important to know exactly the benchmarking topic, or the project will be going nowhere.

It is useful to begin looking at the process at the highest level and work the way down to more detail.

Organisational - Use a relationship map to illustrate the relations that exist within the process. It enables analysis of the current flow of inputs and outputs between functions.

Cross-functional - Use a cross-functional process flow map (Figure 5) to show which division or function is performing which step as the process progress across the organisation.

Linear - Draw detailed flowcharts to break the process down into all its component steps.

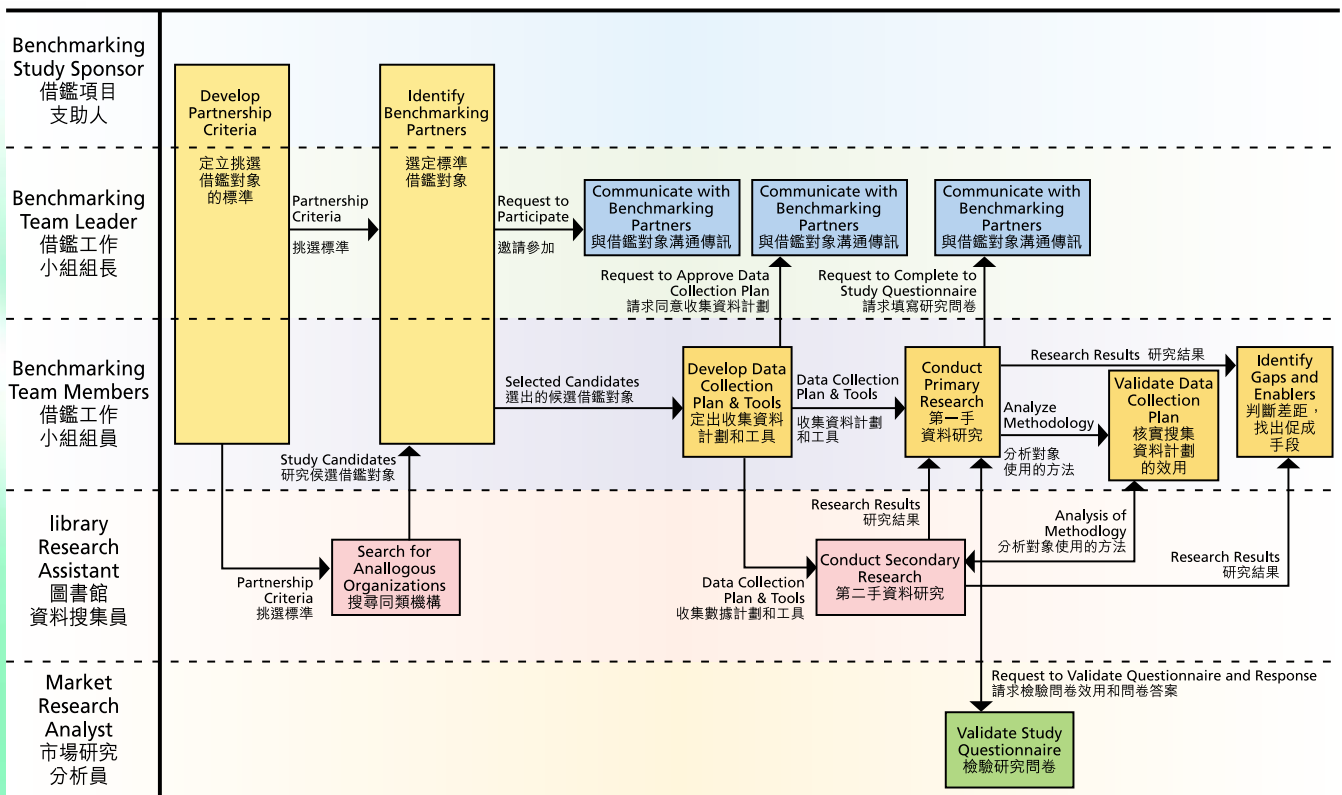


Figure 5: Example of a Cross-functional Process Map
圖五：跨功能流程圖舉例

Source: Xerox
資料來源：施樂

A detailed evaluation of a process will often reveal its weaknesses and prompt management for action. For example, Xerox fixed the process of developing cable assemblies, eliminated 30% expenses and improved quality by 20% even before the actual benchmarking process were carried out.

Establish Benchmarking Measures

A benchmarking project should be conducted with quantitative comparisons as far as possible. They will provide fact-based input for interpreting and implementing the best practices identified in the process.

A family of measures has to be established to provide the basis for comparison. Some common performance measures include customer satisfaction, employee satisfaction, productivity, cost and delivery.

Three levels of measures are often used in benchmarking. It is typical in analysis to understand the subject matter by breaking it down into elements and draw central conclusions from what is found in these elements.

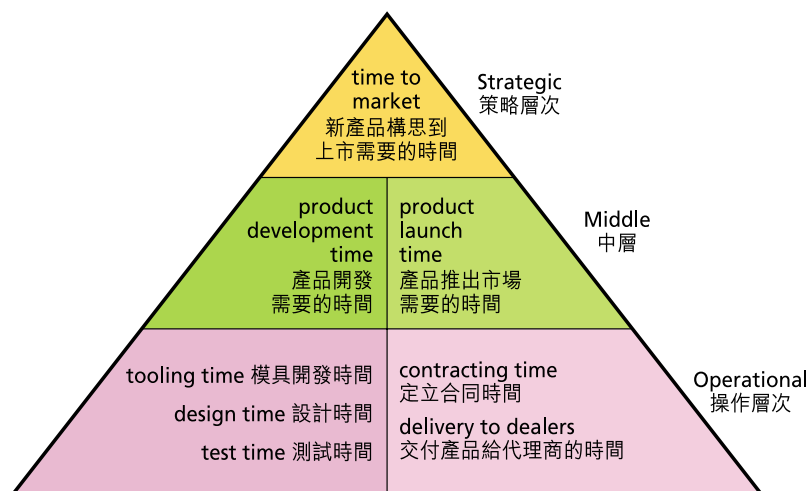


Figure 6: Three Levels of Measures - A Manufacturing Example
圖六：製造業三級量度項舉例

Source: Xerox
資料來源：施樂

Performance measures have to be specific. They should reflect a customer focus and provide data for action and improvement. For instance, "response time to customer call" is preferable to "number of calls".

對程序進行深入的分析後，通常會找出程序的一些弱點，促使管理人員採取改善措施。例如，施樂公司未展開實際的借鑑活動前已糾正了開發電線組件的工序，省去了 30% 的成本，將品質提高了 20%。

定立量度項

進行典範借鑑時應盡可能作出量的比較，這些比較數據能幫助分析和實施求得的優良作業方法。

為方便比較，應定出一組量度程序表現的項目。顧客滿意度、員工滿意度、生產力、成本、交付時間都是常用的量度項。

進行典範借鑑時通常使用三級的量度項。這是分析工作慣用的方法，就是將研究的題目細分成要素，然後總括各要素的研究結果求出結論。

量度項必須具體，最好能顯示顧客的需要，能提供改善行動的依據。例如，回覆顧客查詢的時間比接收查詢數目來得好。

Figure 7 shows a set of measures developed for Hong Kong's electrical appliances industry by the Asian Benchmarking Clearinghouse of the Hong Kong Productivity Council in a government funded project. Table 2 elaborates the key performance indicators for one of these groups of measures

圖七顯示香港生產力促進局亞洲典範借鑑中心在一個政府支助的計劃中定立的一套香港電器業量度項。表二列出其中一組量度項的主要表現指標。



Figure 7: Benchmarking Framework for the Electrical Appliances Industry
圖七：香港電器業表現評估系統

市場及業務發展 Marketing and Business Development	
主要表現指標 Key Performance Indicator	定義 Definition
新產品銷售比率 New Product Sales Ratio	量度宣傳新開發產品的效能。 新產品上市頭 24 個月此產品每財政年度營業額/ 財政年度總營業額 A measure on the effectiveness of promoting new products developed Sales during the financial year for New Products launched within the first twenty-four months / Total sales of the financial year
新客戶/ 市場比率 New Customer/Market Ratio	量度爭取新客戶或開拓新市場的效能。 新客戶營業額/ 總營業額 A measure on the effectiveness of exploring new customers or markets New Customer Sales / Total Sales
應用市場推廣及品牌建立工具 Use of Marketing/ Branding Tools	量度市場計劃、市場調研、品牌價值建立等市場拓展和品牌建立工具的應用程度。 A measure on the degree of using various marketing and branding methodologies, e.g. marketing plan, market research, brand equity building, etc.

Table 2 : KPIs for "Marketing and Business Development" of the Benchmarking Framework for the Electrical Appliances Industry in Hong Kong

表二：香港電器業表現評估系統中「市場及業務發展」部分的主要表現指標

Prepare the Study Plan

Having known exactly what to measure and compare, the team develops the study plan. The plan may include:

Scope of study - The team needs to provide the purpose, improvement opportunities, depth and breadth of study, and time and budget. The subject of study should be an area that has the greatest room for improvement, and that the organisation has the capability to improve.

Project plan - The plan should identify timeline, milestones, and roles and responsibilities. It is useful for monitoring and communicating progress.

Selection criteria of benchmarking partners - They may be product or output characteristics, comparable processes, type of industry, size and organisation structure, culture, primary business drivers (such as distribution channels), and profit or non-profit orientation

Data collection plan - Depending on the required scope and depth of information, the team will select the means for screening partners (by phone, fax, survey or a full partner selection process) and the means for data collection (by secondary or library research, information request, phone interviews, detailed questionnaire, site visits or a combination of these).

定立借鑑計劃

工作小組詳細了解借鑑題目後草擬借鑑計劃書。計劃內容包括：

借鑑範圍 - 小組需要定出計劃目的、目標改善範圍、研究的深度和寬度、期限和開支預算。研究題目必須符合兩個條件：
第一，這個範圍有大幅度改善的可能性；
第二，機構有能力和資源作出這樣的改善。

活動計劃 - 計劃書應說明主要的活動項目和完成期限、工作人員的角色和職責。這些資料能幫助監察和報告工作進度。

選擇借鑑對象的標準 - 選擇標準可包括產品或產出的特徵、程序、行業、規模、組織結構、文化、主要的業務動因（例如分銷渠道）、牟利或非牟利性質。

收集資料計劃 - 按需要資料的多少和詳細程度決定篩選借鑑對象的方法（電話、傳真、調查或完整的挑選程序）和收集資料的方法（收集二手資料、查閱圖書館資料、向對象直接要求提供資料、電話訪談、發出詳細的問卷、實地探訪或同時使用以上兩種或多種的方法）。

第三階段：收集資料

在這個階段，工作小組按計劃展開收集資料的工作，這包括收集第二手資料、選擇借鑑對象、設計收集資料工具、實際收集資料。

收集第二手資料

如機構決定向外借鑑，研究工作通常從第二手資料入手。第二手資料來源包括：

- 圖書館和電腦資料庫
- 互聯網
- 報章雜誌
- 公司年報
- 商會
- 大學
- 市場研究公司
- 顧問公司
- 借鑑網絡，例如香港的亞洲典範借鑑中心和香港標準借鑑研究中心
- 獎項得主名錄，例如香港特區政府工業署舉辦的香港工業獎和香港服務業獎

下章將詳細介紹其中的一些資料來源。

組員亦可和顧客、供應商聯繫，交換訊息。經常和其化機構接觸的員工，例如市務和營業人員，亦可以提供一些資料。研究開發人員和工程人員通常知道其化機構同行的情況。

Stage 3: Collect Information

The team carries out data collection according to plan in this stage.

Steps include conducting secondary research, selecting benchmarking partners, establishing data collection instruments and carrying out the actual data collection work.

Conduct Secondary Research

Suppose the organisation has decided to conduct external benchmarking, the search for superior performance may easily start with secondary research. Secondary sources include:

- Libraries and electronic databases
- The Internet
- Press clippings
- Company reports
- Trade associations
- Universities
- Market research groups
- Consultancy firms
- Benchmarking networks, such as the Asian Benchmarking Clearinghouse and the Hong Kong Benchmarking Clearinghouse in Hong Kong
- Lists of award winners, such as the Hong Kong Awards for Industries and the Hong Kong Awards for Services organised by HKSAR's Industry Department

More information on some of these sources can be found in the next chapter.

Team members may also talk to customers and suppliers. Staff who make frequent contacts with other organisations, for instance, marketing and sales staff, may have valuable information. R&D and engineering staff should have good knowledge about what other organisations are doing in their professional areas.

Select Benchmarking Partners

Findings from the secondary research are used to assess potential benchmarking partners. The information is analysed and a list of potential partners is made based on the selection criteria established in the planning stage.

To identify useful and willing partners, the team may conduct a screening survey which also serves as an invitation to the benchmarking study. The survey should be simple and not too long, multiple choice questions work well to this end, but the objectives, focus areas and resource requirements of the study should be communicated clearly to the potential partners.

It is necessary to establish a mutual relationship for benchmarking. The organisation and the selected partners need to agree on the areas of information to be shared and not to be shared, as well as a code of conduct to be followed by both sides. It is most important when the partners are direct competitors.

選擇借鑑對象

小組可以從二手資料中尋找目標借鑑對象，分析這些資料後，按計劃階段定立的選擇標準整理出一份目標借鑑對象的名單。

小組然後展開初步調查，選出真正有借鑑價值和願意合作的機構，小組亦可借調查的機會邀請機構加入借鑑項目。調查的問題必須精簡，選擇題最合適，但組員必須明確地向目標借鑑對象解釋借鑑項目的目的、研究範圍和需要投入的資源。

只有互惠互利的關係能保證借鑑活動的成果。機構和借鑑對象必須預先作出協定，同意會交換哪些資料和不會交換哪些資料，並定出雙方都要遵守的行為守則。如借鑑對象是直接的競爭對手，這方面的協定就更重要。

設計收集資料的工具

小組可利用詳細的問卷收集資料。問卷還有另一作用：小組可根據收集到的資料決定是否需要進行實地探訪，如需要的話，應探訪哪些機構。

在問卷中可要求借鑑對象提供下面的資料：
背景資料 - 管理制度、與程序有關的一般統計資料

詳細的程序資料 - 流程、量度程序表現的指標

促進程序效能的因素 - 可以是培訓、設備、相配合的程序

問卷應同時提出量和質的問題。從量的數據可以看出程序的效能，從質的資料可以看出產生這個效能的原因。

收集第一手資料

小組可根據問卷調查結果選出值得實地探訪的機構。在實地探訪期間，組員應核對早前收集到的資料是否正確，與程序工作人員會談，親自觀察他們的工作方式。

探訪前便應決定討論事項，列出問題，送交對方。典範借鑑是互惠互利的活動，提出問題前應準備回答對方同樣的問題，自己不願意回答的問題就不必問，準備問題時應同時準備自己的答案。

Develop Data Collection Instruments

A detailed questionnaire will serve as both a data collection instrument and a screening device to determine whether site visit is necessary and, if yes, which partners merit a site visit.

The questionnaire requests information in these areas:

Background information - management structure, general statistics relating to the process being benchmarked

Specific process information - process flow, process metrics

Process enablers - may be training, equipment and related processes

Both quantitative and qualitative questions should be asked. Quantitative information gives a picture of the effectiveness of the process. Qualitative information tells what drives the effectiveness.

Conduct Primary Research

The results of the questionnaire provide a basis for deciding which partner organisations to conduct site visit. During site visits, team members verify the data collected, talk to the people who are involved in the process, and personally observe how the process works.

It is useful to prepare a site visit guide with draft questions and send it to the interviewees ahead of the scheduled visit. As said before, benchmarking is for mutual sharing. You expect to be asked the same question that you have asked the benchmarking partner. It is only appropriate that you ask questions that you are willing to answer and be prepared to give equivalent information in return.

Stage 4: Analyse Data

It is gap analysis in this stage. The team compares its organisation's performance with that of the partners, determines the gap between them, identifies the best practices, and designs implementation strategies for improvement.

Determine Performance Gaps

When data are ready, the team begins to compare performance measures. Sometimes data cannot be compared directly. In this case, it will be necessary to normalise them to allow meaningful comparison.

It is useful to tabulate numeric data. A comparison matrix works well to visualise the benchmark in a particular measure (Figure 8). When the benchmark for each area is determined, the team calculates the performance gaps and identifies areas where significant gaps exist.

第四階段：分析資料

這階段的工作是分析表現水平差距。小組會比較自己機構和借鑑對象的表現水平，計算差距，然後斷定優良作業方法，定出改善策略。

判斷表現水平差距

收集資料工作完成後，首先要比較程序表現的量度結果，不能直接比較的數據需要作規格化的處理。

將數字列表可方便比較，矩陣圖是常用的方法，最能突出各量度項的典範水平。決定了典範水平後，可計算自己的表現水平與典範水平的差距，找出差距最大的項目。

	Organisation A 甲公司	Organisation B 乙公司	Organisation C 丙公司	Organisation D 丁公司
RETURN ON ASSETS 資產回報率				
1. Operating profit / Operating assets 營運利潤/ 營運資產	6.9%	6.6%	2.8%	-1.8%
PROFIT MARGIN, TURNOVER OF ASSET 邊際利潤、資產周轉率				
2. Operating profit / Sales 營運利潤/ 營業額	6.3%	3.0%	2.0%	-1.6%
3. Sales / Operating Assets (times) 營業額/ 營運資產 (倍數)	1.35%	1.25%	1.19%	1.12%
4. Gross profit / Sales 毛利/ 營業額	25.0%	25.3%	25.5%	26.8%

Figure 8: Comparison Matrix for Measures
圖八：用矩陣圖比較量度數據

Source: Xerox
資料來源：施樂

斷定優良作業方法和促成手段

這是借鑑程序中一個非常重要的步驟，亦是典範借鑑和競爭力分析分別最大的地方。機構計算出表現水平差距後，再進一步探究別人表現超越自己的原因，這是典範借鑑的重要目的，是競爭力分析無法做到的。

有多種方法分析別人表現優越的原因，例如進程序對程序的比較，將自己機構和典範機構的詳細流程圖放在一起，這樣就容易找出兩者的差別，容易判斷哪些差別最影響表現的高下。另外，可用矩陣圖比較各機構促進表現的因素（圖九）。

Identify Best Practices and Enablers

Now it comes to a very important step of the benchmarking process. What distinguishes benchmarking from competitive analysis is that in benchmarking an organisation tries to find out what drives superior performance after performance gaps have been identified. Competitive analysis could not serve this purpose.

A number of tools can be used to determine how the benchmark organisation achieves benchmark performance. For example, you can conduct a process-to-process comparison. By putting side by side detailed flowcharts of your organisation and the benchmark organisation, it is possible to find out what differences in the process are causing the discrepancy in performance levels. A comparison matrix can be used again to compare the key factors that drive performance in different organisations (Figure 9).

	Organisation A 甲公司	Organisation B 乙公司	Organisation C 丙公司	Summary 總結
PERFORMANCE MEASURE 表現量度項	Slip rate 失誤率	Break even time 達到收支相抵需要的時間	Project cost management 項目成本管理	
TEAM TYPE 團隊類型	Cross-functional team 跨功能團隊	Cross-functional team 跨功能團隊	Cross-functional team 跨功能團隊	
CUSTOMER REQUIREMENTS 顧客要求	Focus group 顧客溝通小組	Full QFD analysis 全面的 QFD 分析	Design specs from engineers 參照工程人員的設計規格	
PRODUCT TESTING 產品測試	Test to spec 測試是否達到規格	Relative growth method 相對增長法	Test standard 參照測試標準	

Figure 9: Comparison Matrix for Descriptive Data
圖九：用矩陣圖比較描述性的資料

Source: Xerox
資料來源：施樂

其他的分析工具還有因果圖（魚骨圖）、根因分析法等。

分析工作的目標是尋根究底，找出表現差異的原因，了解別人做了些什麼事，以致表現比我們好（優良作業方法），以及他們怎樣去做這些事（促成手段）。

Other useful analysing tools include cause and effect diagram (fishbone diagram) and root cause analysis.

The objective is to get to the bottom of things to understand why performance differs, what are other people doing so that they perform better than we are (best practice), and how do they do it (enablers).

Stage 5: Adapt and Improve

In this stage the organisation communicates the results of analysis, develops an improvement plan and implements improvement.

Report Results

A report on analysis results serves as a communication tool for gaining acceptance for improvement action. The report should include key study findings, the current situation in terms of performance gaps, and recommendations for improvement. It is a "call to action" and should be communicated to management as well as the relevant process owners and users.

If the benchmarking project is an external initiative, the organisation may need to report findings to benchmarking partners, although it can keep to itself the lessons learned from the project.

Develop Action Plan

When all people concerned have accepted the benchmarking results and the need to change, the organisation can set new goals. The new goals are determined by a number of factors:

- What performance is achievable according to the benchmarking results
- What performance is the organisation capable of achieving
- How important is the achievement of these goals to stakeholders
- How much will it cost
- Which level of commitment is required to achieve it

Cost-benefit analysis is essential in prioritising improvement actions to achieve the new goals. The study completed by the American Productivity and Quality Center (see page 2) showed that "mature" benchmarkers often performed cost-benefit analysis before taking action and gained higher payback than "developing" benchmarkers. The analysis might have helped the organisations to identify high payback projects more effectively.

第五階段：應用和改進

這階段的工作包括報告分析結果，制定改進計劃和貫徹落實計劃。

報告結果

分析報告的作用是陳述利害，爭取員工支持改進措施。報告內容應包括主要的借鑑結果、目前機構的表現水平和典範水平的距離，以及改進建議。這是「起來行動的呼號」，必須傳達給管理人員、程序負責人和其他需要使用借鑑結果的人員。

如機構向外借鑑，可能需要給借鑑對象報告結果，但從借鑑活動中得到的知識經驗不必讓別人知道。

定立改善計劃

所有有關人員接納借鑑結果、同意必須作出改變後，機構可定出新的業務目標。

定立新目標時應考慮下列因素：

- 從借鑑結果看來，實際上最高可達到哪個表現水平？
- 機構有能力達到哪個水平？
- 達到這些目標後對所有利害關係者帶來什麼益處？
- 需要動用多少資源達到這些目標？
- 需要多大的決心、多大的堅持才能達到目標？

進行成本效益分析可判斷哪些改進措施最能達到新的目標。美國生產力及品質中心的調查（見第二頁）指出，在使用典範借鑑方法的機構中，「成熟」的用者通常在展開改善活動前進行成本效益分析，得到的改善成果通常比「發展中」的用者大。這可能是因為成本效益分析幫助他們找出了高回報率的項目。

行動計劃要顧及時間、負責人和資源，必須清楚說明改善範圍、目標、與機構使命的關係、要針對的主要工作程序，以及預期的結果。另外，應定出傳達信息、監察進度、調整典範水平的計劃。

實施計劃

實施改善計劃的職責通常交給另一個小組。組員應來自進行變革的部門或程序，原來負責借鑑工作的小組最少要有一位組員擔當改善計劃支持者的角色。

改進計劃必須得到管理人員的支持才有可能成功，另外，與程序關係密切的人員亦是爭取支持的對象，程序負責人是其中最重要的一個。所有受變革影響的單位都同意改善計劃後才可展開改善工作。

實施期間，必須量度和報告表現水平，監察改善工作是否達到預定的表現指標。日後和借鑑對象再作比較時，亦會用上這些量度結果。如本文在第一階段所述，典範借鑑活動必須有表現量度系統的配合。

調整典範水平

借鑑項目不能只做一次。競爭形勢不斷變化，自己努力改進了，但別人同樣力爭向上。機構必須定期評審現時的典範水平，決定是否仍是典範，有沒有其他機構可作為新的借鑑對象。這樣不斷向外借鑑，將目標定在最新的典範水平。

When preparing the action plan, you need to give thought to time, people and resources. The scope, the objective, the link with mission and key processes, and the expected outcome should be clearly defined. A good action plan also includes planning for communication, monitoring and re-calibration.

Implement the Plan

Actual implementation work is often passed on to a new team. Team members have to be drawn from the function or process affected by the change. There should be at least a sponsor from the original benchmarking team.

Success of the improvement plan depends very much on the support of management and the individuals closest to the process, especially the process owner. The action plan should be agreed by all affected entities.

During implementation, performance measurements should be taken and reported. Measurement data are used to monitor improvement against targets. They also provide the basis for subsequent comparison with benchmarking partners. As said in the early strategic stage, it is important to have a performance measurement system that integrates with benchmarking initiatives.

Re-calibrate Benchmarks

Benchmarking is not a one-off exercise. The competitive situation changes. You should expect other organisations strive for improvement and superior performance as much as you are. A regular review process should be in place to evaluate if the benchmarks are still valid and if there are other organisations to benchmark. By continuously benchmarking with external organisations, you can always resets your goals against current benchmarks.

Transfer Best Practices

Benchmarking are put to best use when the best practices are spread across the organisation and leveraged to achieve business goals.

Internal transfer of best practices depends very much on a knowledge management system.

Knowledge management would be a worthy subject for many serious writings. We only put together here some conditions that encourage internal knowledge transfer.

- "Silo" thinking, where divisions or functions focus on maximising their own accomplishment, often sets up barriers for best practice transfer. A culture that values personal expertise over knowledge sharing does not help either. The situation is, ironically, more rampant in knowledge-based organisations such as consulting firms. Factors to give thought to include role model play by leaders and a recognising system that encourages sharing and transfer. Benchmarking is useful to create a sense of urgency that compels people to learn from others, to accept new ideas and to push them through.
 - People often pay more attention to information tools than people interaction. Information technology tools such as e-mail, groupware and best practices databases can support employees' sharing and working together, but it all depends on employees' willingness to do so. More importantly, creating databases is not creating knowledge. Much useful knowledge, such as know-how, judgement and intuition, cannot be written down. The transfer of this "tacit" knowledge is a people-to-people process. The really important driver is culture and behaviours, the employees' own desire to share and seek out best practices.
 - Internal benchmarking provides a structured approach to internal transfer of best practices.
- 部門和功能單位往往有「門戶之見」，只求擴大自己的功勞，不願意交流優良的作業方法。重視個人知識多於交流知識的機構文化產生相同的結果，這種情況在依靠知識的機構（例如顧問公司）尤其突出。要解決這情況，領導者必須樹立坦率交流的榜樣，並應定出獎勵交流和傳播活動的制度。典範借鑑活動能揭露變革的迫切性，促使員工向別人學習，接受新構思和實踐新構思。
 - 很多人非常重視資訊工具，卻忽略了人和人的接觸。電郵、內聯網、優良作業方法資料庫等資訊工具雖然方便全機構員工交流和合作，但他們是否真正做到交流合作，全看他們是否能自動自覺地去做。創建資料庫不等於創造知識，實務技巧、判斷力、觸覺等識見都不容易用語言來表達，傳播這些「模糊」的知識只能靠人和人的接觸。最需要注意的是文化和行為，以及員工是否願意發掘和交流優良的作業方法。
 - 進行有系統的內部借鑑活動可促成優良作業方法的內部傳播。

傳播優良作業方法

機構應將借鑑得來的優良作業方法傳播到機構每個單位，並充份利用這些新得來的知識實現業務目標。要促進優良作業方法的內部傳播，必須依靠知識管理系統。

知識管理是個大課題，非本文能夠論述，這裡只列舉一些有利於內部知識傳播的條件。

Benchmarking Resources

可利用的資源和支援

資料來源

借鑑活動一般從搜集第二手資料開始。第二手資料通常不必購買，但可以提供其他機構的一些背景資料。

很多這些資料都是公開的，常見的來源包括報章、期刊、公司年報、會議論文集、分析報告和專業團體的刊物。從圖書館、電腦資料庫、互聯網可找到這類資料。

除「案頭研究」外，亦可參加一些會議、研討會、考察團、公司探訪活動，親自出外搜集資料。這類活動同時也是聯繫目標借鑑對象的機會，但搜集到的資料需要花些功夫去分析和解釋才會變得有用。

另外，可聯繫一些與借鑑題目有關的行業團體、商會和專業學會。專業學會經常進行自己專業的研究，這些研究的報告會是很有用的材料，例如市務專業的學會可以提供一些用於比較市務活動的資料。大學的研究院亦是重要的資料源。

Information Sources

A benchmarking project easily begins with secondary research. Secondary sources are often free and provide background information on the target companies.

A lot of this information is available in the public domain. Common sources include newspaper articles, periodicals, annual reports, conference proceedings, analyst's reports and publications of professional organisations. These types of information can be found by means of library research as well as electronic database and Internet search.

Other than desktop research, field data can be collected through participation in public conferences, seminars, study missions and plant visits. These activities also serve the purpose of networking with potential partners. However, information collected in this way requires substantial analysis and interpretation before it is useful to a benchmarking study.

You may also contact trade associations, federations and professional institutes that are relevant to the benchmarking subject. Professional organisations frequently carry out studies on their own field, which are good sources of information. For example, institutes of marketing profession may provide valuable information on benchmarking marketing activities. Research departments of universities will have much to offer either.

Then there are market research agencies and consultants. But unless they are already working for your organisation, hiring them for this particular purpose may be expensive.

For smaller companies with limited resources, local governments may provide support. The Department of Trade and Industry of the UK Government introduced the United Kingdom Benchmarking Index (UKBI) in 1996 to bring the benefits of benchmarking within reach of small and medium-sized enterprises (SMEs). The UKBI database provides comprehensive performance data of SMEs. Performance data are created and cumulated as each user submits information for the generation of comparative reports.

In Hong Kong, the Hong Kong Productivity Council has started to develop two benchmarking models, each with a set of key performance indicators. One is for the electrical appliances industry and the other for the toys industry. Multinationals and SMEs alike will find these sector-specific models easy to adapt. The project is supported by the Industrial Support Fund of the HKSAR Government.

市場調研公司和顧問公司亦可給予協助。如你的機構一向僱用這些公司，成本會比較低，相反，找他們專為一個項目搜集資料可能要付出很高的價錢。

資源有限的小型公司可以查看本地政府有沒有提供典範借鑑方面的支援。英國工商署在 1996 年引進了一套「英國典範指標」，幫助中小型企業相互借鑑。這套指標的資料庫給中小企提供全面的表現水平比較數據。資料庫的使用者輸入自己的表現數據後，系統會將輸入數據與庫存數據比較，製作報告。每多一個使用者，資料庫便累積多一份數據。

在香港，特區政府通過工業支援資助計劃支助香港生產力促進局制定電器業和玩具業的運作效益評估系統，每個系統包含一套主要表現指標，大小型機構均可根據這套指標相互比較經營表現。

借鑑網絡

機構應和一批典範借鑑對象維持聯繫，以便進行長久的借鑑活動。建立借鑑網絡有一定的難度，需要很多技巧。對於初進行借鑑活動的機構，供應商和顧客是主要的借鑑伙伴。你的業務成敗對他們有切身的利害關係，他們通常都願意合作。加入一些行業團體亦能幫助尋找和接觸可能的借鑑對象。

行業或商界會議是展開聯繫活動的好機會。在一個典範借鑑會議上，幾間公司商議成立「借鑑資訊交流中心」(Benchmarking Exchange)，現時這個組織已有 2500 多個公司會員。香港的地鐵公司是 CoMET 的成員，這個組織由世界十間經營地鐵業務的機構組成。成立 CoMET 的建議是在國際公共運輸機構聯會的一個會議上提出的。

初進行借鑑活動的機構不一定要自己建立關係，他們亦可加入一些現有的網絡，這些網絡通常以「借鑑中心」的形式運作，可以是私營的機構，亦可以是政府支助的組織。

Benchmarking Networks

Building and maintaining an external network of best practice companies are essential to ensure the continuous success of benchmarking initiatives.

Creating an external benchmarking network is challenging and involves a lot of subtle skills. For a new benchmarker, key suppliers and customers are prime candidates as initial partners because they have a vested interest in your business success. Membership within industry groups will also provide networking opportunities and benchmarking contacts.

Conferences often provide great opportunities for networking. The Benchmarking Exchange, with a membership of over 2,500 companies, started from a small group of benchmarkers who met at a benchmarking conference. The CoMET benchmarking group of ten metro organisations, including Hong Kong's MTR Corporation, was proposed at a meeting of the International Union of Public Transport.

Other than venturing on their own, newcomers to benchmarking may join existing benchmarking networks. They are managed by benchmarking centres that are either private initiatives or organisations supported by local governments.

g Resources

The International Benchmarking Clearinghouse of the American Productivity and Quality Center (APQC) is the largest single organisation devoted to promoting the practice of benchmarking. Members from across the world can join common interest groups, communicate on-line and have access to best practice databases. The Benchmarking Exchange offers another global network.

Benchmarking centres often form alliance with similar organisations across the world to assure a global reach for their members. For example, the Global Benchmarking Network is made up of benchmarking centres from 19 countries.

Their counterparts in Hong Kong are the Asian Benchmarking Clearinghouse (ABC) and the Hong Kong Benchmarking Clearinghouse. ABC has formed strategic alliance with APQC and the Australia Quality Council.

美國生產力及品質中心的國際典範借鑑中心是倡議典範借鑑的最大型機構。世界各地的會員組成專題討論小組，在網上交換信息。會員亦可接上中心的資料庫，尋找有用的資料。「借鑑資訊交流中心」是另一個全球性的網絡。

各地的借鑑中心通常結成聯盟，讓會員能走向世界，例如「世界典範借鑑網絡」(Global Benchmarking Network) 便集合了 19 個國家的借鑑中心。

在香港，亞洲典範借鑑中心和香港標準借鑑研究中心提供了類似的網絡。亞洲典範借鑑中心、美國生產力及品質中心、澳洲品質協會已結成聯盟。

企業匯集研究

借鑑中心通常提供顧問服務和各種借鑑服務，他們展開的企業匯集研究對初進行借鑑活動的機構和小型機構最有幫助。

這類研究項目集合多間公司，對大家感興趣的題目共同學習，發掘優良的作業方法。借鑑中心擔任獨立的项目籌辦人，派出研究小組展開借鑑項目。

研究程序和一般借鑑項目的程序一樣，包含計劃、搜集資料、分析資料、實踐研究成果各階段，但研究小組負起所有執行工作，這包括搜集第二手資料，聯繫借鑑對象，進行問卷調查，安排實地探訪，分析資料，編寫報告，籌辦知識交流會。參加研究項目的機構因而可以將大部分的時間和資源投放到實施優良作業方法上面。

項目的籌辦人通常邀請一位對研究題目有專門知識和工作經驗的人對借鑑工作提供專業意見。

研究項目的參與機構分攤項目成本，他們支出的時間和金錢通常會比自己進行研究來得低，但可收到差不多的效益。對於初進行借鑑活動的機構，這可以當作是建立借鑑網絡的起步點。

Consortium Study

The benchmarking centres often provide consultancy and other services relating to benchmarking. One particularly useful to new benchmarkers and smaller organisations is consortium study.

A consortium study brings together a small group of organisations to learn and adapt best practices on a subject of common interest. The benchmarking centre acts as a third-party organiser and forms a research team to carry out the project.

The study will follow the general benchmarking approach (planning, data collection, data analysis and adaptation of findings), except that the research team will handle all the legwork such as conducting secondary research, recruiting partners, administering questionnaires, conducting site visits, analysing data, reporting, and organising a knowledge transfer session. The participants in the consortium study can, therefore, focus their effort and resources on implementing the best practices uncovered.

The organiser of a consortium study will normally invite a subject matter expert to give specialist input to the project. The subject matter expert will be someone who has specialist knowledge and practical experience in the subject of study.

Participants share the cost of the study. While they invest less time and money than conducting their own research, they probably gain similar benefits. For new benchmarkers, it will be a good first step to establish their external benchmarking network.



Case Studies

Case Studies: DHL International (Hong Kong) Limited

案例研究：敦豪國際（香港）有限公司

敦豪國際（香港）有限公司（DHL）表示公司推行典範借鑑活動的日子尚短，但DHL早已具備了一些進行借鑑活動的成熟條件。

DHL的管理層對業務發展方向和主要業務程序有充分的掌握，這方面的認識幫助他們判斷和確認最需要進行借鑑活動的業務程序，然後通過貫徹落實借鑑活動改善這些程序，爭取更高的業務表現。

明確的策略方向

DHL管理層明白顧客需要的再不只是運輸服務。在未來十年，對空運速遞服務的需求預料會大幅度上升。空運速遞較快捷，但運費較高，顧客作出這種選擇是為了削減庫存和存貨堆積的成本，從整條供應鏈來計算還是可以將成本降低。電子商貿的發展亦會增加貨運和分銷活動，買賣雖然轉到網上進行，但顧客仍需要很實在地處理物流的工作。

DHL International (Hong Kong) Limited claims itself a newcomer to benchmarking, but the company already has some "mature" conditions for its benchmarking initiatives to succeed.

The management of DHL has presented a clear direction of business growth and knows their key processes. It is important for setting benchmarking priorities, pinpointing critical areas for benchmarking and driving improvements that contribute to business success.

A Clear Strategic Direction

DHL understands that customers are looking for more than transportation solutions. For the next decade, the demand for air express services

is estimated to increase drastically. However, this surge in demand for a costlier but faster transportation solution is set against an intention of customers to cutting warehousing and inventory costs, and in turn cutting general costs across the whole supply chain. The advance of e-commerce will only result in more businesses seeking solutions for their distribution needs. Sales of goods and services may shift on-line, but the physical movement of goods and products are still required.





The future success of DHL lies in providing not only express transportation, but also express solution for customer's logistics and supply chain functions. Small wonder that the early external benchmarking initiatives of the company focused on supply chain management. To start with, DHL joined a consortium benchmarking study conducted by the Asian Benchmarking Clearinghouse. The study focused on six areas in supply chain management. They are, specifically, positioning, integration, agility, measurement, supply management and enabling technologies.



單靠快速的貨運服務不能保證 DHL 的未來發展，公司必須給顧客提供服務方案，使他們能快速完成物流和供應鏈方面的作業。DHL 最初的向外借鑑活動因此以供應鏈管理為主題。公司參加了亞洲典範借鑑中心組織的一個企業匯集研究項目，研究範圍包括六個供應鏈管理範疇，即定位、整合、靈活性、量度、供應管理、支援技術。



了解業務程序

DHL 管理層清楚知道哪些是主要業務程序。在每個借鑑項目中，這都是一開始就必須弄明白的問題。主要程序是指哪些關係企業成敗的程序，能改善這些程序就能提高公司達到經營目標的能力。下表列出 DHL 認為最影響他們業務的關鍵程序。

Know Its Own Processes

DHL knows what its key business processes are. The identification of these processes would be one of the first steps in any benchmarking project. Key processes are those that have the greatest impact on the company's critical success factors. Improvement in these processes,

therefore, adds to the company's capability to achieve business objectives. The following table gives an idea of what processes DHL thinks as critical to their success.

Categories 類別	Key Processes 主要程序
Service operation 服務作業	Air 空運 Ground 地面運輸 Express Logistics Centre 快速物流中心 Supply chain management 供應鏈管理
Customer service 客戶服務	Customer satisfaction measurement 量度顧客滿意度 Call centre 電話服務中心
Sales and marketing 行銷和市務	Sales process 行銷程序 Sales management 行銷管理 Marketing information system 市務信息系統 Market intelligence 市場情報
Human resource management 人力資源管理	Management development 管理能力發展 Training 培訓 Developing competencies 勝任能力發展 Career planning 升遷計劃 Managing employee satisfaction 員工滿意度管理
Finance 財務	Cash management 現金管理 Balanced scorecard 均衡評分表
Information Technology 資訊科技	E-commerce, business to business 電子商貿 (企業對企業)

Table 3: DHL Key Processes
表三：DHL 的主要業務程序

From Internal to External Benchmarking

DHL has long been conducting competitive analysis of its air express services. A weekly customer satisfaction survey is administered by a third party to customers not just of DHL. The results help constantly monitor service performance and position the company among its competitors.

An employee satisfaction survey is conducted every two years. Also administered by a third party, the survey provides data for internal comparison between worldwide operations. These data in turn become input for human resource planning.

Benchmarking has first been incorporated into the improvement system as internal initiatives. It is a usual starting point for companies that take up benchmarking as an improvement tool. It is easier to get started between branches or divisions in the same company. Their functions and processes are expected to be similar and ready for comparison. The global presence of DHL offers many opportunities for internal benchmarking and learning. One such project involves the comparison between the seven Express Logistics Centres across the world, including the one in Hong Kong.

To gain a new perspective of looking at ways to conducting business, DHL has started benchmarking with partners outside the air express industry. Current external benchmarking

initiatives focus on supply chain management, call centre, the sales process and management development, areas that the company deems as critical to its business.



內部借鑑到向外借鑑

DHL 一直對自己的速遞服務進行競爭力分析，公司委托獨立機構每星期進行一次顧客滿意度調查，調查對象是整體速遞業的顧客，這樣能幫助公司經常性地監察服務表現，判斷公司和競爭對手的高下。

DHL 亦每兩年進行一次員工滿意度調查，這項調查同樣是交由獨立機構執行。世界各地的營運單位會相互比較調查結果，並將結果作為定立人力資源計劃的一項依據。

DHL 最初的借鑑活動是在內部進行的。很多利用借鑑活動促成改進的公司都是從內部借鑑入手，同一公司的分部或部門通常較容易合作，他們的活動和業務程序亦較相似，方便比較。DHL 的全球性業務提供很多內部借鑑和學習的機會，其中一個內部借鑑項目是比較全球七個快速物流中心（包括香港的一個）。

DHL 亦開始尋找速遞業以外的借鑑對象，從新的角度研究作業方式。現時的向外借鑑項目包括供應鏈管理、電話服務中心、行銷程序和管理能力發展，這些

都是 DHL 認為影響業務成敗的範圍。

借鑑程序

DHL 的借鑑程序分為六個步驟：

1. 定出需要進行借鑑活動的主要程序。
2. 找出這程序上有典範表現的機構作為借鑑對象。
3. 收集借鑑對象的資料。
4. 進行表現水平差距分析，確定優良作業方法。
5. 定立改善計劃
6. 監察進度，量度成效，反覆借鑑。

向外借鑑通常產生兩個不容易處理的問題。第一，如目標借鑑對象是競爭對手，如何說服他們合作？第二，如他們是另一行業的，是否能相互比較？

DHL 管理層認為慣常的業務交往活動是尋找目標對象和試探他們是否願意合作的機會。要引起競爭對手對借鑑活動的興趣，必須對他們強調任何借鑑活動的基本目的：交流學習，互惠互利。



如需要尋找速遞業以外的借鑑對象，DHL 會留意那些在指定範圍或程序有突出表現的行業，例如，對於客戶服務、電話服務中心、服務重整等借鑑題目，會在銀行、電訊公司中尋找。

The benchmarking Process

DHL conducts benchmarking projects through a six-step process:

1. Identify the key process
2. Identify best-in-class performance and best practice partners
3. Collect information from benchmarking partners
4. Perform gap analysis and identify best practices
5. Establish improvement plan
6. Monitor, measure and recycle

External benchmarking projects often post two tricky questions for a company. Firstly, if the potential partners are competitors, how can you approach them for collaboration. Secondly, if they come from other industries, what is there in them for meaningful comparison.

DHL sees usual business networking events as good opportunities for identifying potential benchmarking partners and testing intention of collaboration. To encourage competitors' interest in benchmarking, the company finds it important to emphasize the basic nature of any benchmarking initiative: it is an effort for mutual exchange and benefit.

For potential partners outside the air express industry, DHL looks into an industry which excel in a particular area or process identified for benchmarking. So, for benchmarking subjects such as customer service, call centre and service recovery, it is useful to search within the banking industry and telecom firms.

Improvement and Benefits

Benchmarking is not just about comparison but improvement. DHL management clearly understands that establishing an improvement plan is the most significant step in the benchmarking process. Through benchmarking, the company obtains comparative measurements, knows the performance gap and understands how the others achieve best-in-class performance. This information is translated into action plans that drive improvement in critical areas.

And by benchmarking outside the industry, the company aims to grab hold of out-of-the-box ideas that would bring about breakthrough changes and innovation to its business processes.



The effectiveness of benchmarking, however, very much depends on to what extent are such improvement initiatives linked to the business strategies of the company. This leads us back to the beginning of the matter. An organisation has to have a clear understanding of its strategic direction and key processes to set benchmarking priorities, and carry out benchmarking projects and action plans that deliver results the organisation needs most. DHL exemplifies in this area.

改進成果

典範借鑑不只是比較，而是比較後設法改善。DHL 的管理層認為定立改善計劃是借鑑程序最重要的一步。公司通過借鑑活動



獲得比較資料，知道表現水平差距，了解其他公司怎樣達到典範水平，最後還必須將這些知識轉化為行動，實踐改善主要的業務範圍。

通過向其他行業借鑑，DHL 希望更進一步，跳出慣常的思維方式，突破和創新業務運作。

有一個因素往往決定了借鑑活動的成效，就是借鑑活動是否能配合公司的策略方向。公司必須有明確的路向，對主要程序有充份的了解，才可能選定最需要進行借鑑活動的程序，貫徹落實借鑑活動，創造公司最需要的成果。DHL 做到了這一點。

Case Studies: Kowloon-Canton Railway Corporation

案例研究：九廣鐵路公司





In 1991 Kowloon-Canton Railway Corporation (KCRC) began its "Quest for Excellence", a total quality management programme with a vision to be a world leader in providing quality transport services.

In 1992 KCRC commissioned its first global benchmarking study to find out how its performance compared to world leaders in the railway industry and establish improvement plans to close the gap. Since then benchmarking has played an important part in the Quest for Excellence programme. It enables the corporation to see what is possible and prioritise its improvement actions.

1991年，九廣鐵路展行「臻善行動」，力求通過這全面優質管理計劃成為世界級的優秀公共運輸機構。

1992年，九廣鐵路進行第一個全球借鑑項目，找出自己經營表現與世界鐵路運輸業領先機構的差距，再按差距定出改善計劃，追上世界級水平。從那時開始，典範借鑑在「臻善行動」中發揮了重要作用，公司根據借鑑結果確定了可提升的表現水平，定出了最需要進行的改善活動。

借鑑和改善工作相結合

典範借鑑活動是九鐵程序改善體系的一個組成部分。下圖顯示了改善工作的程序，這程序以戴明循環改善方法（Plan-Do-Check-Act）為基礎。

1. 斷定問題/ 表現水平差距（需要時進行典範借鑑）
2. 從員工和顧客處收集資料
3. 描畫/ 分析現時程序，找出根本成因
4. 定出對應方法
5. 定立量度方法和指標
6. 實施
7. 評估效用

如某程序需要大幅度的改善，工作團隊會選用典範借鑑方法達到改善目標。九鐵員工在借鑑活動中量度程序表現，深入了解程序，定立關鍵業務範圍的躍進指標，然後爭取突破性的改善。

九廣鐵路同時進行表現水平借鑑和程序借鑑。不定期進行的表現水平借鑑項目有多個。公司管理層表示經常地競逐獎項亦是一種向外借鑑的方法。

在表現水平借鑑方面，九鐵進行最多的是顧客滿意水平的比較，借鑑對象是香港其他大型的運輸業經營者，公司會委托獨立的市場研究機構執行調查研究和收集資料的工作。另外，九鐵加入了一個世界鐵路客運經營者的研究項目。

Integration with the Improvement Process

Benchmarking is an integrated part of KCRC's process improvement system. The process improvement process, as shown below, is an elaboration of Deming's Plan-Do-Check-Act cycle.

1. Identify problem/performance gap (benchmark where appropriate)
2. Gather input from employees and customers
3. Map/analyse the current process and identify root causes
4. Formulate counter-measures
5. Set measures and targets
6. Implement
7. Evaluate performance

Work teams use benchmarking studies for process improvement when significant improvement is required for a particular area. Through benchmarking, KCRC people measure process performance, understand the process, set stretch targets for key business drivers and drive breakthrough improvement.

KCRC carries out both performance and process benchmarking. Several performance benchmarking studies are conducted from time to time. KCRC management also see their regular participation in award competitions as a form of external benchmarking.

For performance benchmarking, KCRC often conducts competitive benchmarking studies on customer satisfaction level with other major transport operators in Hong Kong. Independent market research companies are employed to conduct the studies and collect data. KCRC also participates in a worldwide study on passenger rail operators.

Finding the Right Partners

KCRC considers it hard to identify comparable partners. The 34-kilometre East Rail line runs through some very densely populated areas, which is not typical of similar rail systems. Even more unusual is that KCRC runs on commercial principles. It is not state-owned or subsidised as many rail operators in other countries are.

To ensure that partners are right for comparison, KCRC set down criteria for selecting benchmarking partners. The following table shows what KCRC considers when it tries to identify a comparable organisation.

挑選合適的對象

九鐵表示合適的比較對象不容易找，三十四公里長的東鐵線貫穿了一些人口非常稠密的地區，很少同類的鐵路有這個特點。另外，九鐵按商業原則經營，這個分別就更大，其他很多地方的鐵路不是國營就是國家補貼。

九鐵為保證選出合適的借鑑對象，定立了一套挑選標準。下表列出九鐵選擇對象時考慮的事項。

Criteria for Selecting Benchmarking Partners 選擇借鑑對象的標準	
Performance Benchmark Companies 表現水平借鑑對象	Process Benchmark Companies 程序借鑑對象
<ul style="list-style-type: none">Operate in economically developed cities 位於經濟發達的城市Carry over 20 million passengers per year (for transit companies) 每年載客超過 2000 萬人（這條標準用於客運公司）Employ reasonably modern equipment and infrastructure 使用適度現代化的設備和基礎設施Have distinct urban transit operations and infrastructure to minimise issues associated with cost allocations to and from other systems 使用突出的市區集體運輸方法和基礎設施，能減低與其他運輸系統的成本分配問題	<ul style="list-style-type: none">Are identified through careful research 通過周詳的研究調查工作找出Will share information on best practices 願意交換優良作業方法的資料Have innovative approaches or solutions to problems we currently have 使用創新的方法解決九鐵同樣碰到的問題Functions and processes are comparable to ours 活動和程序與九鐵相似Meet minimum performance benchmark levels 達到最低的典範表現水平

Table 4: KCRC's Criteria for Selecting Benchmarking Partners
表四：九鐵挑選借鑑對象的標準

Some companies may look similar but actually they have enough differences to be relevant benchmarking sources. For instance, KCRC and MTRC in Hong Kong cannot be readily compared as each of them operates a rather different rail business. MTRC operates passenger trains that run mainly in underground tunnels in urban areas. KCRC provides suburban transport and also operate freight and cross-boundary through trains.

一些公司表面相似，但實際有很大分別，未必是合適的比較對象。例如，九廣鐵路和地下鐵路經營的業務有很多不同的地方，不容易比較。地鐵經營市區客運業務，大部分鐵路位於地下隧道中。九鐵卻提供市郊運輸服務，同時經營客運、貨運和跨界的直通車。

業內還是業外

九鐵很多時向其他的鐵路經營者借鑑。管理層認為同行機構方便比較，但競爭對手未必願意交換很多資料，交換的資料亦未必十分詳細。不同國家的鐵路經營者雖然經營類似業務，卻不是競爭對手，因此較能維持借鑑伙伴的關係。

另一方面，向其他行業借鑑可以跳出自己行業的局限，認識一些世界最好的作業方法。不同行業的機構未必容易比較，但九鐵會通過業外借鑑改善一些特定的程序。

Inside or Outside the Industry

KCRC benchmarks with other rail operators from time to time. KCRC management see that competitive benchmarking provides the most direct comparisons that are possible. But a major hindrance is how much information and to what depth are competitors willing to share information. Similar rail operators in different countries, however, are not competitive. As a result, a benchmarking partnership can be comfortably maintained among them.

On the other hand, benchmarking outside the industry provides insight into best practices of the world, not just within the confine of the industry. Meaningful comparison may not easily come by in this type of benchmarking, but when there is a specific process to improve, KCRC will consider benchmarking with organisations outside the industry.

Making use of the data

Having a partner with similar business or processes does not necessarily guarantee ready data for comparison. Differences in business environment, regulations and culture need to be considered.

KCRC recognises that direct comparison between companies does not come by straight away whether it benchmarks in Hong Kong or across the world. An understanding of the regional differences help the corporation in interpreting the data and the divergence in performance. In the case of KCRC, it is necessary to allow for, say, rail subsidies, which are practiced in many countries.

KCRC expects a benchmarking study to provide not an exact representation but rather an indication or best approximation of what a particular work can be best accomplished. It, however, does not prevent the corporation from realising that benchmarking is instrumental in improving its performance. The management has attributed benchmarking as one of the means that enable them to keep on winning some prestigious awards through the years, which place the corporation among the leading organisations in Hong Kong.

運用借鑑結果

選出業務或程序類似的借鑑對象後，還有一些因素需要考慮，經營環境、法規、文化的差異都可能影響比較結果。

九鐵認識到機構和機構之間很少能立即作出直接的比較，不論借鑑對象是香港或外地的機構，都未必能做到這一點。對於外地的機構，如要正確地解釋數據和表現水平的差距，必先要了解地區性的差異，以九鐵為例，必須考慮到其他國家政府經常給予鐵路公司補貼的問題。

九鐵管理層表示借鑑結果不可能完全解釋真實情況，只可以提供方向或最接近真實的景象，從中判斷用什麼方法可以最有效地將指定的工作完成。但這個作用已足夠促成程序的改善，九鐵管理層表示公司多年來贏得不少重大獎項，能躋身香港領先機構之列，典範借鑑正是其中一個成功原因。

Case Studies: MTR Corporation



案例研究：地鐵公司



地鐵公司自 1992 年開始利用典範借鑑尋求在服務上精益求精，起初聘請顧問公司提供協助，後來發覺顧問服務不能滿足公司的需要，因而自行建立一套借鑑方法。地鐵公司將借鑑程序納入有關的操作程序文件，借鑑學習逐漸成為了公司文化的一部分。

The MTR Corporation has used benchmarking as an improvement tool since 1992. Consultant firms were employed to assist in the process at the beginning. Having found the service not satisfying organisation needs, the Corporation ventured on its own and developed its specific benchmarking methodology. Now the organisation has the benchmarking process written into corporate procedures and integrated as an important part of its culture.

A People that Discovers and Learns

Management of the MTR Corporation clearly understands that the benefits of benchmarking come from its continuous and pervasive use. Benchmarking is not treated as a management fad but is recognised because of the work it does. It is a powerful tool that, when incorporated into the improvement system, gives data, direction and support for management decision.

Many people consider a learning culture a critical condition for benchmarking initiatives to succeed. The MTR Corporation has demonstrated that this is true. Management describes what the organisation is practising as "a living



benchmarking system". All levels in the organisation are involved. Management, process owners and operational staff alike can initiate benchmarking projects. Work Improvement Teams are one source of benchmarking ideas. Operational units use self-initiative to carry out small benchmarking projects for process improvement, for instance, arranging site visits to learn from other companies.

A Tool for Continuous Improvement

This learning culture ensures that benchmarking is a continuous process in the MTR Corporation. Top management have committed themselves to reinforce this continuous process. Clear objectives have been set for benchmarking activities. One of these specifies benchmarking as a means to facilitate continuous improvement through its regular use.

To assure focused improvement, benchmarking is linked to key success factors of the company. Top management determines what are critical for metro business and review at least once a year the results of benchmarking in meeting objectives.

求知、學習的文化

地鐵公司的管理層清楚知道，只有全公司不斷地進行借鑑活動，才能收到最大的借鑑效益。管理人員不把典範借鑑看作一時的管理風尚，他們根據典範借鑑實際的功用認定這是一個有實效的工具。借鑑活動在地鐵公司的改善體系發揮很大的作

用，能夠供給數據，指引方向，幫助管理人員有效地作出決定。

很多人認為借鑑活動只能在重視學習的文化環境中生根，地鐵公司證明這個說法是正確的。公司管理層說，他們採用了一個「日常借鑑系統」，全體員工不論職級，不論是管理人員、程序負責人或操作人員都可提出借鑑

活動。工作改善小組可構想借鑑項目，操作部門亦可自發地進行小型的借鑑活動以改善自己的操作程序，例如他們可安排探訪活動，到其他公司觀察學習。

不斷求進的工具

這種重視學習的文化保證借鑑活動能不斷展開。地鐵高層管理人員決心讓借鑑學習的活動長久維持下去，他們定立了明確的借鑑活動目標，其中一條訂明員工應經常使用典範借鑑來達到持續改進的目標。

公司的借鑑項目都是最影響公司服務及運作表現的範圍，這樣才可作出針對性的改善。管理高層負責判斷公司地鐵業務的成敗關鍵，並最少每年一次評審借鑑工作是否能促成這些成功要素。

每年進行的借鑑項目

地鐵公司在 1994 年參加了一個重要的借鑑項目，這個項目每年進行一次，成員包括來自三大洲的十個地鐵經營者，合稱為 CoMET (Community of Metros)。倫敦大學的鐵路技術策略中心以獨立身份處理成員間收集和傳送資料的工作。

CoMET 項目有五個研究範圍：資產/ 設備使用率、可靠性、服務品質、效率、財政表現。每個範圍都定出了一套主要表現指標，作為相互比較的基礎。成員每年交換表現數據，對指定範圍表現突出的成員進行深入的案例研究，安全性和可靠性是其中一些研究重點，研究結果用於進一步的改善工作。

An Annual Exercise of Performance Benchmarking

An important benchmarking effort of the MTR Corporation started in 1994 and has now become an annual exercise. The initiative involves a Community of Metros (CoMET), to which ten metro organisations spanning three continents belong. The Railway Technology Strategy Centre of the University of London acts as a third party to collect and disseminate information among the group.

The CoMET project studies five areas: asset/capacity utilisation, reliability, service quality, efficiency, and financial performance. Key performance indicators (KPIs) (Table 1) were established to provide a framework for comparison. Each year group members exchange performance data and conduct detailed case studies of the best performing metros in selected areas. Safety and reliability are some of the high-priority areas to study. Results are used as input to improvement plans.

Asset/Capacity Utilisation 資產/ 設備使用率	A1. Capacity km per track km 載客量公里 / 軌道公里	A2. Passenger km per capacity km 乘客公里 / 載客量公里
Reliability 可靠性	R3. Car operating hours per total hours delay 列車營運時數 / 總延誤時數	R4. Percentage of train on time 準時的列車百分比
	R5. Car operating km between incidents 事故之間的列車營運公里	R6. Car operating hours between incidents 事故之間的列車營運時數
Service Quality 服務品質	SQ7. Total passenger hours delay per 1000 passenger journey 總乘客延誤時數 / 1000 乘客車程	SQ8. Estimate percentage of passengers on time 估計準時的乘客百分比
Efficiency 效率	E9. Revenue capacity km per total staff + contractors hours 載客量公里收益 / 員工 + 合約員工總時數	E10. Total passenger journeys per total staff + contractors hours 總乘客車程 / 員工 + 合約員工總時數
	E11. Revenue car operating km per total staff + contractors hours 列車營運公里收益 / 員工 + 合約員工總時數	
Financial Performance 財政表現	FP12. Service Operations cost per passenger journey 服務營運成本 / 乘客車程	FP13. Fare revenue per passenger journey 車費收益 / 乘客車程
	FP14. Operating cost per passenger journey 營運成本 / 乘客車程	FP15. Service Operation cost per car operating km 服務營運成本 / 列車營運公里
	FP16. Maintenance cost per car operating km 維修成本 / 列車營運公里	FP17. Total cost per car operating km 總成本 / 列車營運公里
	FP18. Operating revenue per operating cost 營運收益 / 營運成本	

Table 5: Key Performance Indicators for the CoMET Study
表五：CoMET 研究項目的主要表現指標

Comparing Apple to Apple

Each of the ten members of CoMET comes from a different country. This prevents the practice of a particular country dominating the results. But different countries have different social and economic conditions as well as different regulations for conducting business. The latter is especially true in the business of mass public transport. These factors may somehow muddle comparison and gap analysis, as the organisations are not running on the same ground. A question needs to be answer here, which is common in many external benchmarking projects: To what extent are your organisation comparable to your partners?

The CoMET group has developed criteria for selecting members in the first place. A major criterion is that the railway serves urban areas in a principle city. Such a metro organisation typically operates under a high passenger loading with short distance between stations and a large number of underground tunnels.

To deal with the regional differences, the group has a small team working out the best ways for comparison. Some generic areas such as safety performance can be compared without the need for much manipulation of data. Others usually require some normalisation, for example, taking into account the gross domestic product (GDP) or purchasing power parity (PPP) of different countries.

The comparison system improves as the CoMET project rolls on year by year. Some key performance indicators have been changed to provide a better platform for comparison. The data accumulated through the years allow comparison of trends rather than absolute figures.

建立相互比較基礎

CoMET 的成員每個都來自不同國家，不會有一個國家的慣常做法支配了比較結果，但不同國家有不同的社會和經濟狀況，政府對集體運輸業的規管亦是每個國家都不同。由於每個成員都是在不同的條件下經營，比較和分析工作會有一定的難度，就像其他很多向外借鑑的機構一樣，CoMET 成員必須解答這個問題：借鑑伙伴之間能作出多準確的比較？

CoMET 一開始即定出了挑選成員的標準，最重要的考慮因素是鐵路網絡是否覆蓋大城市的市區，這類鐵路通常車站距離短，有很多地下隧道，需要應付大量的乘客。

為了解決地區性的差別，CoMET 成立了一個小組找出最合理的比較方法。安全性等數據不需要經過太多處理即可相互比較，但其他數據通常要作出規格化的處理，例如按各地的本地生產總值和購買能力平價作出調整。

CoMET 項目每過一年，比較系統就越趨完善。成員修改了一些主要表現指標，定出了更合理的比較基礎。另外，累積的數據不斷增加，成員可以比較表現水平的逐年變化，不再局限於分析絕對的數值。

其他的借鑑活動

CoMET 的十個成員經營大致相似的業務，但沒有一個是競爭對手，彼此樂意交換資訊。地鐵公司把 CoMET 看作是作用巨大的借鑑項目，同時也是良好的借鑑網絡。公司需要針對某個程序展開借鑑活動時，可以很容易地在成員中找到借鑑伙伴，即使是其他的改善活動，亦可以請求 CoMET 成員提供相關的資料。

地鐵公司在 1998 年參加了另一個鐵路業的借鑑小組，組員多是一些區域鐵路的經營者，業務與地鐵公司有較大的差別。小組同樣定出了一套方便比較的主要表現指標。

地鐵公司亦和外地其他行業的機構進行一些程序借鑑項目，借鑑範圍包括顧客滿意度、供應商管理、資訊科技、資產管理、安全性和可靠性。

More Benchmarking

The group of ten operate more or less the same business but they are not competitive. Data are exchanged openly among members. The MTR Corporation actually sees CoMET as a benchmarking network as much as a useful project. Other members are ready partners for specific process benchmarking as well as information sources for other process improvement activities.



The MTR Corporation joined another railway benchmarking group in 1998. Members include some more regional railway operators who do not conduct exactly the

same business as the MTR Corporation. Again, KPIs have been developed for comparison.

The Corporation has also conducted several process benchmarking projects with worldwide partners from other industries. These studies focused on areas such as customer satisfaction, supplier management, information technology, asset management, safety and reliability.

Benchmarking Payback

The MTR Corporation attributes hundreds of millions of dollars of savings to improvement efforts as a result of benchmarking. The following areas have seen major improvement:

- Asset management, replacement and utilisation - savings in large expenditure items by extending the life of assets
- Telecommunication system and information system to customers
- Efficiency of internal management and practices
- Value to business, customers, and the community

These improvements would not come by if study results have not been effectively turned into action. Management of the MTR Corporation are well aware that they need to commit and provide support, including the allocation of necessary resources. Implementation of benchmarking results also requires buy-in from staff.

Communication plays an important role in making staff at all levels understand why they have to change. As a result, the Corporation publicises benchmarking results in internal publication.



Even more important is the practice that benchmarking is part of everyday improvement activities at all levels. The MTR Corporation's management said their people "live benchmarking". It is probably what makes the Corporation a good benchmark for benchmarking practices.

借鑑活動的效益

地鐵公司表示借鑑活動促成的改善成果數以億元計，以下範圍獲得了最顯著的改善：

- 資產的管理、更換和使用 - 延長資產操作壽命，省去了很多大額的支出項目
- 通訊系統和乘客告示系統
- 內部管理和操作效率
- 公司、乘客、社會的得益

如不能將借鑑結果落實為改善行動，這些成果不可能出現。地鐵公司管理層清楚知道自己需要在這方面作出承擔，提供必需的支援，撥出必需的資源。為保證借鑑結果得到實

徹落實，亦必須爭取員工的支持，通過有效的溝通傳訊方法讓所有級別的員工明白必須變革。地鐵公司因此會在內部刊物公佈和宣傳借鑑項目的結果。

但典範借鑑的成功關鍵終在於經常運用，將典範借鑑納入全公司日常的改善活動中。地鐵公司的管理層說他們的員工

「借鑑為生」，或許就是這一點使地鐵公司成為典範借鑑活動的典範。

Case Studies: Xerox

案例研究：施樂



Xerox is often referred to as the benchmark of benchmarking. The story began in the early 1970s when Xerox in the US introduced benchmarking as a new tool to regain its competitive advantage. Benchmarking became a major driver of its business turnaround.

The amount of benchmarking has increased significantly in the years that followed. Xerox benchmarks with different levels of performance. It measures itself against the industry average, the best performance in its industry and the best performance in any industry.

When Xerox won the Malcolm Baldrige Award in 1989, it admitted that benchmarking was key to its major achievements, which, in the area of quality improvement, included:

- 78% reduction in defects
- 40% decrease in unscheduled maintenance
- 27% drop in service response time
- increased copy quality
- reductions in labour and material overheads
- becoming the first company to offer three-year product warranty

很多人稱施樂是典範借鑑的典範。施樂自七十年代初即展開借鑑活動，在美國利用借鑑成果重拾競爭能力，扭轉了業務頹勢。此後，施樂的借鑑活動大量增加，分為三個層次，這包括行業的平均表現水平、行業的最高表現水平和所有行業的最高表現水平。

施樂在 1989 年獲得鮑德里奇獎後，表示典範借鑑是獲得重大成果的主要手段。以品質改進為例，施樂在當時獲得了下列的成果：

- 缺陷率下降 78%
- 意外維修率降低 40%
- 服務回應時間縮短 27%
- 複印品質上升
- 人力和物料間接成本下降
- 施樂成為第一間提供三年產品保養的公司

The Benchmarking Process

Now benchmarking is a common practice of every department of the Xerox organisations across the world. The Xerox benchmarking process goes through five stages and ten steps as shown in Figure 10.

- **Phase 1 - Planning**

The objective of this phase is to prepare a plan for benchmarking.

- **Phase 2 - Analysis**

This phase help understand competitors' strengths and assess one's own performance against these strengths.

- **Phase 3 - Integration**

The objective of this phase is to use the data collected to define the goals necessary to gain or maintain superiority, and to incorporate these goals into the formal planning process.

- **Phase 4 - Action**

During this phase, the strategies and action plans established through the benchmarking process are implemented and periodically assessed (recalibrated) with reports of progress in achieving them.

- **Phase 5 - Maturity**

The objective of this phase is to determine when an organisation has attained a leadership position and to assess whether competitive benchmarking has become an essential, ongoing element of the management process.

Xerox found the benchmarking process a powerful tool in identifying gaps and setting expectations. Through the process, Xerox people understand what has to be done to succeed and accept the higher level of expectations that goes along with the task. Benchmarking has become an essential part of Xerox's continuous process of improvement.

借鑑程序

目前施樂各地機構所有的部門都將典範借鑑納入了日常活動內。施樂的借鑑程序分五個階段十個步驟（圖十）：

- **第一階段 - 計劃**

這階段的工作是定立借鑑計劃。

- **第二階段 - 分析**

在這階段須要了解競爭對手的強項，然後評估這些項目中自己和對手的表現水平差距。

- **第三階段 - 整理**

根據收集到的資料定立爭取或維持領先位置必須達到的目標，將這些目標併入正式的業務計劃內。

- **第四階段 - 執行**

執行按借鑑結果定出的策略和行動計劃，定期評審計劃成效（調整典範水平和報告進度。

- **第五階段 - 成熟**

判斷公司是否佔據領先位置，評估同業借鑑活動是否已成為管理程序中必要和久的組成部分。

施樂認為典範借鑑最能幫助判斷自己和競爭對手的差距，定出未來的表現水平目標。施樂員工通過借鑑活動認識到有些工作必須去做，這些工作會對他們的表現有更高的要求，但他們必須做妥這些工作才能擊敗對手。典範借鑑的這個作用促成了公司的不斷改進。

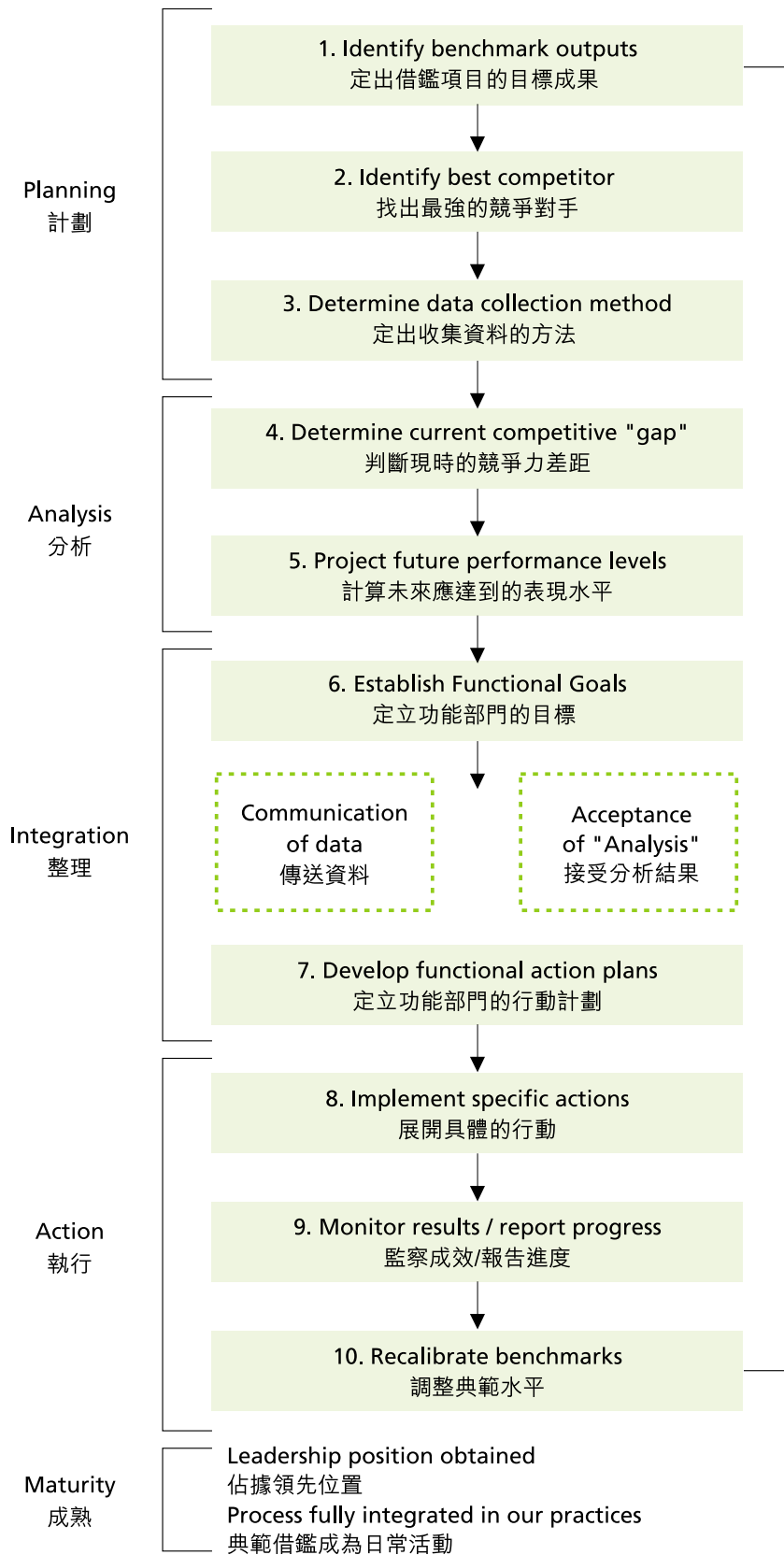


Figure 10: The Xerox Benchmarking Process
圖十：施樂的典範借鑑程序

趕上典範水平

施樂將借鑑活動和自我評核活動結合起來，以保證目標鎖定在典範水平上。

1994年，施樂實施了一個內部認證制度，以定期評核整體的品質表現。公司定出了正式的評核系統，其後幾次修改，目前的系統包含六個類目共30個要素。圖十一的「施樂管理模式」顯示了那些需要量度和評核的範圍。

Target against Benchmarks

Benchmarking and self-assessment are used together in Xerox to set goals against benchmarks.

In 1994 Xerox introduced an internal certification programme as a method for continuous assessment of its overall quality performance. An assessment framework was established and has been revised as the business moved ahead. It now includes six key categories which are then broken down into 30 elements. The Xerox Management Model shown in Figure 11 sums up the elements that are measured and assessed.

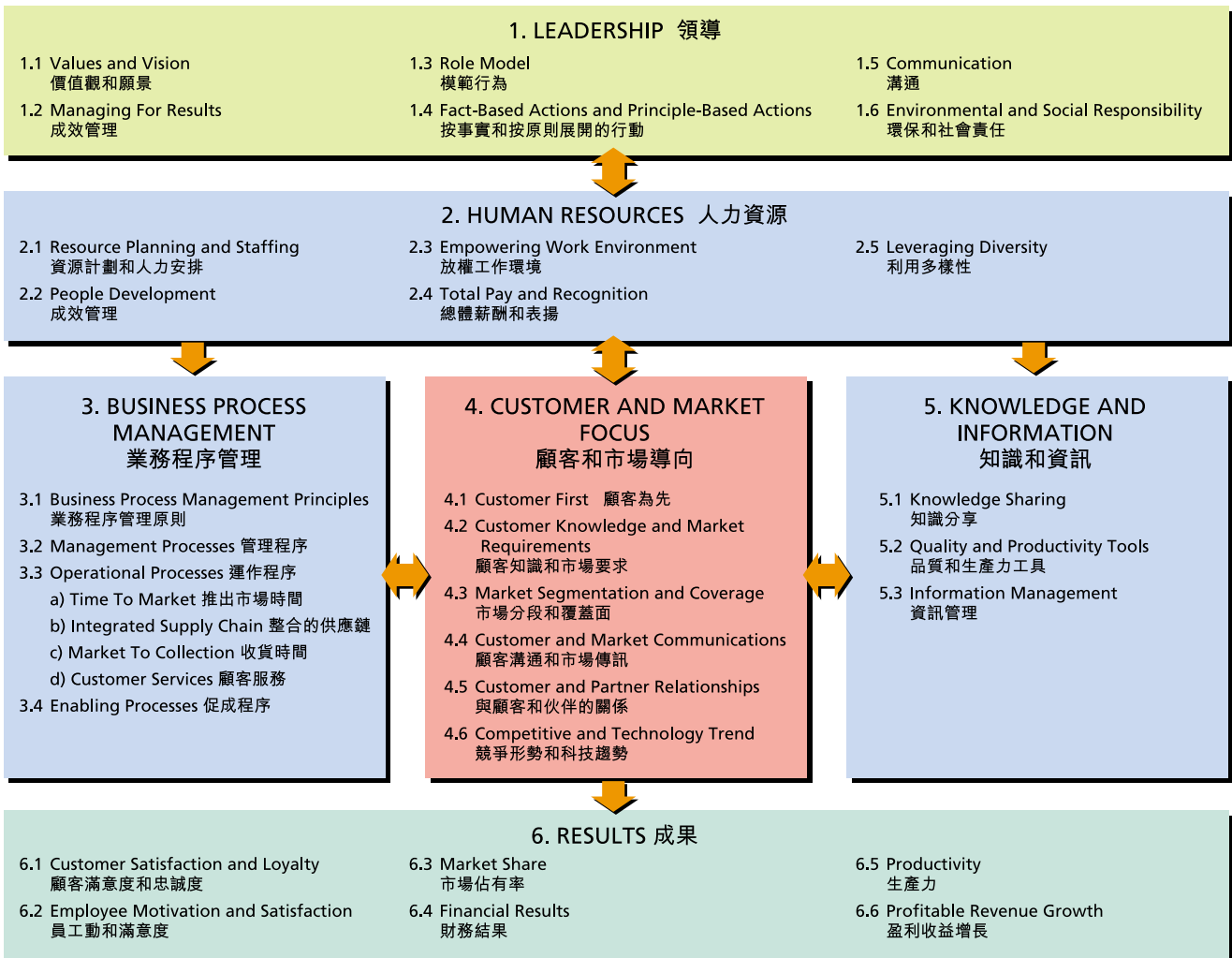


Figure 11: The Xerox Management Model

圖十一：施樂管理模式

Each element has its own measurement targets. Using benchmarking, the items within the management model are targeted against world-class benchmarks. Benchmarking had been a separate item in the management model. It was later incorporated as one of the Quality and Productivity Tools. This suggests that benchmarking has become more pervasively used in Xerox as a standard tool. The practice of benchmarking is now to a larger extent embedded into the culture and plays an integral part in the management process.

Integration between Benchmarking and Continuous Improvement

The annual self-assessment process assures that the targets of each element are met, improvements are made and the company is going towards world-class performance levels. It is a continuous process of improving all business areas. Through regular review of the effectiveness and extent of quality deployment, Xerox is able to find out the root causes of success and failure, develop action plans to ensure targets are met, and highlight the factors to be incorporated in the following year's targets.

As the elements of the management model are targeted against world-class benchmarks and the benchmarks are going to move, Xerox is achieving "world-class" performance that its definition is going to change.

模式中每個要素都有表現指標，通過典範借鑑，可以將指標定在世界級的典範水平上。典範借鑑曾是模式中一個獨立的項目，後來併入了「品質和生產力具」，這顯示典範借鑑成為了全公司慣常的活動，成為了公司文化和管理程序的一部分。

借鑑活動和持續改進活動相結合

自我評核活動每年一次，評估公司是否達到每個要素的指標，是否作出了改善，是否達到世界水平。這樣每年反覆進行，確保公司貫徹落實所有業務範圍的改善工作。施樂根據定期評核結果知道品質工作的貫徹程度和效能，然後找出成敗的原因，定立行動計劃，務求達到指標。評核結果亦會突出一些需要注意的問題，定立下一年的指標時須作出處理。

所有要素的指標是以世界典範水平為依據，但典範水平隨時間變動，施樂要達到的「世界級水平」因此亦隨形勢的變化而改變。

Useful Contacts

可提供協助的機構

Appendix
Appendix
Appendix



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The following reference materials can be downloaded at the website of the American Productivity and Quality Center (APQC):

下列參考材料可在美國生產力及品質中心的網站下載：

The Benchmarking Code of Conduct adopted by APQC
美國生產力及品質中心採用的借鑑行為守則

Process Classification Framework developed by APQC's International Benchmarking Clearinghouse in partnership with Arthur Andersen
美國生產力及品質中心和 Arthur Andersen 聯合制定的程序分類大綱

HKSAR Government Industrial Support Fund Project

“Developing Educational Materials to Encourage and Facilitate Hong Kong Manufacturers for Quality Transformation” (AF/3/98)

香港政府工業支援資助計劃 “開發優管教材以推動香港製造業的優質變革” (AF/3/98)

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Benchmarking is to learn from people who are doing better than you are. In fact, you should expect that all people are trying to do better and better.

So a benchmarker will continue to compare and learn, to keep afloat of even harder competition.

This booklet describes benchmarking as an essential tool for continuous improvement and business leadership.

典範借鑑就是向勝過自己的人學習。
我們不能不假定，所有的人都在奮力求進。
一個善於借鑑的人，必定不斷比較，
不斷學習，設法勝過愈來愈強的對手。本書
說明典範借鑑是促成持續改進、爭取領先地位
不可缺少的工具。

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