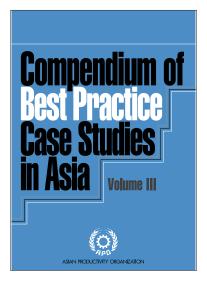
# From: Compendium of Best Practice Case Studies in Asia volume III

©APO 2007, ISBN: 92-833-7060-0

a publication of the APO Best Practice Network





Published by the Asian Productivity Organization 1-2-10 Hirakawacho, Chiyoda-ku, Tokyo 102-0093, Japan Tel: (81-3) 5226 3920 • Fax: (81-3) 5226 3950 E-mail: apo@apo-tokyo.org • URL: www.apo-tokyo.org

#### **Disclaimer and Permission to Use**

This document is a part of the above-titled publication, and is provided in PDF format for educational use. It may be copied and reproduced for personal use only. For all other purposes, the APO's permission must first be obtained.

The responsibility for opinions and factual matter as expressed in this document rests solely with its author(s), and its publication does not constitute an endorsement by the APO of any such expressed opinion, nor is it affirmation of the accuracy of information herein provided.

Bound editions of the entire publication may be available for limited purchase. Order forms may be downloaded from the APO's web site.

# **Compendium o** Jnar J



ASIAN PRODUCTIVITY ORGANIZATION

Compendium of Best Practice Case Studies in Asia volume III — a publication of the APO Best Practice Network.

The opinions expressed in this publication do not reflect the official view of the APO. For reproduction of the contents in part or in full, the APO's prior permission is requested.

© Asian Productivity Organization, 2007 ISBN: 92-833-7060-0

# CONTENTS

Forewor	rd	
Backgro	ound	1
Measur	ing Impact of Business Excellence Approaches	
_	Using Quality Award Framework to Achieve Company	
	Growth (Singapore)	7
_	Achieving Customer and Employee Satisfaction through Total Quality Management (Thailand)	10
_	Using Productivity Approaches to Improve Business Results (Republic of China)	12
_	Creating Business Results from Business Excellence Framework (Australia)	
_	Gaining Competitive Edge through Change Management	
	(Mongolia)	20
-	Summary	23
Key Per	formance Indicators in Small and Medium Enterprises	
-	Benchmarking Customer Feedback Handling (Philippines)	24
_	Enhancing Organizational Culture to Achieve Customer	
	Satisfaction (Japan)	27
-	Summary	31
Public S	Service Excellence	
_	Promoting e-Governance in Local Governments (Philippines)	
_	Improving Quality of Life through e-Governance (Philippines)	
_	Using Business Excellence Framework to Improve Public Service (Australia)	
	Strategic Policy and Executive Services OSA 2004	
_	Summary	
_		
Integrat	tion of Best Practice Case Studies	56
Suggest	ed Approaches for Disseminating and Deploying Best Practices	
Opport	unities for International Collaboration	
_	Malaysia's e-Benchmark System	60
-	Republic of China's i-Bench	65
Append	ixes	
	Guide to Acronyms	68
_	The 1999 AQC Research Study	
_	List of Participating NPOs	78

### FOREWORD

Since its establishment in 2001, the Asian Productivity Organization-Best Practice Network (APO-BPN) has grown into a large network of about 88 organizations from both the private and public sectors, including small and medium enterprises.

In the past six years, the APO-BPN was able to generate useful knowledge—best practices of 36 organizations under nine topic areas—which were used by other organizations in the network to continuously improve. They were also able to learn from each other on the benchmarking process. The APO-BPN has also helped the National Productivity Organizations (NPO) position themselves as leaders in knowledge transfer; many of them now have the knowledge and confidence on how to support benchmarking in their own countries.

The APO-BPN has gone through three cycles of sharing of best practices, and is now on its way to using e-collaboration to take advantage of the benefits of information and communication technology (ICT). The i-Bench initiated by the China Productivity Center and the e-Benchmark System started by the National Productivity Corporation, Malaysia—of which cases are included in this publication—are examples of the efforts being done to conduct benchmarking using ICT. The APO-BPN Knowledge Portal is also being developed to serve as the network's activity communication channel, platform for knowledge and information exchange among NPOs, and knowledge management system. With the introduction of e-benchmarking, however, face-to-face interaction should not be set aside as it contributes to maintaining relationships and strengthening collaboration among NPOs.

In September 2006, the APO-BPN just concluded its seventh workshop, of which result is this third volume of the best practice case studies in Asia. The best practices featured are on measuring the impact of business excellence approaches, key performance indicators for SMEs, and public service excellence. As in the first and second volume, the organizations represented in this compendium are coded to protect internal confidentialities, and also to emphasize the leading practices rather than the image of the organization.

The best practices contained in this publication are meant to be shared among organizations and adapted according to their needs, helping them achieve competitiveness, thereby contributing to APO's overall goal of productivity enhancement and socioeconomic development.

Shigeo Takenaka Secretary-General

Tokyo October 2007

# BACKGROUND

#### WHAT IS APO-BPN

The Asian Productivity Organization-Best Practice Network (APO-BPN) is a network of organizations in Asia with a common purpose of achieving competitiveness through sharing of best practices. The APO, the umbrella organization of APO-BPN, is a regional inter-governmental organization which aims to help its member countries increase productivity and achieve greater socioeconomic development, and ultimately attain a better quality of life in the Asia-Pacific region. Each APO member country designates a national body to be its National Productivity Organization (NPO). NPOs are either agencies of the government or statutory bodies entrusted with the task of promoting productivity in their respective countries.

#### WHY APO-BPN WAS ESTABLISHED

In the knowledge-based economy, one key to competitive advantage of an organization is its knowledge on the best practices of others, and leveraging on it. Organizations, whether in manufacturing or services, have to benchmark themselves against the best standards or practices worldwide to achieve competitive advantage and business excellence. The best practice journey embraces the concept of organizations looking outwards to see what can create value for their stakeholders. The knowledge gained could be used to innovate on best practices, and thus, introduce methods that are better than the best.

Organizations on their own, however, often face difficulties in using best practice knowledge for performance improvement. They might neither be familiar with relevant sources for best practices nor able to get other organizations share their knowledge on best practices with them. Moreover, they might find the cost of gaining best practice knowledge limiting, and not have the know-how to use the knowledge gained to improve their operations. The NPOs could help overcome these barriers by collecting, organizing, and sharing knowledge on local and international best practices efficiently. They could also help facilitate the use of knowledge by organizations for performance improvement. Thus, a key initiative to support NPOs in undertaking this role is the establishment of a best practice network among APO member countries.

#### Objectives

The best practice network aims to generate knowledge on global practices that will be useful for NPOs in helping organizations in their country achieve best practice performance standards. It also seeks to support the transfer of best practice knowledge among organizations in the APO member countries and position the NPOs as leaders in the area of knowledge transfer.

The APO-BPN provides organizations with a useful platform for inter-country best practice benchmarking. Specifically, it helps them

- identify where global best practices reside;
- gain useful knowledge on global best practices that will help them achieve superior performance;

- augment their own best practice networks or learning circles within their own countries by accessing the APO-BPN for global knowledge; and
- learn how to acquire and apply best practice knowledge, including how to do benchmarking.

#### **HOW APO-BPN WORKS**

The best practice network is composed of various stakeholders from the Asia-Pacific region. These are primarily the NPOs and their customer organizations, professional and industry associations, benchmarking experts, and APO Secretariat. Each of them has defined roles and obligations to ensure efficiency and effectiveness of the APO-BPN (See Figure 1).

APO-BPN aims to facilitate sharing and learning of best practices in specific areas of interest (or topic areas) among participating countries, so that there is a rapid and efficient transfer of best practices. The entire best practice network process for each topic area is led by the NPO Working Group nominated to undertake the role of "driving" the sharing and learning process. The NPO Working Group consists of representatives from NPOs that have client enterprises participating in the network.

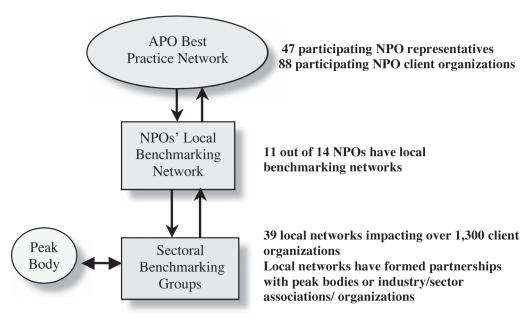


Figure 1: Reach of APO-BPN as of 2006

#### THE APO-BPN METHODOLOGY

The best practice network methodology covers the programming and the benchmarking processes. The programming process involves sourcing and evaluating topic ideas;

preparing topic information sheets; determining program of projects; developing action plan, business case, and specific topic marketing kit; and research reporting.

The benchmarking process starts with securing participation of organizations with outstanding performance in each country. This is followed by planning meetings and data collection analysis, of which results are the leading practices shared through workshops among APO-BPN stakeholders. The NPOs disseminate the leading practices through forums, internet, and publications. The next step is integration of learning and follow-up actions. This may include dissemination of findings by the NPOs, further learnings such as site visits and workshops, and development of action plans and implementation by participating organizations. The benchmarking process will culminate through a review process, which will be the basis for improving the next cycle of the APO-BPN.

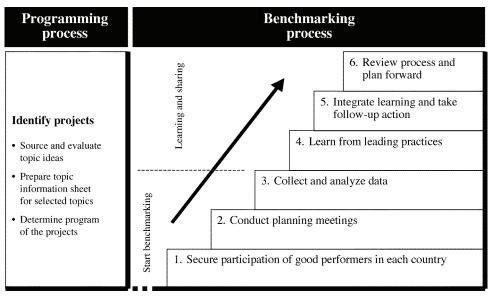


Figure 2: APO-BPN Methodology Framework

#### Milestones

During the APO study meeting held on 24–27 April 2001 in Singapore, the participants from 13 APO member countries agreed that a best practice network could be set up among the NPOs. The APO-BPN initially conducted best practice demonstration projects on topic areas of interest to NPOs' client organizations. A series of workshops was then conducted where the APO-BPN methodology was developed and applied.

#### Best Practice Topics Shared through APO-BPN (2003-2006)

- Frontline customer service
- Balanced scorecard
- People performance management
- Organizational excellence for SMEs
- How to do local benchmarking
- Developing a culture of innovation
- Public service excellence

- Key performance indicators in SMEs
- Measuring impact of business excellence approaches

#### *First APO-BPN Workshop: Development of Benchmarking Methodology* Singapore, 26–28 November 2001

In the first workshop, the participating NPOs identified eight possible topics for demonstration projects. These topics were in the areas of balanced scorecard, performance management system/people development and management, and customer focus and service. The topics were identified based on the needs of NPOs' client organizations, and prioritized through a process of agreement among the participating NPOs. A common benchmarking framework or methodology for conducting the demonstration projects was developed. Hence, a standard, consistent method of securing the participation of NPO client organizations in the demonstration projects and of carrying out benchmarking across countries was established.

#### Second APO-BPN Workshop: Planning for First Cycle of Demonstration Projects Bangkok, Thailand, 21–24 May 2002

The second workshop served as the planning phase or first phase of the agreed-upon benchmarking methodology. Planning was done for three selected demonstration projects—balanced scorecard, customer service, and human resources performance management system. To help participants implement the demonstration projects, they were trained on the benchmarking methodology. NPO representatives from Thailand, Malaysia, and Philippines were appointed as project leaders for the balanced scorecard, human resources performance management system, and customer service projects, respectively. They were tasked to coordinate the project activities according to the timeline decided at the workshop. They were also assigned to secure participation of best practice organizations, develop data collection tools, and prepare a report on the data collected.

#### *Third APO-BPN Workshop: Review of Benchmarking Methodology And Findings in Demonstration Projects*

#### Kuala Lumpur, Malaysia, 28–31 October 2002

In this workshop, the project teams reviewed the methodology adopted for the demonstration projects based on their experiences during the implementation. The main interim findings in the demonstration projects were discussed and a preliminary list of learning needs and best practices were compiled. They also identified the specific follow-up actions to be taken for the demonstration projects over the next five months. In preparation for the fourth workshop, the project teams were tasked to complete the data collection, finalize the survey questionnaire matrix, finalize the learning needs template, and identify selected participating client organizations with best practices to address the learning needs.

#### *Fourth APO-BPN Workshop: First Cycle Sharing of Best Practices* Manila, Philippines, 14–17 October 2003

In this workshop, the selected organizations in Asia presented their best practices on their respective topics—people performance management, balanced scorecard, and frontline customer service. The project teams for each topic discussed the status of the demonstration projects including the challenges they faced in implementing the methodology, how these could be addressed, and the key findings from the demonstration projects. They also developed case study reports on individual companies which presented their best practices during the workshop. Site visits in three organizations with corresponding topic areas were also conducted. Key findings from the cases under each topic area were identified including the approaches, benefits, and lessons learned.

# *Fifth APO-BPN Workshop: Planning for Second Cycle of Demonstration Projects* Kathmandu, Nepal, 22–25 June 2004

A total of 22 participants from 15 APO member countries participated in the workshop to finalize the demonstration projects, review the benchmarking methodology, and plan for next best practice network projects. Three demonstration topics were prioritized and scoped—organizational excellence for small and medium enterprises (SME), how to do local benchmarking, and developing a culture of innovation. The workshop also covered how to improve ongoing benchmarking collaboration among NPOs and how to enhance the use of e-benchmarking. Further, roles and responsibilities for APO-BPN's sustainability were identified, and a one-year cycle for future projects was developed.

#### *Sixth APO-BPN Workshop: Second Cycle Sharing of Best Practices* Bangkok, Thailand, 2–5 August 2005

A total of 24 participants from 14 member countries shared their best practices on the topics identified during the fifth workshop. The shared leading practices are expected to address the learning needs of participating organizations. After the sharing, they developed the implementation framework for the adoption of leading practices and reviewed e-benchmarking among NPOs. Follow-up activities over the next nine months were also discussed.

#### Seventh APO-BPN-Workshop: Third Cycle Sharing of Best Practices Ulaanbaatar, Mongolia, 5–8 September 2006

The seventh workshop discussed NPO country updates on local benchmarking and international collaboration; best practices on measuring impact of business excellence approaches, key performance indicators (KPI) in SMEs, and public service excellence; APO-BPN action plan; and e-benchmarking.

#### WHAT IS BENCHMARKING

The APO-BPN provides a good venue for organizations in Asia to benchmark each other's best practices. Benchmarking is a business excellence tool for finding, adapting, and implementing outstanding practices in order to achieve superior performance (Benchmarking Partnerships, Australia). It comprises prioritization of strategic improvement need (the why), measurement (the what), and practices (the how).

#### WHAT IS A BEST PRACTICE

A best practice is something that NPO customers would view as very useful to learn about and adapt to implement and hence improve their own organization. It is something that demonstrably contributes to excellent business results; something unique or different that others don't do; not only a plan or intent, but also something that is well deployed or used throughout the organization; something the organization is continually improving; and something that is looked up to by peers and experts (Benchmarking Partnerships, Australia).

#### **Best Practice Topics for APO-BPN Third Cycle**

During the seventh workshop of the APO-BPN, three new best practice topics were shared. The reasons for selecting and sharing the respective topics are

#### Measuring the Impact of Business Excellence Approaches

- measure the benefits of implementing business excellence systems
- correlate the impact of implementing the business excellence systems to organizational performance
- use the findings to promote business excellence systems to organizations that have not implemented these systems
- encourage organizations to sustain the implementation of business excellence systems

#### Key Performance Indicators in SMEs

- compare and integrate performance of SMEs based on KPIs
- share performance of SMEs across the regions
- use KPIs and benchmarks for leveraging performance among SMEs

#### Public Service Excellence

- improve performance of public sector
- increase number of exemplars from the public sector
- raise awareness level on benchmarking
- promote the value of best practices among public sector organizations
- accelerate the establishment of best practice database among NPOs

# MEASURING IMPACT OF BUSINESS EXCELLENCE APPROACHES

#### USING QUALITY AWARD FRAMEWORK TO ACHIEVE COMPANY GROWTH (SINGAPORE)

#### **Organizational Profile**

BE-01 is a fully private-owned company in Singapore, with its mother company located in Japan. It is primarily involved in the assembly and testing of semiconductor integrated circuit consisting mainly of microcomputer and memory devices with monthly output of around 14 million pieces. Established in May 1976, BE-01 now has about 800 employees, and operates 24 hours a day. It has a floor area of about 63,000 square meters.

#### **Rationale and Objectives**

BE-01 has embarked on a business excellence journey to establish a holistic view of overall business framework which will then serve as an educational tool for all employees to learn and implement. It aims to make a difference from other semiconductor companies and be competitive enough to benchmark with similar and even other industries as well. BE-01 uses the Singapore Quality Award (SQA) framework to continuously improve and achieve organizational growth.

#### **Overall Description**

A steering committee consisting of top management and managerial staff from various departments was set up to lead the improvement project. Using the plan-do-check-action approach, a master plan was drawn up highlighting key activities, which were assigned to respective department managers. Using the SQA framework and criteria, a self-assessment was conducted to understand the organization's present status and identify possible gaps. Group discussions and brainstorming sessions were conducted to determine the appropriate actions that need to be taken to close those gaps. The activities identified were implemented and evaluated for further improvement (See Figure 1). The entire process took about nine months including the assessment made by the Standards, Productivity and Innovation Board (SPRING Singapore), which awarded BE-01 with Singapore Quality Class.

#### **Leading Practices**

Total Productive Maintenance (TPM) was the foundation built for the company-wide continuous improvement cycle involving all departments. TPM has become the driving force for change and innovation among the BE-01 staff—from operators to managers—to achieve world-class mindset. It consists of seven pillars: autonomous maintenance, kobetsu kaizen, planned maintenance, initial control, quality maintenance, office 5S, and safety/environment. Starting 2000, BE-01 moved from operation ownership TPM to business ownership TPM where seven virtual companies were established. The idea was to convert each section to become a company by itself, thus enabling the staff to manage their own profit and loss through their daily improvement activities as a team.

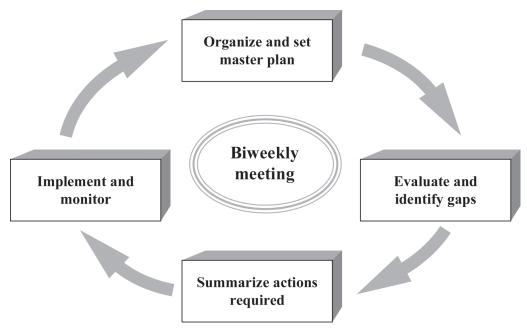


Figure 1: Improvement Project Cycle

In 2003, BE-01 started the project on "LEAN" production, a method of material flow control to achieve linear and continuous flow pattern with smallest possible lot size by a "pull" system from customer (See Figure 2). With an overall goal of creating value and maximum profit, "LEAN" production aims to eliminate waste, reduce inventory cost, improve cash flow, and achieve the shortest loss time and best quality.

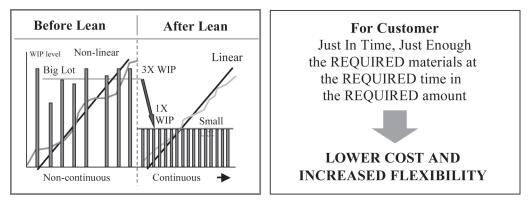


Figure 2: Concept of Lean Production

#### **Benefits Gained**

Management of information is now more focused and aligned with BE-01's goals. Comparison and benchmarking has helped the company understand where it stands in terms of strengths and weaknesses, and act on those areas (See Table 1). Suppliers' development program has improved capabilities and helped achieve a win-win situation. Customer satisfaction has shown good results in terms of increased sales especially in the "LEAN" partnership project (See Figure 3). Lastly, employees are able to internalize the company's procedures, which led to a better understanding and support of the company's culture.

Comparison and Benchmark Subject	Comparative Benchmarking	System Owner	Reasons	Frequency of Review
Customer • Customer Claim	Sister companies	QC	<ul> <li>Customer satisfaction</li> <li>Strategic pricing and cost</li> </ul>	Monthly Half-yearly
Financial and Market • Sales trend • Profit trend	Competitor/sister companies	Finance and Planning	Strategic     pricing and cost	Half-yearly
<ul> <li>People</li> <li>Training expenditure against payroll</li> <li>Training expenditure per employee</li> <li>Annual turnover rate</li> </ul>	National average	HRM	Performance     measures	Half-yearly
<b>Operational</b> • Lead time trend	Sister companies	Planning	Strategic outsource and cost	Monthly

Table 1: Example of Comparison and Benchmarking

Category	BE-01	Company A	Company B	Company C
Production Management	0	0	$\Delta$	$\Delta$
Yield	0	0	0	$\Delta$
Abnormality In Process	0	$\Delta$	$\Delta$	Х
Service & Information	0	$\Delta$	Х	Х
Total Image	0	$\Delta$	$\Delta$	Х
Delivery	$\Delta$	$\Delta$	$\Delta$	$\Delta$
Cost	$\Delta$	0	X	0
Quality	0	$\Delta$	$\Delta$	Χ
Overall View	0	0	0	$\Delta$

 $\bigcirc$ : Excellent  $\bigcirc$ : Good  $\triangle$ : Satisfactory X: Poor

Figure 3: Customer Satisfaction Survey

#### Lessons Learned

Through its business excellence journey, BE-01 has realized that much of the data collected are not utilized. In some cases, data are duplicated which results in wastage of resources. Another area noted was that some key events and information were not captured and aligned with the company's direction, thus, results could not be reviewed effectively. Finally, changing employees' mindset throughout the organization is a constant challenge.

#### Next Steps for Continuous Improvement

BE-01's next challenge is to expand the "LEAN" partnership program with more customers, as good achievements and results were seen in the trial project. Such implementation, if successful, will bring about integrated lean supply chain management from "pull" of end customers to finished goods to lean manufacturing to direct material.

#### ACHIEVING CUSTOMER AND EMPLOYEE SATISFACTION THROUGH TOTAL QUALITY MANAGEMENT (THAILAND)

#### **Organizational Profile**

BE-02 was established in 1989 to produce and distribute freshly baked products to its mother company, a convenience grocery store in Thailand. To supply short shelf life, fresh bakery items to modern trade retailers throughout the country, BE-02 operates five bakery factories in different parts of Thailand. The premixes are prepared from the main plant in Bangkok and delivered to each factory for manufacturing consistently qualified products. BE-02 has a workforce of about 2,200 employees.

#### **Rationale and Objectives**

BE-02's vision is to be the leader in manufacturing and distributing freshly baked products in modern trade businesses in Thailand, such as convenience store, gas store, and hypermarket. To achieve this vision, BE-02 has to be the best in product development for all customers, choose the best production model for fresh bakery items, and achieve customer and employee satisfaction.

#### **Overall Description**

BE-02's roadmap to business excellence started in 1999 with its implementation of ISO 9001. Following this, BE-02 was certified with ISO 14001 and OHSAS 18001 in 2001. With the approval of its Good Manufacturing Practice (GMP) and Hazard Analysis and Critical Control Point (HACCP) in 2003, BE-02 was recognized as a good bakery manufacturer.

Since 2001, BE-02 has been using balanced scorecard to measure performance in four perspectives: financial, customer, operational, and organizational learning. In 2002, the Total Quality Management (TQM) concept was introduced in the company, focusing on KANO's House. The Total Quality Assurance (TQA) criteria were then implemented in 2004 leading the BE-02 to be a Total Quality Control (TQC) award recipient in 2005.

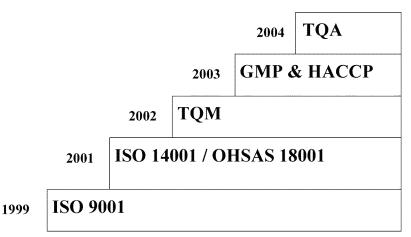


Figure 1: BE-02's Roadmap to Business Excellence

#### **Leading Practices**

As the only bakery manufacturer with five plants in Thailand, BE-02's top management is committed to engage in TQM. The organization is strongly led by working teams. It conducts best product development process to suit Thai customers' needs and wants through market survey, product testing, and sales testing within a limited number of stores; then it rolls out the product nationwide.

#### **Benefits Gained**

Through the adoption of the TQA business excellence framework and using proven management tools, BE-02 has improved in terms of sales growth and market share. The degree of customer satisfaction and employee satisfaction has been significantly increased. Several productivity improvement efforts have also been accomplished throughout the organization.

#### **Lessons Learned**

To consistently achieve best business outcomes, BE-02 has learned to choose the effective key performance indicators (KPI) to cover all areas of business. More importantly, it has learned that each KPI needs to be integrated to balance all business excellence points of view. Another interesting lesson is using all helpful facts and data to develop business strategy which should be well-aligned with the expected results.

#### Next Steps for Continuous Improvement

BE-02 continues to increase its employee and customer satisfaction level. To produce and maintain skilled workers, BE-02 is setting up an in-house bakery training center to further educate its own staff. It is also considering the development of better succession plan. This covers efficient career development plan and talent management for business sustainability.

BE-02 is now focusing not only on the retailers but also on the end users as well, to improve its marketing performance. Better expansion in bakery market toward Thai consumers will be exercised. BE-02 plans to enlarge it market segment at a higher contribution margin to develop high value-added items and healthier range of products for the more health conscious public.

#### USING PRODUCTIVITY APPROACHES TO IMPROVE BUSINESS RESULTS (REPUBLIC OF CHINA)

#### **Organizational Profile**

BE-03 was established in 1972 under a 70–30% joint venture agreement. It is one of the car manufacturers in the Republic of China. It has a workforce of 2,129 and a factory space of 350,000 square meters. Its revenue in 2005 was at US\$1.3 billion with a production volume of 79,769 units.

#### **Rationale and Objectives**

BE-03's quality policy "Quality is number one" aims to achieve for the company the Republic of China National Quality Award; integrate its quality management system with sale and service satisfaction; and involve its dealers, suppliers, and customers in its improvement efforts. BE-03 has adopted the balanced scorecard to monitor its key performance indicators (KPI) for continuous improvement. To strengthen its competitive advantage, BE-03 targets to incorporate into its business model the following: business goals and priority, work and life, culture, people development, leadership, relations communication, and reward and recognition.

#### **Leading Practices**

BE-03 has adopted a lean manufacturing model integrating its production system, which provides a daily management tool to help the line side supervisor monitor the daily quality operation and online benchmarking information with the company's affiliates (See Figure 1).

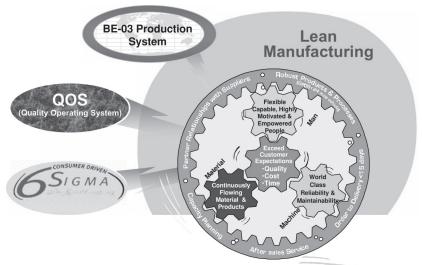


Figure 1: BE-03's Lean Manufacturing Model

BE-03 has also adopted the Communicating and Managing Performance Accountability and Strategy System (COMPASS) to monitor its business plan and performance. COMPASS involves the following processes:

• Approval and revision of business plan;

- Translation of the business plan's thrusts emphasizing the balanced scorecard's four business perspectives—financial, customer, operational, and organizational learning;
- Translation of the business plan's targets and action plans into KPIs' targets and action plans; and
- Monitoring of KPIs' performance, corrective actions, and critiquing by the scorecard owner

The progress of KPIs reflects the progress of business plans and the performance of scorecard owners. BE-03's management monitors the progress of business plans through COMPASS. Scorecard owners are then given team-based performance rewards.

BE-03's strategic agenda include strategic objectives, strategic issues, and strategic initiatives. In formulating the KPIs, BE-03 considers six important characteristics of the indicators—controllable, actionable, simple, credible, integrated, and measurable. The following KPIs are linked to the organization's objectives:

- Market transformation strategies for greening the motor vehicle
- Regulatory programs such as fuel economy and emission standard
- Board coverage incentives
- Public education and information program
- Tax credits
- Research and development

#### **Benefits Gained**

Through COMPASS, BE-03 is able to clarify and gain consensus about the company's vision and strategy. COMPASS using balanced scorecard has enabled BE-03 to communicate its strategy throughout the company, obtain feedback, and improve the company's strategy; align team and personal goals with business strategy; conduct periodic and systematic performance reviews; link strategic objectives to business plan and budget; identify and align strategic initiatives, resources, and investments; and monitor business plan performance and action plans. BE-03 has also been able to increase its revenue and expand its market share through productivity improvement efforts. It has certified its suppliers to ensure quality operation system. Figure 2 shows the percentage of suppliers certified by BE-03 from 1998 to 2006. Furthermore, it has improved the sale and service satisfaction leading to more potential customers (See Figures 3 and 4).

BE-03 was able to deliver about US\$2 billion profit. It was able to develop local experts in all facets of the business and create a successful enterprise model among corporate brands in terms of sales, service, and credit.

#### Lessons Learned

In using the balanced scorecard, BE-03 has realized that it is not a quick process. Its implementation needs specific targets and goals for all employees to internalize. Sufficient time should be allotted for critical thinking, analysis, and data gathering. Successful deployment of this approach may take several steps and efforts.

At the initial stage of implementation, balanced scorecard must be driven by the top management. Whether the management style is top-down or bottom-up, there is a need to periodically review the result and track the progress. Furthermore, the balanced scorecard can also be a part of employees' performance appraisal.

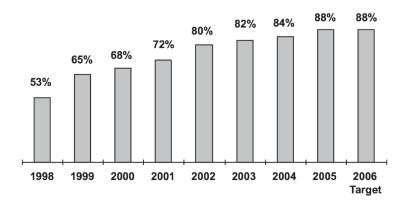


Figure 2: Q1 Suppliers Site Certified

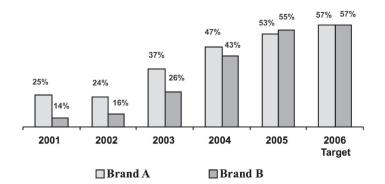


Figure 3: Sale Satisfaction Improvement Trend

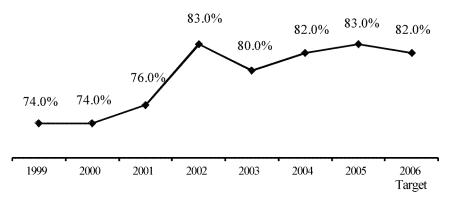


Figure 4: Service Satisfaction Improvement Trend

#### Next Steps for Continuous Improvement

To continuously improve, BE-03 plans to start or continue implementing the following:

- Quality Operation System Best Practice Network for tier 1 suppliers, dealers, and customers to achieve sale and service satisfaction and increase revenue
- Six Sigma project to achieve cost saving target and eliminate defect rate for high quality product strategy
- Vehicle export program to meet demands from Japan, Australia, New Zealand, and Russia
- Deep-dive review with BE-03's local suppliers
- Facility upgrade
- "Adoption" program for high-impact suppliers to eliminate the potential risk on quality and cost issue
- Involving export markets early in identifying customers' voices
- Market visitation by personnel from quality department to gain understanding of customer wants

#### CREATING BUSINESS RESULTS FROM BUSINESS EXCELLENCE FRAMEWORK (AUSTRALIA)

The best practices demonstrated in this case study come from the benchmarking projects carried out by BE-04 for various leading organizations in Australia.

#### **Organizational Profile**

Based in Australia, BE-04 owns and delivers a former quality council benchmarking. It partners with various organizations and industries to form network, share learnings, and improve. BE-04 provides benchmarking resource persons for the Asian Productivity Organization (APO) and conducts joint projects with New Zealand Business Excellence Foundation (NZBEF), BPIR.com Ltd (New Zealand), Singapore Productivity Association (SPA), Thailand Productivity Institute (FTPI), Training and Productivity Authority of Fiji (TPAF), and American Productivity and Quality Center (APQC). BE-04 is a member of the Global Benchmarking Network community. Over the past decade, it has facilitated more than 80 benchmarking studies across a network of 5,000 people.

#### **Rationale and Objectives**

There has been a concern for some time in Australia about the drifting away of blue chip private organizations from the Australian Business Excellence Awards. A number of leading Australian organizations have not seen the direct relevance of the Australian Business Excellence Framework to their business results. They tend to move away from a generic business excellence framework as it is not seen as entirely relevant to their strategy maps nor directly linked to their business outcomes. Their approach is usually based on a practical and industry-driven perspective rather than on a management theory perspective. Some practical managers have likened the theoretical frameworks developed in the past to a "column of smoke," where they cannot grasp or understand its meaning for their business.

The National Productivity Organizations (NPO) would find it difficult to promote the value of the Framework unless they demonstrate its relevance to improving business results. To do this, NPOs need to provide proven business excellence approach by

measuring its impact, thereby convincing organizations to adopt the Framework and help them achieve results.

Frameworks and their assessments should be relevant and directly linked to business results and strategies. An organization's framework can be drawn from industry needs, whether public or private, as well as from one's own specific needs. To determine the priorities for improvement, benchmarking has helped organizations drill deeply into gap areas through sharing of knowledge with other organizations and industries.

The best practices below emphasize how the Framework can contribute to improving and sustaining business outcomes through a systems view of the business. They also highlight the importance of aligning the organization's framework assessment with the strategic planning cycle so that the gaps identified can by incorporated into the business plan.

#### **Overall Description**

The leading organizations find the generic framework as a useful basis on deciding what their own framework should be. They have found out that they need to focus on aspects of their business that are not appropriately dealt with by the existing generic framework. These organizations have their own external and internal assessors and evaluators who provide feedback on organizational strengths and gaps. The gap areas identified are integrated and translated into strategic actions incorporated into the business plan. Some of the innovations adopted by these leading organizations include

- developing frameworks and assessments that are results oriented and relevant to both leaders and practitioners
- including relevant elements that are missing or not fully emphasized in existing frameworks
- linking the framework into core business processes and making it meaningful for senior management and practitioners
- tailor-fitting the assessment and evaluation to organizational needs
- adopting categories and criteria that are missing from or not emphasized sufficiently in existing frameworks, such as communications, recognition and reward, change management, safety, and project management
- adopting a sustainable balanced scorecard of outcomes, which has enabled the employees to know what they have achieved and what needs to be improved
- linking knowledge management, innovation, and organizational learning

#### **Leading Practices**

After the "buy-in" or proving the need for the Framework, it was developed further and tested, customizing it according to the needs of the organization. A systems view of an organization shows how the Framework can create business results through value-adding processes. Figure 1 shows an example of a systems view to ensure right focus on customers.

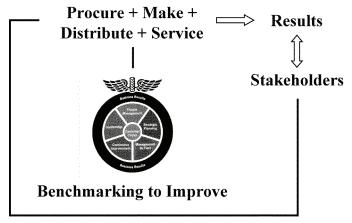


Figure 1: Customer Value Chain

Below is an example of a framework adopted by a major motoring and largest general insurance company in Australia. It has tailored the Australian Business Excellence Framework into its organization, incorporating the Framework elements into its own logo.



Figure 2: Framework Tailored to a Logo of an Australian Organization

Values, mission, and vision	Evaluation processes	Planning		
Performance (contribution)	Market focus customers/suppliers	Metrics and reporting		
management				
Leadership and alignment	Knowledge sharing and innovation	Improvement methodology		

Table 1: Sample Framework from a Multinational Organization

Some categories of the framework that the organizations have developed themselves include:

- Employer of Choice
- Managing change
- Innovation
- Safety
- Environment
- Social responsibility
- A good day's work
- Sustainable financial success
- Management of variation

The leading organizations ensure that their development and improvement plans are realizing the most benefit for them. Focusing on each element of their framework, they try to identify

- how they do it,
- how well or widespread they do it, and
- how they know how well they do it (measurement)

They use project management disciplines to ensure realization of benefits from their prioritized action plans in gap areas. They also benchmark with other industries to learn how to innovate and accelerate large step changes.

The organizations have conducted internal and external assessment of their own framework and operational processes using their own methods. In the course of doing so, they have found out that the generic assessment processes are only adding partial value as the assessment objectives vary depending on the organization's current and future needs. Some of the assessment goals include:

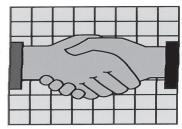
- · capability assessment
- identification of strengths and gaps
- communication by executives
- improvement implementation
- business outcome improvement
- benchmarking and knowledge sharing
- gap closure

A major Australian company designed its own assessment method to address the following needs:

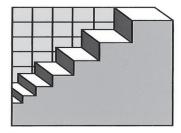
- networking (building relationships)
- educating (raising awareness of practices, professional development)
- benchmarking (allowing comparisons)
- team work (building a sense of identity and aligning common business goals)
- evaluating (identifying performance gaps)

In summary, the leading organizations have adopted the following best practices in terms of measuring the impact of their own business excellence framework:

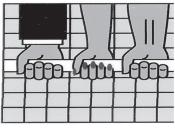
- Systems view to identify the stakeholders' present and future needs
- Identifying relevant core processes to maximize value to stakeholders
- Identifying measures or key performance indicators (KPI) to track the value added
- Clarifying the organization's core values, mission, and vision
- Developing a specific management (business excellence) framework that will enable delivery of sustainable outcomes for the organization's stakeholders and which will reinforce the core values, mission, and vision
- Building upon the generic frameworks from various countries to develop a framework that is suited to the organization's needs
- Developing a systems model that allows the framework to enhance outcomes for stakeholders through the core processes that deliver value
- Developing a method for the framework's internal and external assessment and core processes to help prioritize and manage improvements while sustaining good practices
- Adopting project management principles to realize the improvements sought. Project management principles include scoping, time/schedule management, cost control, quality control, people focus, communications, risk control, procurement, integration, review, and learning
- Interpreting the framework to focus on what constitutes a good day's work (something they can do every day which is also incorporated into their role), people and teams, and their own performance plans (measures).



1 Satisfy your customers



2 Continually improve through small steps



3 Involve everybody in improvement

4 Control through measurement and statistics

Figure 3: Key Principles of a Good Day's Work

#### **Benefits Gained**

With the senior management's early ownership of the framework, they were able to directly see the business results that are tied to the assessments made. The end result is benefiting their stakeholders. Employees in the organization are committed to deliver maximum value. The organization can also track the correlation between the improvements implemented and the business benefits achieved.

An Australian study investigated the relationship between management practice and business performance of organizations that have been evaluated through the Australian Quality Awards for Business Excellence. Based on quantitative analysis and empirical validation methods, evidence for the existence or non-existence of benefits can be identified from factual information, which leads to a conclusion of the debate as to whether this concept works or not. The testing of this relationship also leads to an enhanced understanding of interdependencies and the importance of specific awards criteria. The report on this study is shown in Appendix 2.

The actual benefits reported by the leading organizations include annual increase in operating profits, improvement in credit rating, decrease in staff attrition, higher stock price return, higher growth in operating income, and higher sales.

#### Lessons Learned

From the experiences of these leading organizations to which BE-04 carried out a benchmarking project, the following lessons can be derived:

- Just do it. Don't fiddle around. Decide on and implement the framework and change it along the way. Something is better than nothing.
- Don't hold back the self-assessment process just because the time is not right or there is a change going on. Change is the best time as the framework provides a common language and focus that maximizes the speed, buy-in, and benefits of the changes
- Don't wait for a crisis. Create a crisis before the real one crop up!
- The first steps are the hardest. A one-day facilitated workshop with senior management looking at the organization as a system will usually prove the benefits
- Don't start with the criterion on leadership; instead start with the criterion on results when doing a self assessment.
- Involve as many people as possible in the early stages. Let them question and challenge and decide for themselves.
- Have a dedicated project manager to phase in the framework. The project manager should be able to get the commitment of the staff members who are involved in the improvement activities.
- Link the framework assessment to the business planning cycle in order to get results. In this way, what has been planned is more likely to get done.

#### GAINING COMPETITIVE EDGE THROUGH CHANGE MANAGEMENT (MONGOLIA)

#### **Organizational Profile**

Established in 1978, BE-05 is engaged into coal mining with a production capacity of three million tons per year. BE-05 operates 24 hours, and has 1,200 employees. In 1995, it

was restructured to become a joint company—75 percent owned by state government and 25 percent owned by private organization.

#### **Rationale and Objectives**

From being the sole company in the coal mining business, BE-05 now has to deal with a competitive market, with four key competitors. Prices of raw material have also increased. Recognizing all these changes in the market, BE-05's top management and staff have felt the need to change, considering internal factors such as the organization's outdated key performance indicators (KPI), hierarchical management structure, and lack of modern technology. Thus BE-05 started its change management effort within the organization, including revising its vision statement and key leverage areas and establishing steering council and change management taskforces. It has also started productivity improvement efforts, changing the mindset of its employees.

#### **Overall Description**

The change management program of BE-05 involves three phases. The first phase is establishing a new vision statement and new base structure. The second phase includes implementation of productivity improvement projects. The third phase is sustaining and expanding the improvement efforts, and getting the active participation of middle management. The new vision statement and structure have been communicated to all BE-05's staff. BE-05 has also developed action plans and implemented 5S, Kaizen, suggestion scheme, Quality Control Circles (QCC), and balanced scorecard

#### **Leading Practices**

Change management is done systematically with BE-05's top management commitment and support. The mindset for change has been integrated into the organizational culture through continuous training and development for employees. BE-05's management encourages new ideas and acknowledges successful initiatives. Every employee understands that everyone can be a leader; and BE-05 considers all employees as valuable asset of the company.

BE-05 has also adopted the balanced scorecard as a measurement system, and productivity improvement tools including 5S, Kaizen, suggestion scheme, and QCC. It has also introduced into the organization diagnostic teams and preventive maintenance.

#### **Benefits Gained**

With the changes that have taken place within BE-05, its business results have improved. In 2005, its product quality of 380 exceeded its target of 300. The salary level has increased by 18 percent and the incentive system by 60 percent. Before the company was suffering losses, now profits are being gained. Employee turnover rate is only 10 percent.

For management and organization structure, changes have been done twice. BE-05 has established workplace categories, tariffs, and professional proficiency inquiry system. As a result, there have been zero accidents.

BE-05 revised the maintenance system and introduced research and development for raw materials. It also conducted extensive internal and external environmental surveys and started a human resource development program.

#### Lessons Learned

Without having sufficient knowledge and experience in implementing change management, BE-05 encountered several difficulties. It was not able to clearly identify the borderline between the company's formal structure and change management structure. Selected KPIs were not always appropriate. Operations of some units were inconsistent and inadequate. In same cases, taskforce team members were poorly selected. BE-05 also had some difficulty in getting middle management's involvement. Due to lack of experience, some tasks lagged behind the schedule.

#### Next Steps for Continuous Improvement

BE-05 plans to implement knowledge management and quality management system within the organization. It will also ensure that the productivity improvement tools and techniques are being implemented. It also plans to engage into benchmarking and share its own experiences and learn from others on change management.

#### SUMMARY

N .	т ,	CD .	г 11	A 1
Measuring	Impact (	of Business	Excellence	Approaches
measuring	mpace	or Dabiness	Directionee	ippioaenes.

	Best Practice	Leading Practices	Benefits Gained	Lessons Learned
BE-01	Using the a quality award framework for continuous improvement to achieve company growth	<ul> <li>Total Productive Main- tenance</li> <li>Lean production</li> </ul>	<ul> <li>Management of information</li> <li>Comparisons and benchmarking</li> <li>Supplier development</li> <li>Customer satisfaction</li> </ul>	<ul> <li>Data collected were not used</li> <li>Key events and data not captured to align with organizational goals</li> <li>Changing mindset of employees is a challenge</li> </ul>
BE-02	Achieving customer and employee satis- faction through Total Quality Management	<ul> <li>Top management en- gagement and commitment, teamwork</li> <li>Use of pre-mixed mate- rials to maintain the confidentiality of for- mulation and consistency of product quality</li> <li>Market survey, product testing in selected stores before rolling out to all stores</li> </ul>	<ul> <li>Improved sales growth and market share</li> <li>Increased customer and employee satisfaction</li> </ul>	<ul> <li>KPIs were not integrated at the start and did not cover all areas of business</li> <li>Important facts and data are not used to form strategy</li> </ul>
BE-03	Using productivity approaches to improve business results	<ul> <li>Lean manufacturing model integrating the production system</li> <li>Use of COMPASS in monitoring organizational performance</li> </ul>	<ul> <li>Clarified and gained consensus on vision and strategy</li> <li>Balanced scorecard enabled better communication</li> <li>Alignment of strategic initiatives, resources, and investments</li> </ul>	<ul> <li>Balanced score- card is not a quick process</li> <li>Employees need to internalize company's specific targets and goals</li> </ul>
BE-05	Gaining competitive advantage through change management	<ul> <li>Integrating change in organizational culture</li> <li>Empowering employees</li> <li>Adoption of 5S, <i>Kaizen</i> suggestion scheme, QCC, and balanced scorecard</li> </ul>	<ul> <li>Improved business results</li> <li>Zero accident</li> </ul>	<ul> <li>No knowledge and experience in implementing change manage- ment</li> <li>Selected KPIs were not always appropriate</li> <li>Operations of some units were inconsistent and inadequate</li> </ul>

# **KEY PERFORMANCE INDICATORS IN SMALL AND MEDIUM ENTERPRISES**

#### **BENCHMARKING CUSTOMER FEEDBACK HANDLING (PHILIPPINES)**

#### **Organizational Profile**

KPI-01 is a manufacturer and exporter of decorative and functional earthenware ceramics. It is a small enterprise that started its operations in October 1994 and currently employs 150 workers that include staff and management. KPI-01's main market of decorative and functional ceramics include the United States, England, Spain, and Australia. In the past, it has also exported to Japan, Canada, China, Germany, United Arab Emirates, South Korea, New Zealand, France, Italy, Belgium, Sweden, Norway, Netherlands, and Greece.

KPI-01 was one of the four Philippine companies that was given Total Quality Management (TQM) instructions under the second phase of the ASEAN-Japan TQM Project administered by the Bureau of Product Standards in 2000. It is a member of the Philippine TQM Foundation, a non-government organization promoting TQM among SMEs. KPI-01 recently joined the Benchmarking Project for Philippine SMEs that was initiated and facilitated by the Development Academy of the Philippines (DAP) in 2005.

KPI-01's implementation of TQM and the broadening of its ceramic products and markets has allowed it to operate continuously since its inception despite the closure of almost 80% of Philippine decorative ceramics manufacturers due to intense competition from other Asian countries.

The vision of KPI-01 is to become a global brand of innovative and quality ceramic products by year 2010. Its mission is to create delighted and loyal customers through its people, processes, and products.

#### **Rationale and Objectives**

After implementing TQM, benchmarking was the next logical step for KPI-01 in its journey to excellence. As a small enterprise, however, KPI-01 did not have the means to embark on a benchmarking project because: 1) information and knowledge about benchmarking were practically nonexistent within the company, 2) other organizations could not be identified and persuaded to do benchmarking, and 3) the expense of hiring a third party facilitator precluded the use of such an important resource. With DAP's initiative on a benchmarking project for Philippine SMEs, the stage was set for the participation of KPI-01.

Upon the decision of KPI-01 management to participate in the benchmarking project, several objectives were determined: 1) learn about benchmarking through the company's involvement and participation, 2) network with other SMEs in the Philippines and eventually in the Asian region, and 3) seek continuous improvement through benchmarking.

#### **Overall Description**

The participating companies in DAP's benchmarking project chose the topic "Handling Customer Feedback in Philippine SMEs." This topic was chosen by consensus from among five other topics that included innovation, training effectiveness, balanced scorecard, alignment of corporate versus individual balanced scorecard, and development

of organizational culture. Five key performance indicators (KPIs) were selected by the benchmarking group: 1) number of complaints, 2) speed of resolution, 3) percent resolved (defined as the number of resolved complaints divided by the total number of complaints multiplied by 100), 4) cost of complaint, and 5) level of customer satisfaction.

A flow chart of the process of handling customer feedback is shown in Figure 1. The participating companies generally followed this basic mechanism with some modification depending on the nature of their business.

#### **Leading Practices**

KPI-01 has adopted several practices for handling customer feedback in pursuit of its mission to create delighted and loyal customers. First, it now uses a formal survey for gathering customer complaints through email and telephone. From a previous monthly average of three customer complaints received, an average of seven customer complaints has now been registered for the first six months of 2006. Although the upward trend would be a cause of concern for most companies, what was happening at KPI-01 was that complaints were not being reported by customers because of the lack of a formal mechanism for doing so. All the company did was wait for complaints which is why it was receiving so little. By proactively soliciting feedback through a formal survey, the company has learned about the problems its customers are experiencing. With the receipt of customer feedback, the company can now identify the root causes of problems and eliminate them.

Second, KPI-01 has integrated the process of handling customer feedback in its *Kaizen* and Quality Circle activities by using it as a source of improvement ideas. *Kaizen*, KPI-01's suggestion scheme, is used to do quick fixes of customer complaints. Quality Circles are used to implement system fixes that can take up to six months. Employees get to learn about customer problems which help instill customer focus in their minds.

Third, KPI-01's principle "the simpler the better" has helped it manage its limited resources. One simple device KPI-01 uses is a handy notebook for recording verbal feedback. Verbal feedback is often forgotten by its recipients which results into lost improvement opportunities. At KPI-01, the sales and marketing officer and her assistant have been tasked to record customer feedback, whether positive (compliment) or negative (complaint), when verbalized by external customers in face-to-face meetings, or during telephone conversations. Since KPI-01 deals with only a few customers (wholesalers, importers, distributors, and institutions) in the export business, the number of customer feedback is not voluminous, and these are reviewed once a week during regular weekly meetings.

Finally, to further help implement change, rewards in the form of small amounts of cash and recognition in monthly forums have been instituted. In the *Kaizen* program of KPI-01, for instance, more than 200 percent increase in implemented suggestions has been achieved after such reward and recognition scheme was initiated.

#### **Benefits Gained**

The process of soliciting feedback from customers and implementing countermeasures to customer problems has instilled in the minds of employees the importance of customer focus as a quality management principle at KPI-01.

Through benchmarking, employees have learned that simply waiting for customer feedback prevents them from improving customer service. The more proactive way is to actively solicit feedback, since numerous problems are left unexpressed by customers if they are not asked. Knowledge about these problems has driven KPI-01 to pursue improvement and prevent problems from happening or recurring.

Finally, the benchmarking project has allowed KPI-01 to become part of a sharing and learning network of SMEs. Benchmarking not only on handling customer feedback but also on other various topics has helped KPI-01 increase its competitiveness.

#### **Lessons Learned**

It has become evident in the process of benchmarking that it is not a project with a clear end in sight, but a continuous journey toward excellence. It is imperative therefore to obtain the commitment of employees directly involved in its implementation. One way in which commitment can be obtained is by aligning both individual and corporate performance measures with the strategic goals of the company.

Designing the appropriate organizational structure to drive implementation is also necessary. Roles and responsibilities need to be clearly defined. Systems, processes, and step-by-step methodologies need to be identified, because the lack of human and financial resources in SMEs does not allow much room for experimentation.

Because KPI-01's benchmarking partners come from diverse industries, it was difficult to benchmark absolute figures or do an "apple-to-apple" comparison. For instance, retail companies that directly deal with end users will naturally have a higher incidence of customer complaints compared to companies dealing with only a few customers such as wholesalers, importers, distributors, or institutions. In considering such KPIs, sector benchmarking in Philippine SMEs in the manufacturing and export industry, specifically those involved in gifts and housewares, may be a more beneficial activity for KPI-01.

#### **Recent Improvements**

Two selected KPIs—cost of complaint and level of customer satisfaction—were not being tracked at KPI-01. Given the other strategic issues that KPI-01 has to deal with and the limited resources of the company, it was difficult to start a process of tracking and monitoring these two KPIs. But when KPI-01 had learned from its benchmarking partners the benefits they gained in tracking the two KPIs, it decided to track them as well. Data is now being gathered to determine the cost of complaint, and a draft customer satisfaction survey has been designed to measure the level of customer satisfaction beginning the last quarter of 2006.

#### Next Steps for Continuous Improvement

With the benefits gained from the participation of KPI-01 in the benchmarking project of DAP, it will again participate in the second cycle. KPI-01 will also initiate benchmarking study with other possible partners in the manufacturing and export companies involved in gifts and housewares. KPI-01 will also seek assistance in searching for benchmarking performance measures and other best practices from world-class organizations. Finally, KPIs will be reviewed quarterly to assess their impact in attaining corporate objectives.

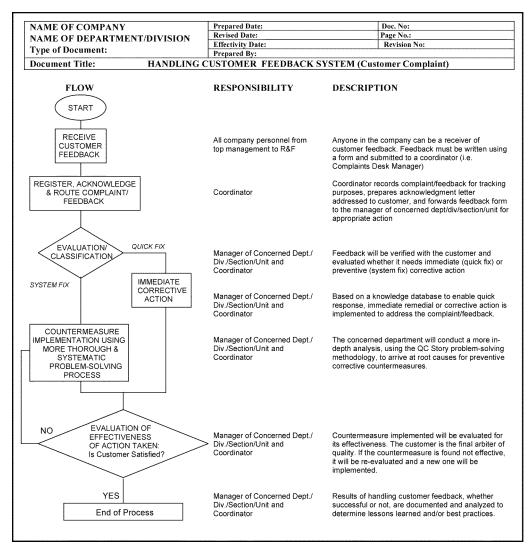


Figure 1: Process of Handling Customer Feedback

#### ENHANCING ORGANIZATIONAL CULTURE TO ACHIEVE CUSTOMER SATISFACTION (JAPAN)

#### **Organizational Profile**

KPI-02 is an Italian restaurant chain in Japan with sales of yen (¥) 36 million and an operating profit of ¥615 million (as of fiscal year 2004). It was established in 1996, and at present has 19 regular and 43 temporary staff members. KPI-02 targets high-income females aged 20 to 50. Its vision is to become an Italian restaurant chain with the highest rating on customer satisfaction.

#### **Rationale and Objectives**

With the shrinking market of fast-food service industry, the calming down of Italian boom, and the tough competition, KPI-02 aims to gain competitive advantage by enhancing its organizational culture to achieve customer satisfaction. This will be done by establishing strong leadership and empowering the staff so that a climate of customer value is created. By doing so, KPI-02 expects to earn high customer acceptance and satisfaction, thereby becoming the most preferred restaurant in the market.

To strengthen the leadership system, KPI-02 aims to nurture innovators in the organization and enable them to carry the organization's vision, philosophy, and values. The innovators are expected to hand down the important frame of mind and behavior orally to the newcomers and explain continuously the purpose and meaning of each of the organization's activity. It also aims to enhance its capability in solving management problems by doing the right things the right way based on past failures. To empower its staff, KPI-02 seeks to establish a learning environment that promotes knowledge sharing, innovation, teamwork, autonomy, and creativity.

As an approach to strengthen leadership and empower the staff, and eventually achieve its goal of high customer satisfaction, KPI-02 has adopted information cards that will promote management transparency, instill the organization's values in the minds of the staff, create a learning environment, and provide a venue for responding to customer claims and for developing and deploying strategies. Figure 1 shows other several uses of information card.

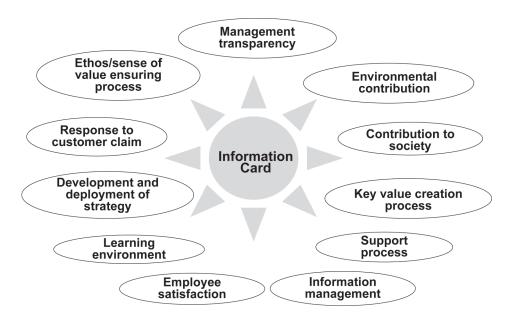


Figure 1: Uses of Information Card

#### **Leading Practices**

Information cards are used to instill the most important values of the organization to the staff. The cards allow the staff to express their opinion and the management to give feedback. Immediate improvement actions are also coursed through the information cards.

One of the unique features of the information card is involving the customers in the internal value creating process. The cards are used to get valuable information from the customers. These cards are color-coded in blue, white, and red. Praises from the customers are written in the blue card, suggestions are placed in white, and claims from customers in red. The color-coded cards are then deployed through the appropriate channels for the right group or individual to take the needed actions. Figure 2 shows the process adopted by KPI-02 in using the information cards.

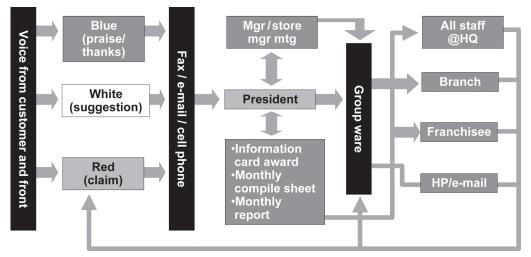


Figure 2: Information Card Process

#### **Benefits Gained**

Praises coming from customers, co-workers, and management written in the information card have created satisfaction among the staff, which has resulted to high performance and morale, increased motivation, and low turnover rate. With staff being motivated and satisfied, the organization has reduced cost and gained loyal customers, thus leading to better financial results. Figure 3 shows how the use of information cards can lead to better financial results.

#### Lessons Learned

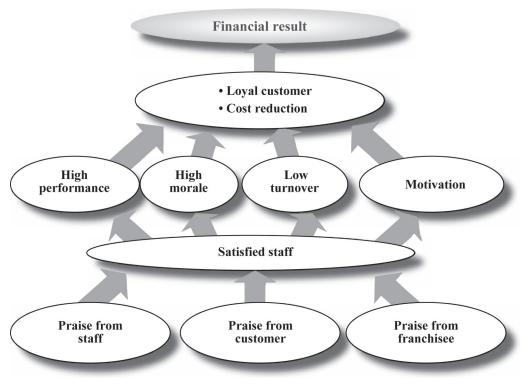
Free flow of opinions, suggestions, and even criticisms through the use of information cards can change the organization. The president's thoughts, philosophy, and comments coursed through the information cards to reach individual staff, can result to empowerment and motivation. Sharing of knowledge and information can also contribute to research and development and efficiency in the work place. Information cards are also effective in nurturing the autonomy and creativity of staff.

#### Next Step for Continuous Improvement

Based on its accumulated know-how, KPI-02 plans to establish a new restaurant consulting business.

Compendium of Best Practice Case Studies in Asia: Volume III

\_ I



1

Figure 3: Effectiveness of the Information Card

|\_\_\_\_

1

#### SUMMARY

#### Key Performance Indicators in SMEs

-

	Best Practice	Leading Practices	<b>Benefits</b> Gained	Lessons Learned
KPI-01	Benchmarking on effective handling of customer feedback	<ul> <li>Formal survey to gather customer complaints by email and telephone</li> <li>Customer feedback as input to <i>Kaizen</i> and Quality Circle activities</li> <li>Use of notebooks for collecting cus- tomer feedback</li> <li>Use of rewards and recognition to help implement change</li> </ul>	<ul> <li>Customer focus instilled to employees</li> <li>Continuous improvement</li> <li>Prevention of problems</li> <li>Increased competitiveness</li> </ul>	<ul> <li>Align individual and corporate performance measures with com- pany's strategic goals</li> <li>Design appropriate organizational structure to drive implementation</li> <li>Benchmarking with the same sector (manufac- turing and export) is more beneficial</li> </ul>
KPI-02	Enhancing organizational culture to achieve customer satisfaction	<ul> <li>Creating a culture of teamwork, knowledge sharing, creativity, and autonomy</li> <li>Team members working together with common goal of value creation</li> <li>Strong emphasis on the philosophy "I am okay, you are okay"</li> <li>Defining and com- municating values to both staff and customers</li> <li>Use of information cards to communi- cate affirmation, complaints, sugges- tions, and feedback among the man- agement, staff, and customers</li> </ul>	<ul> <li>Deep communication among staff is established</li> <li>High team performance</li> <li>Enhanced customer satisfaction</li> </ul>	<ul> <li>Free flow of information can change the organization</li> <li>Management's outright feedback using information cards can empower and motivate employees</li> <li>Sharing of knowledge can contribute to research and development and efficiency in the workplace</li> </ul>

# PUBLIC SERVICE EXCELLENCE

# PROMOTING E-GOVERNANCE IN LOCAL GOVERNMENTS (PHILIPPINES)

# **Organizational Profile**

PSE-01 is a non-government organization (NGO) officially registered with the Securities and Exchange Commission, composed of e-governance champions from the Philippine local governments.

# **Rationale and Objectives**

The organization was formed out of a common felt need to strengthen local governments' capability to use information and communication technology (ICT) to improve governance, administration, and service delivery. PSE-01 aims to provide a venue for sharing models of good practices, develop competence of e-governance champions, advocate on policies supporting local e-governance, and create partnerships to promote local e-governance.

# **Overall Description**

In late 2003, the Asia Foundation, as part of its transparent and accountable governance program, supported research on the status of e-governance in local governments in the Philippines. The research sampled 17 local governments across the country, ranging from municipalities to provinces, and asked about the status of their e-governance. It also sought to identify the hindering and driving factors of local e-governance.

Early in 2004, the research results were presented to the e-governance champions of the respondent local governments. They validated most of the results, and they wanted to go beyond the research and act on it. Thus in May 2005, with support from a provincial government, the e-governance champions met again. Gathering in one of the resorts in the Philippines, they formulated practical visions and developed a strategic plan of action to promote local e-governance. It was in this meeting that they first called themselves the e-governance Technical Working Group (TWG).

The strategic directions of the TWG focus on the need to share information across local governments. They saw that to improve the success rate of local e-governance initiatives, local government officials need to know about:

- what local government services are being improved with the use of ICT,
- what problems were encountered in the course of implementing e-governance projects,
- what solutions worked or did not work, and
- what are the good practices in managing e-governance projects.

To pursue its projects, the TWG established partnerships with various organizations for funding and technical support.

# **Leading Practices**

The TWG has undertaken several major activities, including a series of e-governance orientation workshops, e-governance online website, participation in local e-governance conference, and a paper on contracting ICT projects.

The first major activity of the TWG was the conduct of three-day orientation workshops, involving a series of "how to" sessions:

- how to get started in e-governance,
- how to pursue e-governance with a limited budget,
- how to manage contracted ICT projects,
- how to manage in-house systems development, and
- how to work with spatial data.

Three e-governance orientation workshops were conducted for Luzon, Visayas, and Mindanao, respectively. The first one was in Ortigas, Metro Manila for Luzon; the second in Island Garden City of Samal for Mindanao; and the third in Bohol for the Visayas region. Each workshop reached at least 35 local government officials.

The TWG's second project was e-governance online, a website designed for sharing of information on e-governance. In this project, the institutional partner was a national government agency on computer, which hosts the website and provides technical support for its maintenance. The website serves as a repository of local e-governance experiences. Unfortunately, severe hacker attack took the website offline for some months. When the web site's location had been transferred, the TWG took the responsibility for updating the web content.

The case reports on e-governance in the website emphasize the application of ICT to improve a service. Case reports contain information about:

- what local government services were improved,
- performance standards for these services and how performance rates improved after the introduction of ICT,
- how the project was planned and implemented,
- technology used, and
- contact details to help readers learn more about the cases.

In 2005, the TWG participated in the e-governance conference conducted by the Development Academy of the Philippines (DAP). The conference was a gathering of more than a hundred of municipalities to learn from each other's experiences and from the European model on e-governance as well as forge partnerships to pursue e-governance. One of the results of the conference was a partnership formed between the province of Bulacan and San Fernando City, Pampanga called the inter-LGU expert-exchange project.

The TWG also authored a paper on good practices in managing contracted ICT projects. Over the course of several revisions, the paper grew from 10 to 18 principles or tips about successful contracting. Some of the points raised are:

- It's your project, not the contractor's
- Know what you want
- Manage your contractor to succeed

While implementing these projects, the TWG also looked for an institutional base. It explored the possibility of serving as a *think tank* for the Union of Local Authorities of the Philippines, but the two groups had divergent goals. The TWG then decided to establish itself as an NGO, and at the same time encourage the formation of e-governance associations at the level of each league of local government—League of Cities, League of Municipalities, League of Barangays, and League of Provinces. It was envisioned that these league-level associations would become institutional members of the NGO.

To date, three league-level e-governance associations have been formed. Interim officials have been elected for the League of Cities of the Philippines (LCP) e-Governance Association. A regular set of officers serves the League of Municipalities of the Philippines (LMP) e-Governance Association. The League of Barangays' secretariat officers, complemented with pioneering *barangay* chairmen, serve as the e-governance TWG themselves.

# **Benefits Gained**

These activities have raised the profile of PSE-01 and encouraged more local governments to be part either of their own league-level association, or of PSE-01.

# **Lessons Learned**

- Technical expertise and political leadership need to go hand in hand. Without political leadership, technical expertise is a tool without an application; without technical expertise, political leadership is direction without movement.
- ICT project management, which is lacking in most local governments, is an essential element for success in the use of ICT for local governance.
- The best teacher for a local government ICT champion is another local government ICT champion.

# Next Steps for Continuous Improvement

The league-level associations will pursue their respective priority projects. The LMP e-Governance Association plans to develop and offer an introductory course on e-governance for municipal mayors, through its own Municipal Development Academy. Both the LMP and LCP associations aim to study and advocate for policies for institutionalization of e-governance units in municipalities and cities. The League of Barangay, on the other hand, intends to develop online information systems for *barangay* use, with options for connectivity and computer package.

PSE-01 will revitalize the website and pursue knowledge management (KM). Some of the questions that need to be answered in the course of pursuing KM are

- what do Mayors need to know about e-governance,
- how do cities and municipalities set up ICT units, and
- what knowledge and skills are needed for different ICT positions.

Information sharing, benchmarking, and networking will continue to be an important element in PSE-01's pursuit of e-governance.

# IMPROVING QUALITY OF LIFE THROUGH E-GOVERNANCE (PHILIPPINES)

# **Organizational Profile**

PSE-02 is a provincial government office administering a province in the Philippines that is near Manila. The province is composed of 22 towns and 2 cities with 569 villages sharing the land area of 262,500 hectares. It is equipped with telecommunications, power and water facilities, industrial estates, and good roads. It has a population of 2.8 million with a literacy rate of 98.33 percent. Its people are entrepreneurial, speak Filipino, and use English as a second language.

The vision statement of PSE-02 is "a strong middle class as the core of the citizenry with equal access to opportunities and services." It is committed to the following:

- Promotion of positive Filipino values among families
- Programs for a drug-free and responsible youth sector
- Programs for sustainable development
- Efficient delivery of health and social services
- Protection and management of the environment
- · Programs aimed at food security
- Strengthening of SMEs
- Programs to develop information technology in local governance
- Proficient, motivated, and inspired workforce in the bureaucracy
- Promotion of arts, culture, and tourism
- Provision of quality services to all sectors
- Programs for upgrading the quality of public education

# **Rationale and Objectives**

The Philippines has constantly faced the issue of transparency, accountability, and efficiency. To address the issue of graft and corruption and pay the government workers well, the government must develop efficient systems that save money, which then could be used for more productive programs and services.

Transparency and accountability are essential to the stakeholders' understanding of local government and who benefits from decisions and actions made by them. Access to information is fundamental to this understanding and to good governance as a whole, and this is where government's critical role is apparent and crucial.

In 1998, PSE-02 faced many challenges—overstaffed bureaucracy, irrelevant systems and procedures, low morale of personnel due to inadequate incentive mechanisms, and resistance to change of administration among the staff. In addition, PSE-02 had to pursue economic development, ensure the efficient delivery of health and social services, implement programs to counter drug addiction, strengthen gender sensitive programs and projects, support education systems, address problems resulting from urbanization (flooding, traffic, waste management, salt intrusion, need to open up new urban centers), and implement infrastructure development.

# **Overall Description**

Making information available to the citizens is imperative to PSE-02, having the constituents know how their government is being run. Thus, PSE-02 formulated the information technology (IT) plan for the province. In November 1996, the Management Information System (MIS) was created. MIS was then a division under the Office of the Provincial Administrator. Ten computer literate employees from different offices were detailed to compose the IT office. In October 1997, a planning workshop was held. The human, hardware, and software resources were evaluated and assessed. The information systems plan for the province was formulated through a technical assistance from Associates in Rural Development/Governance on Local Democracy (ARD/GOLD), funded by the United States Agency for International Development (USAID).

The MIS office became a department in 1999; and when the 2002 reorganization had started, MIS became the Provincial Information Technology Office (PITO), which initiated e-governance in the province. PITO aims to bring about good local governance and help PSE-02 become globally competitive. It is committed to enhance efficiency and

accuracy by improving delivery of basic services to the people, providing a mechanism for transparency and accountability in government transaction, and increasing government capability for planning, policy formulation, and program implementation. Through its e-local governance program, PSE-02 seeks to be efficient, effective, and transparent to people's needs, and meet the challenges of local governance, national growth, and globalization.

# **Leading Practices**

PITO implements PSE-02's information system, which is designed to support the operations of the province and its 22 municipalities and 2 cities.

The main activity of the information system is to computerize PSE-02's strategic operations, namely, revenue generation, fiscal management, supply and property management, development planning and management, records management, and information linkage for inter-local government unit for greater efficiency.

PSE-02 focuses on knowing its customers, soliciting citizens' feedback to improve its services. The constituents can feedback through PSE-02's web site. There is also a venue for information exchange through continuing dialogues between authorities and constituents.

IT intervention at the province is done at two levels: province and municipality. The IT intervention spearheaded by the province is customized to fit its own needs and that of its towns—a data bank responsive to the need of the bureaucracy and its people.

The data processed and stored in the Personnel Management Information System (PMIS) were instrumental in making sound policy decisions in the reorganization of the bureaucracy. Through the Real Property Tax Information System (RPTIS), the undisclosed properties have been known and assessed, which has helped in PSE-02's revenue generation. For data banking, the Geographic Information System (GIS) helps determine lot parcels without tax declarations. All the data generated by these systems are essential in making sound policies which lead to greater efficiency in revenue generation.

Government's information such as records, decisions, and programs are made available to people with the use of IT. The intranet serves as a venue for open communication between leaders and employees and among and between employees.

# PSE-02 Intranet

With the intranet, departments can have simultaneous communication; memos and other forms of inter-office communications can now be retrieved and sent through e-mail. PSE-02 also benefits from the internet protocol (IP) telephony technology, which enables better communication among the offices at the least cost—making room for integrated voice, data, and video telephony. To date, PSE-02's intranet is using fiber optic technology.

# Personnel Management Information System (PMIS)

PMIS is being operated at the Provincial Human Resource Management Office (PHRMO). It maintains employee records such as personal information, seminars and training, leave credits, deductions, and service records. Integrated in the system are modules for payroll management and timekeeping. Employee attendance is monitored using the digital time recorder or the swipe machine. The system is connected via the Local Area Network (LAN), a networking facility which provides online communication between the IT office and the PHRMO.

The following are the components of PMIS:

- A. Personnel Management
  - Employee 120 files (personal data, educational background, eligibilities, seminars and training, and service records)
  - List of birthday celebrants
  - Science and Technology forms
  - List of awardees
  - Personal data sheet (PDS)
  - Latest statistics

# B. General Payroll System

- Monthly payroll of PSE-02
- Remittances done in the accounting office (life insurance, health insurance)
- Pay slips of employees
- Alpha list (summary of employee's annual income tax)
- Tax forms
- Employee master list

# C. Timekeeping System

- Leave credits/balances
- Personnel attendance report
- Daily time record

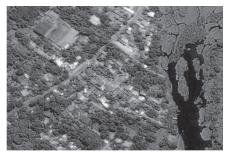
# Real Property Tax Information System (RPTIS)

RPTIS provides an updated and accurate assessment roll of all real property units. It can generate assessment notices, tax bills, and list of past due accounts on a timely manner. The following were the developed modules for RPTIS:

- Assessment of real properties (contains the individual record of assessment of properties such as land, plants and trees, building or machinery; property owner; location; and corresponding assessments)
- System of billing the taxpayers (refers to the system of generating notices and tax bills, computation of tax due, and determining delinquent accounts)
- Collection of real property taxes (facilitates collection of real property taxes)

# Geographic Information System (GIS) for "Reclassification of Real Properties for Land Use"

The GIS is tied up to RPTIS real property records and assessments that are linked to the digital map. This application helps establish a complete inventory and identify ownership of every piece of real property. The system started in 1997. However, RPTIS alone is text-based. GIS application for "Reclassification of Real Properties for Land Use" also features G-RPTIS, G-Mayors Permit Licensing Information System (G-MPLIS), and G-Executive Information System



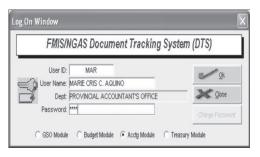
(G-EIS)—combining the functions of both text-based and graphical media. This application serves as a check and balance between RPTIS database through the color-coding scheme and actual graphical satellite-based imagery.

# Financial Management Information System (FMIS)

FMIS is an integrated information system customized for the province. It runs in a LAN environment. It involves the budget, treasury, and accounting offices of PSE-02. Recently, with the use of FMIS, PSE-02 was chosen by a national government agency to be the model local government unit (LGU) for the development of the Electronic Treasury Operations Management System (eTOMS) to be implemented among the municipalities nationwide.

# Financial Document Tracking System

It is an application system incorporated in the FMIS which assists on delivering the specific and precise location of a financial document. It directly traces and provides immediate access to information on documents, and increases the speed and ease of moving information among the offices of PSE-02.



# Aid Monitoring System (AMS)

AMS aims to monitor and track records of aids and assistance provided by PSE-02 to its constituents. It is designed for Personal Staff of the Office of the Governor, Provincial Administrator's Office, Provincial Budget Office, Provincial Engineering Office, Provincial Social Welfare and Development Office, and Provincial Health Office.

# Property Management System (PMS)

It is a user-friendly, computerized system that catalyzes the functions of the Provincial General Services Office (PGSO) which is envisioned to link all PSE-02 offices and hospitals to cater to needs for supplies, equipment, and other materials. The supplies module, which is one of its components, is designed for fast and efficient consolidation of all office supplies and other items for procurement. Another component is the equipment module, which is intended for the input, storing, and reporting of the items of capital inventory controlled by each department.

# District Hospitals Information System (DHIS)

In 1993, the government-run hospitals were devolved to PSE-02. District hospitals were established to reach out and offer health services to the remote and capital parts of the province. DHIS is a network-based information system which maintains and facilitates retrieval of patient's records and records of government medical insurance members, preparation of patient's statement of account, and accurate daily report of collections and inventory of medicines and medical supplies. The system is a useful tool for maintaining patients' records, automatic billing, and generation of statistical reports.

# Polytechnic College Registrar Information System (PCRIS)

It is a college registration system that maintains the college official record of students' academic and profile data. Records are established from data supplied by the college

admission system. Personal and demographic data and previous academic history are the main components of a student's initial record. It processes grade reports, final grades, degrees/courses, and the confirmed class schedule. The school's registrar's office is the primary user of this system. Also incorporated in the system is the assessment module, which is used to monitor the payment dues of the students.

# *Provincial Cooperative and Enterprise Development Office Record-Keeping System* (*PCEDO-RKS*)

The PCEDO-RKS is a web-based application that maintains records of all cooperatives in the province. Updating and retrieval of records of cooperatives can be done online using the internet.

# Disaster Management Information System (DMIS)

This program is specifically developed for the Provincial Disaster Coordinating Council to facilitate record keeping, report generation, and disaster-related queries.

# Environmental Permit and Monitoring System (EPMS)

EPMS aims to facilitate transactions of the Provincial Environment and Natural Resources Office (PENRO), specifically in issuance and monitoring of applications and permits.

# Commercial Spaces Monitoring System (CSMS)

CSMS integrates lessee information archive—payments monitoring of commercial spaces with standardized amount on deposit and cash advance; quick search facility on list of active, inactive, and expiring contracts; list of delinquent clients; and projected and actual income—into one complete system package for PSE-02-owned commercial spaces.

# Case Tracking of Illegal Drugs Information System (CTIDIS)

The system was developed in 2002 for the national police agency. This program systematizes the recording and monitoring of illegal drug cases in the province.

# Jail Management Information System (JMIS)

JMIS aims to provide fast and efficient generation of reports and records management. It includes prisoner information and subsistence data recording; quick search facility on prisoner's data; subsistence voucher and history; and list of committed detainees, transferred detainees, released detainees, and youth offenders.

# Local Blood Council Information System

The information system for the Local Blood Council aims to simplify documentary transactions of staff while performing improved, more orderly, systematic, faster, and cost-effective duties, and rendering quality service to its consumers. It integrates both desktop-based and web-based functions of an application system to deliver an "always on" inquiry system regarding blood donation availability and blood donor's laboratory findings. This application also provides frequently asked question (FAQ) feature for site visitors regarding blood and blood donation information.

# PSE-02 Official Website

PSE-02's web site, which started in 1998, contains vital information about the province.

# North Food Exchange (NFE)

It includes cooperatives in the municipalities and cities of the province and management groups, suppliers, and support organizations such as banks and transport groups. The NFE website engages in e-commerce. Business activities such as production, consumption, and marketing of agro-food products and basic commodities lay the groundwork for setting up NFE Complex and *Ko-op* Marts in each of the province's 24 municipalities and cities.

# Polytechnic College Web Site

It serves as a facility for communication and includes services of the school, such as students' corner and academic programs.

# Provincial Commission for Women Web Site

This website commemorates women advocates in the province who have been committed to serve the constituents.

# Development of Municipal Web Sites

PSE-02 helps the municipal governments in promoting and opening to the world their variants for infrastructure development and the delivery of basic services that can be used to entice foreign investors. Since 1998, websites of 22 municipalities, 2 cities, and 7 *barangays* in the province have been developed and published.

#### Promotional CD

It provides information about the province aiming to attract potential local and foreign investors through an encyclopedic, digitized medium.

# Information Kiosk

Carrying the concept of the promotional CD, the updated version has been transformed into a touch-screen information kiosk, with an added help desk feature in digital format.

# e-Procurement System

It is a web-based, online application system accessible through a link found in the official web site of PSE-02. The system promotes transparency in governance by allowing suppliers and the public to view all items and projects of PSE-02 that are subject for bidding and quotation. It also shows to whom the bids are awarded and the reason for awarding.

It allows PSE-02's registered suppliers to post their proposals and bids for the "open bidding" of the items that are meant "for quotation". After the open bidding period (quotation only), all suppliers who joined and submitted their proposals (electronically) should attend the awarding of winners on the date specified.

# Converged Network

PSE-02 has been implementing the converged network in partnership with local telecommunications companies for fiber optic lines and audio/video conferencing using telephony. IP telephony is a new system of communication where telephone calls transport over the internet. Through this technology, PSE-02 can monitor incoming and outgoing calls, control unnecessary calls, identify user, and save money.



# Technology Transfer to Local Government Units

PSE-02's programs are being replicated to 76 provinces and LGUs for free through a memorandum of agreement. With the help of USAID and ARD/GOLD Project, several components of PSE-02's information systems have been shared.

# **Benefits Gained**

The experiences of PSE-02 have shown that e-local governance contributes to both efficiency and effectiveness. It renders government to be transparent and responsive to people's needs. Through computerization, PSE-02 is reaping the benefits of

*Reenergized bureaucracy.* Government operations are done faster with less man-hour requirements resulting to a more responsive and more competitive provincial administration.

*More effective and efficient service delivery.* Frontline offices' quality of services has improved due to systems and operations which can be done in less time.

*Improved information access.* PSE-02's information system enables access to more reliable, accurate, and timely data. Through PSE-02's website, people in the locality and abroad are able to access information.

*Greater accountability and transparency.* With computerization, anybody can access and know what is happening inside PSE-02.

*Savings of the provincial government.* For 2004 alone, the amount PhP 87,156,800 (US\$ 1,584,669) was saved, which is more than enough to cover the salaries of PITO employees in that year.

*Rightsizing of the bureaucracy.* Government operations are done faster in less man-hour with less people doing the job. Offices with bloated personnel were trimmed down by automating the office procedures resulting to a more responsive and more competitive provincial administration. Computerized systems have replaced mechanical jobs done by many clerks in the office; thus PSE-02 was able to move on to a more efficient, reliable, cost-effective, user-friendly, and highly adaptable system.

*Empowered workforce*. Employees in the information-based operations of PSE-02 are now more productive and effective. Productive employees are rewarded with high salaries and given due incentives.

# Lessons Learned

*Resistance to change can be managed by capitalizing on small victories.* PSE-02 initially aimed for RPTIS; however, it later realized that this was a long-term goal. PSE-02 embarked instead on PMIS, which has created a tremendous demonstration effect. When the government employees had seen the system worked and their payrolls processed on time, they started believing in computerization.

Lack of knowledge in computer operation is not a reason not to computerize. Orientations on computerization were conducted for all PSE-02's departments. Government and department heads were also trained on using computer. An executive order made computer literacy mandatory for every employee. PSE-02 also has a program on continuous upgrading of computer units and computer skills. It hires graduates of local universities in the province to develop its computer programs. Thus, the programs used in the province were done almost entirely by local people with the help of some consultants.

Apprehensions regarding displacement of personnel due to reorganization can be addressed with communication and retraining. Fears of displacement of local government personnel were allayed by retraining, reorientation, and transfer. For those who really have to be separated, PSE-02 gave them ample time and even assisted them to look for jobs. Applying IT in the work of a local government needs less people. When PSE-02 had applied the PMIS, it was able to reduce its personnel by at least 16 people. Increase of efficiency due to computerization has enabled PSE-02 increase the salary and benefits of its employees. PSE-02 believes that unless the issue of low salaries is addressed, it will be difficult to address the issue of graft and corruption.

In professionalizing the bureaucracy, PSE-02 invests in people. PSE-02 has introduced new incentive mechanisms, strengthened the rewards system, and modified performance standards and evaluation system. PSE-02 has improved the working environment, and continues to build capability at all levels with focus on values orientation. Every department head is required to attend a computer literacy program. Computer literacy skills are now a basic job requirement when applying for positions in PSE-02.

*Computerization is not expensive.* PSE-02's meager resources for IT have to compete with other government expenditures like health and education; thus, instead of buying branded computers, PSE-02 started by using assembled computers.

*Initiatives must benefit all people.* The success in the information technology initiatives of PSE-02 must translate into benefits for the general constituency. The people working with PSE-02 should also enjoy the benefits of computerization.

The PITO in the province is a home-grown solution that has shown some measures of success. The data processed and stored using several applications were instrumental in making sound policy decisions in the reorganization of the bureaucracy, leading to greater efficiency in revenue generation. The creation of PITO showcases an innovative management that is committed to a culture of excellence.

# Conclusion

Information technology plays a vital role in governance. It serves as a tool in ensuring high quality of service to the people. Different databases built at the PITO for several systems have made available relevant, reliable, timely, and updated information promoting people empowerment. This contributes to the quality of decision-making process being participated actively by non-government organizations, people's organization, and local chief executives.

Access to information empowers not only PSE-02's officials and employees, but also the constituents. IT in governance gives the people "the right to know what their

government officials are doing." Access to information is not only for people living in the province, but also for those who are abroad.

Every department in PSE-02 has one stand on the quality of service they want to deliver to the people, and they are one in considering that the customer is number one.

# USING BUSINESS EXCELLENCE FRAMEWORK TO IMPROVE PUBLIC SERVICE (AUSTRALIA)

#### **Organizational Profile**

PSE-03 is a combined emergency services organization in Australia with an annual turnover of US\$580 million (fiscal year 2006/2007). It has over 8,400 paid staff supported by thousands of volunteers across the State.

PSE-03 is one of the biggest public sector users of Australian Business Excellence Framework (ABEF). It has been using the ABEF since 1997. PSE-03 has multiple other training, marketing, and annual awards at state and national levels. PSE-03 is part of Senior Officers Business Improvement Network (SOBIN), a public sector business improvement network that has been established with every State government agency represented on it. PSE-03 also continuously benchmarks and shares best practices through Benchmarking Partnerships.

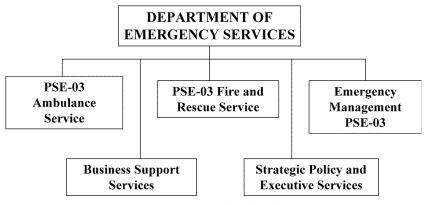


Figure 1: PSE-03 Organizational Structure

# **Rationale and Objectives**

PSE-03 has been using the ABEF for many years to enable continuous improvement and achieve sustainable outcomes for its stakeholders. It uses self assessment to identify gaps for improvement and reinforce strengths in the way they plan, deploy, and measure the application of the framework. For these same reasons, PSE-03 also regularly submits evidence of performance and improvement at the divisional level for external evaluation by the Australian Business Excellence Awards. This provides them with an external yardstick to further gauge opportunities for improvement. PSE-03 also conducts benchmarking through Benchmarking Partnerships to accelerate improvements in priority gaps, either in the application of ABEF or in operational processes. It also shares its strengths with benchmarking partners to help the business and public sector communities.

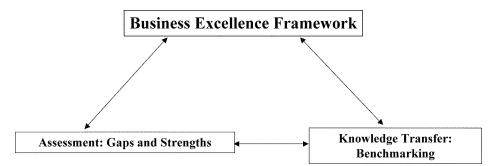


Figure 2: Benchmarking Framework

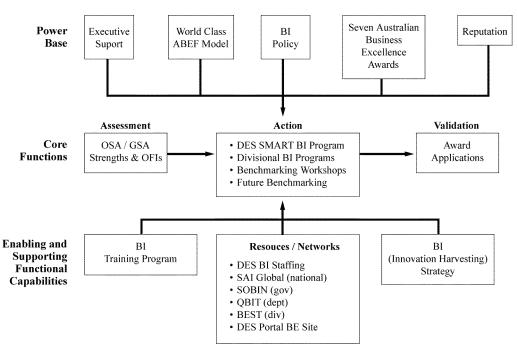


Figure 3: PSE-03 Concept Map for Business Excellence

# **Overall Description**

The diagram below indicates how the seven categories of the ABEF apply to a general business process model used in PSE-03 at both departmental and divisional levels.

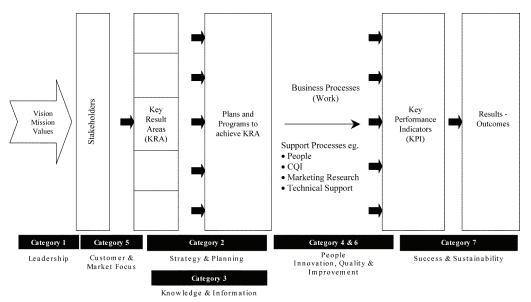


Figure 4: Business Process Model - ABEF Fit

	Why use BE Approach	Not important	Somewhat important	Very important	Not applicable
1	To guide our organization's continuous improvement effort			Х	
2	To have a holistic business framework to coordinate a range of initiatives			Х	
3	Research shows that using business excellence approaches improves performance			Х	
4	It provides PSE-03 a rigorous and structured approach to identifying strengths and areas for improvement			Х	
5	To educate staff on the characteristics of successful organizations		Х		
6	To provide an external measure of performance			Х	
7	To benchmark our performance within and across industries		Х		
8	To become 'world class'			Х	
9	To gain access to markets	Х			
10	To gain recognition/differentiation in the industry		Х		
11	Others (Please specify): It is a smart way to become as good as possible in the shortest time, and empowers people to want to try harder			Х	

1997	Establishment
1999	PSE-03 Ambulance Service – Progress Towards Business Excellence level
2001	PSE-03 Ambulance Service – Progress Towards Business Excellence level
2001	PSE-03 Fire and Rescue Service – Progress Towards Business Excellence level
2003	Counter Disaster and Rescue Service – Finalist Award level
2005	Business Support Services – no recognition
2005	Strategic Policy and Executive Services – no recognition
2005	PSE-03 Ambulance Service – Bronze Award level
2005	PSE-03 Guided Self Assessment
2006	PSE-03 Fire and Rescue Service – Finalist Award level
2006	PSE-03 Fire and Rescue Service – Strategy and Planning Category Award

Table 2: PSE-03's History in Business Excellence Awards

(Note: In 2003 hierarchical levels of Award changed, so the descriptions mean something different.)

# **Leading Practices**

# Organizational Self Assessment

PSE-03 adopts an organizational self assessment (OSA) at the divisional level every second year and at the departmental level every other year, with the latter starting in 2005. The self assessment aims to assess progress toward business excellence, provide a reliable picture of current business processes, and identify the strengths to sustain and opportunities to improve.

The OSA comprises four elements—surveys, interviews, focus groups, and performance measures.

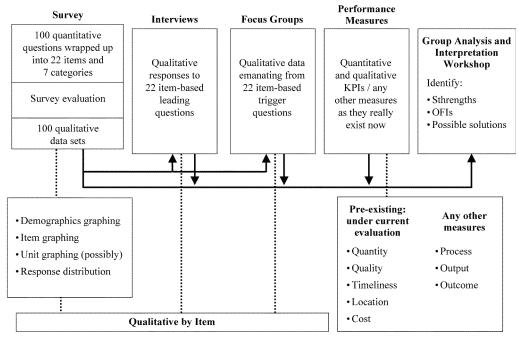


Figure 5: Process of Organizational Self Assessment

The group analysis and interpretation workshop leads to identification of possible solutions to opportunities for improvement (OFIs). The surveys collect both quantitative and qualitative data on performance against the ABEF in the organization and aim to maximize response rates to achieve a large sample of responses across the organization.

Interviews are one-on-one and the information is recorded anonymously. Focus groups are carried out across executives, managers, and staff bands in geographically representative locations, and have the following features:

- sound qualitative research process
- assured confidentiality
- 4 to 12 participants per focus group preferred
- facilitation and scribing are carried out by two trained staff

Performance measures are reviewed to determine suitability, relevance, currency, and practicality. The analysis workshop synthesizes the data from the surveys, interviews, focus groups, and performance measures to produce a report that informs decision makers, enabling them to take actions on OFIs and sustain strengths through either routine strategic planning and/or specific interventions.

The report is structured as follows:

- Executive Summary
- Background to the ABEF
- Methodology
  - Strengths
  - OFIs
  - Evidence
  - Interpretation
- Results, including by item of the ABEF (for each of the 22 items)
- Conclusion
- Recommendations

They use a common template to structure data in the report similarly for each item, enabling easy comparison. The results are also presented in terms of trends over the years the OSAs have been conducted. The following graph (Figure 6) shows the results for one PSE-03 division for each category of the ABEF. These data include only the quantitative survey results.

The next graph (Figure 7) shows the Division's strengths and OFIs for each of the 22 items of the ABEF. These data occurred after the workshop. Both quantitative and qualitative data are scored, using the Australian Business Excellence Awards Evaluation scoring technique. This gives greater validity to the "true" situation that quantitative data alone (i.e. survey results) could not provide.

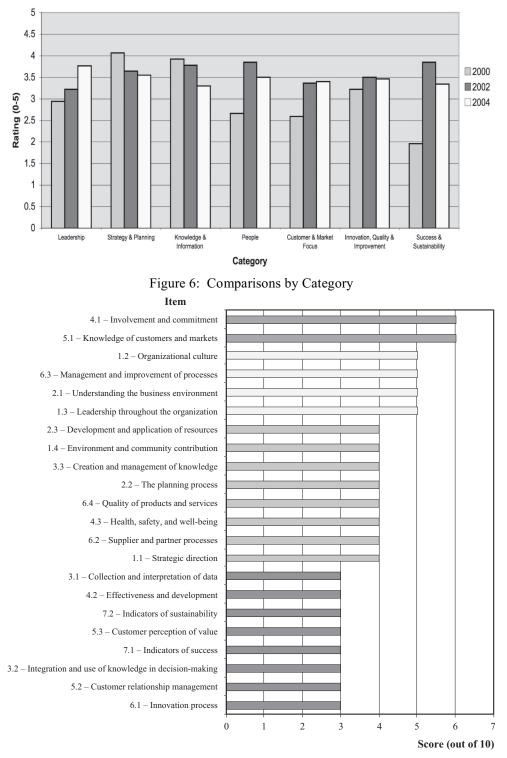


Figure 7: Overall ABEF Score Ranking

# STRATEGIC POLICY AND EXECUTIVE SERVICES OSA 2004

# Benchmarking

Having identified its OFIs, PSE-03 then uses benchmarking along with other business improvement methods to accelerate continuous improvement. It has formed a special relationship with Benchmarking Partnerships. Through this relationship, PSE-03 hosts benchmarking workshops whereby Benchmarking Partnerships brings the leading practices to PSE-03 by showcasing the experiences of known high-performing organizations and facilitating ongoing benchmarking opportunities. The workshops specifically focus on the OFI topic and scope (or learning needs) of PSE-03. Leading organizations are invited to present their known leading practices according to the topic and scope specified by PSE-03. Other organizations areas a range of industries also attend the workshops to network and share leadership ideas and harvest leading practices for implementation. In this manner, all participants benefit.

The benefits and responsibilities PSE-03 find through these benchmarking workshops are summarized as follows:

- Benchmarking Partnerships bring the best practices and networking across a variety of industries to PSE-03, aligned to PSE-03's specific improvement needs
- PSE-03 learns from and networks with guest speakers and other participants in an action packed day—harvesting best practices and ideas
- They learn about what they need to know and discover what they didn't know by sharing and learning between different industries with a like-minded improvement need
- They participate in hands-on learning and in facilitated discussion about strengths of leading practices with speakers and other delegates
- A comprehensive workshop manual is issued for all delegates
- All delegates receive memory jogger notes of the proceedings
- Delegate and speaker contact list are provided for ongoing networking
- PSE-03 shares the lessons learned and experience through benchmarking knowledge exchange
- A benchmarking code of conduct protects confidentiality and privacy

Topics hosted by PSE-03 recently include knowledge management, motor vehicle driver safety, communications, innovation, best of the best, and recognition and reward. PSE-03 also shares its leading practices in benchmarking workshops and study tours initiated or hosted by other organizations.

# External Evaluation Yardstick

PSE-03 also has external evaluations carried out by independent evaluators to provide a fresh outsider's view of the way they are applying the ABEF, and to look for "hidden" opportunities to improve. This external evaluation through the Australian Business Excellence Awards provides PSE-03 with a yardstick on how they are performing relative to other excellence-focused organizations.

# **Benefits Gained**

PSE-03 has become the most award winning organization in Australia. Overall, PSE-03 divisions have been recognized seven times in the Australian Business Excellence Awards

in nine external evaluations, with a whole of department evaluation currently being planned. However, PSE-03 recognizes that it has still a long way to go.

PSE-03 also recognizes that the real purpose of ABEF application, assessment, and benchmarking is to improve and sustain its outcomes for stakeholders. The award, while appreciated, is a secondary consequence that brings much goodwill and recognition to PSE-03.

The following quantitative data from a doctoral research study by Russell Linwood reflects performance in key areas over a period the ABEF has been used. This longitudinal study (PSE-03 University of Technology) evaluates the impact of using ABEF on patient outcomes in an ambulance emergency environment.

Figure 8 is an output measure demonstrating the growing response demand. It shows the magnitude of demand and the ratio of PSE-03 Ambulance Service urgent and nonurgent cases. Matching assets, including trained paramedics and communications officers to this demand profile, puts other key performance indicators (KPIs) into perspective.

Figure 9 refers to the proactive output of customers trained in first aid. Outcomes of such activity are impossible to measure completely, but it is known that patients who benefit from first aid prior to arrival of PSE-03 Ambulance Service are more likely to experience lower morbidity and mortality.

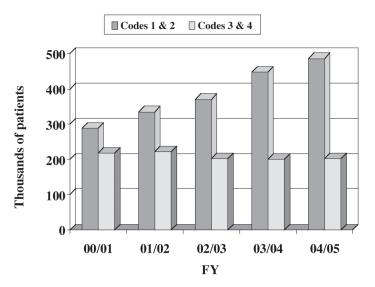


Figure 8: Number of Cases in FY: All Cases – 1 & 2 (Urgent) 3 & 4 (Non-urgent)

Response times in Figure 10 dropped during intense demand in FY 2001/2002 and FY 2002/2003 but then improved, possibly due to a range of business improvements which were still under evaluation. Current data have shown consistent improvement since November 2004, which has been attributed to continuous quality improvement (CQI) initiatives and to PSE-03 Ambulance Service and its Commissioner who are strong ABEF practitioners. Figure 11 demonstrates the percentage of patients resuscitated and handed over to hospitals alive after out-of-hospital cardiac arrest.

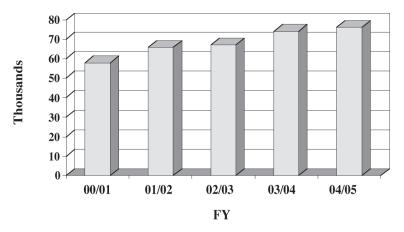


Figure 9: Number of Community Education Certificates Issued in FY

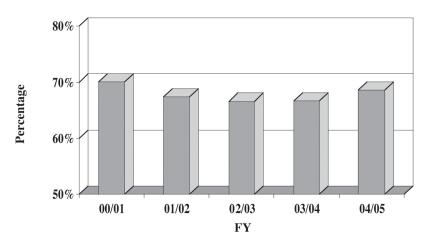


Figure 10: Percentage of Responses Done in Less than 10 Minutes

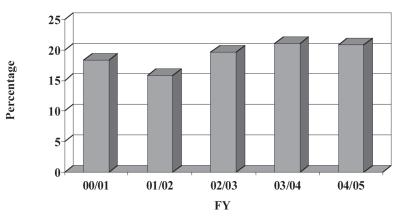


Figure 11: Out-of-Hospital Cardiac Arrest Survival Rates

For several years, ambulance has been rated the most admired service in Australia. This is supported by patient satisfaction data (Figure 12), and reflects the application of ABEF Category 5 (Customer and Market Focus) featured prominently in PSE-03 Ambulance Service CQI actions.

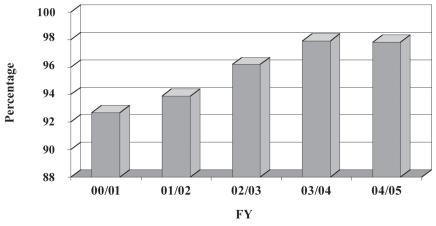


Figure 12: Patient Satisfaction

To what degree these and other quantitative data are directly attributable to use of the ABEF is not possible to determine. It is in this area that qualitative evidence from the study's informants and comparisons with interstate ambulance data plays an important part in the study.

# Lessons Learned

**Policy.** PSE-03 has put in place clear policy about business excellence, and this is reviewed and updated if necessary every two years. It is deliberately kept simple to maximize flexibility. While the ABEF is the overarching model for CQI, a range of other approaches to addressing OFIs are accommodated, depending on the need.

*Coordination*. This is based on a shared approach concept, with all five divisions appropriately progressing their own CQI needs based on OSAs, with the whole department combining its energy every other year for a PSE-03-level OSA (the first one in 2005 was a guided self assessment). As a result, business improvement plans have been made at both divisional and departmental levels. In a mutually supporting manner, the two levels of work are intended to occur in tandem with minimal replication of effort.

*Champion concept.* Each division applies its own management structure/chain of command to maximize sustainability of selected OFIs. At PSE-03 level, the Executive Management Team (CEO and divisional heads) has taken a champion role for each ABEF category. This process is still in its early stages; evaluation of the effectiveness of the champion concept still needs to be done, as it can cut across functional responsibility.

*Currency.* Staying current with developments in the field of business excellence as well as the competing models and approaches to CQI remains a challenge. PSE-03 is addressing this with a combination of part-time teams in divisions supported by a central "pod"/Centre of Business Excellence of full-time specialists dedicated to assisting divisions on a needs basis and coordinating whole of PSE-03 matters.

*Competing models*. An issue remains on the use of other models/approaches due to competing models and the language of quality. Some management tools are touted as business improvements and vice versa, and this can be unhelpful.

**Priority.** While business excellence is sought as a desired end state, operational essentials must come first in any business, especially emergency services. This remains an unanswered challenge in a world of competing priorities, so the pragmatic approach applied is to undertake self assessment on a flexible basis (it can be suspended at any time if necessary). "Improvement" is ongoing, being a combination of normal business planning and specific OFI-based interventions as and when resource attribution allows.

**Resources.** Resourcing remains everyone's challenge. Direct observation of international best practice, coupled with professional literature, indicates that the more successful organizations use a deliberate approach to business excellence and resource the function with full-time CQI staff supported by project teams and consultants and the necessary budget, to derive return on investment. The model used dictates the degree of commitment. One example is an organization that assigns 2 percent of its entire staff to full-time application of Six Sigma.

*General lessons learned*. The following observations have been made while using ABEF in PSE-03:

- Quality is everyone's business. However, there is still a need for a core capability and capacity to enable others to make progress; the "technology/know-how" is an essential investment that must not be lost once acquired.
- Adopt an ADRI (Approach, Deployment, Results, and Improvement) mental attitude.
- Conduct workshops to identify actions needed to address OFIs.
- Provide budget for professional development in the ABEF; skill does not grow on trees.
- Even short-term practitioners need appropriate training.
- Form business improvement teams to implement OFIs.
- Maximize benchmarking.
- Review workflow from a business process management perspective.
- Plan OSAs to measure progress; conducting OSA every two years is a useful yardstick.
- Engage in the Australian Business Excellence Awards process for external validation; being recognized with an award is nice, but this is secondary to the main intent of the awards process.

# Next Steps for Continuous Improvement

Per its business excellence policy, PSE-03 is engaged in a rolling series of OSAs to help drive CQI, and periodic award applications to validate its self-assessment findings. These

findings are important, but they are not the only driver to planning and service delivery. Seeking the long-term success and sustainability of the organization to deliver on its core business is a clear focus of PSE-03.

# SUMMARY

	Best Practice	Leading Practices	Benefits Gained	Lessons Learned
PSE-01	Promoting e-governance in local governments	<ul> <li>Knowledge sharing among local govern-ment units on best practices and lessons learned</li> <li>Institutionalizing ICT in local government</li> <li>Customer segmentation, identifying customers' expectations</li> <li>Use of business excellence framework as yardstick for measuring performance in public sector organizations</li> <li>Effective application of ICT to improve service quality</li> </ul>	<ul> <li>Improved credibi- lity of organization</li> <li>Local governments are encouraged to join league-level associations</li> </ul>	<ul> <li>Technical expertise and political leader- ship need to go together</li> <li>ICT project management skill is important</li> <li>ICT champions should learn from each other</li> </ul>
PSE-02	Improving citizens' quality of life through e-governance	<ul> <li>Political will to implement computerization</li> <li>Strong support from provincial council board members</li> <li>Starting with small victories</li> <li>Managing resistance to change</li> <li>Professionalizing bureaucracy</li> <li>Developing staff capabilities</li> <li>Hands-on policy of provincial officers</li> <li>Institutionalization of a Provincial IT Office as full pledge department</li> <li>Use of ICT in instituting a system of communication</li> <li>Assessment commutee that monitors computerization program</li> </ul>	<ul> <li>Reenergized bureaucracy</li> <li>More effective and efficient service delivery</li> <li>Improved information access</li> <li>Greater accoun- tability and transparency</li> <li>Savings</li> <li>Rightsizing of the bureaucracy</li> <li>Empowered workforce</li> </ul>	<ul> <li>Resistance to change can be managed by capitalizing on small victories</li> <li>Lack of knowledge in computer opera- tion is not a reason not to computerize</li> <li>Apprehensions on displacement can be addressed with communication and retraining</li> <li>Computerization is not expensive</li> <li>Initiatives must benefit all people</li> </ul>
PSE-03	Using Business Excellence Framework to improve public service	<ul> <li>Organizational self assessment</li> <li>Benchmarking</li> <li>External evaluation</li> </ul>	<ul> <li>Most award winning organiza- tion in the country</li> <li>Improved and sustained out- comes for stakeholders</li> <li>Improved response time</li> <li>Improved patient satisfaction</li> </ul>	Challenges in policy, coordination, champion, currency, competing models, priority, and resources

# **INTEGRATION OF BEST PRACTICE CASE STUDIES**

# IMPLEMENTING BUSINESS EXCELLENCE APPROACHES

The best practice organizations on implementing business excellence approaches are into the business of assembly and testing of semiconductor integrated circuits, bakery, car manufacturing, and coal mining.

Their common objective for implementing business excellence approaches is to put in place strategy implementation tools and identify the strategies that can bring the organization to the next level of performance. The best practices focus on

- engagement and commitment of all top management for Total Quality Management (TQM)
- using the business excellence framework as the fundamental framework of management innovation
- lean manufacturing model to integrate the production system, Six Sigma, and quality operation system
- Total Productive Maintenance (TPM) as the foundation for company-wide, continuous improvement cycle involving all departments
- establishing a change management team
- adopting 5S, *Kaizen*, suggestion scheme, quality control circles, balanced scorecard, strategy map, benchmarking, and Six Sigma.

# **KEY PERFORMANCE INDICATORS IN SMES**

Two SMEs have shared their best practices on key performance indicators. One is involved in manufacturing and export of decorative and functional earthenware ceramics and the other one is in a restaurant business. Both have the goals of satisfying their customers. Their best practices are

- use of formal survey for gathering customer complaints through email and telephone
- integration of process (handling customer feedback) as a source of improvement ideas in *Kaizen* and Quality Circle activities
- use of simple devices such as notebooks for collecting customer feedback
- use of rewards and recognition to help implement change
- creating a culture of teamwork, knowledge sharing, creativity, and autonomy within the organization
- working together with the common goal of value creation by following up each other physically and mentally
- enhancing customer service based on customer standpoint
- emphasis on the philosophy "I am okay, you are okay"
- defining and communicating corporate values to both staff and customers
- use of information cards to communicate complaints, suggestions, and feedback among the management, staff, and customers

# PUBLIC SERVICE EXCELLENCE

Public sector organizations from Australia and the Philippines have shared their best practices on public service excellence. Their common objective is to improve public service delivery and ensure citizens' welfare. The best practices they exemplified are

- knowledge sharing among local government units on best practices and lessons learned
- institutionalizing ICT in local government
- customer segmentation and identifying customers' expectations
- use of business excellence framework as yardstick for measuring performance in public sector organizations
- effective application of ICT to improve service quality
- political will to implement computerization
- strong support from provincial council board members
- starting with small victories
- managing resistance to change
- professionalizing bureaucracy
- developing staff capabilities
- hands-on policy of provincial officers
- institutionalization of a Provincial IT Office as full pledge department
- use of ICT in instituting a system of communication
- assessment committee that monitors computerization program
- organizational self assessment
- benchmarking
- external evaluation

# SUGGESTED APPROACHES FOR DISSEMINATING AND DEPLOYING BEST PRACTICES

Best practices are initiatives to improve organizational effectiveness, service delivery, and employee satisfaction. They are valuable knowledge, which when applied, can help achieve organizational goals and contribute to excellent business outcomes or results. Sharing good practices, learning from others, and applying a best practice are fundamental in achieving competitive advantage and business excellence.

To make the best use of the rich experiences of organizations in APO member countries, it is imperative to take into account the existing initiatives that have been proven successful. In light of this, inter-institutional effort on knowledge sharing has become a critical need to promote the application of best practices throughout the Asia-Pacific region. To ensure that the best practices in this compendium are disseminated, shared, and applied among organizations in an APO member country, below are the suggested approaches for both the NPOs and their client organizations:

# DISSEMINATING BEST PRACTICES TO ORGANIZATIONS

# Local Best Practice Exchange Network

NPOs with best practice exchange network in their respective countries have demonstrated that being in a network allows localization of best practices. Through the local network, the worldwide best practices shared through the APO-BPN can easily get across the public and private organizations within an APO member country. The exchange of information on best practices is facilitated among participating organizations in mutual cooperation. An established network is an effective venue for deploying best practices in various platforms such as benchmarking activities, forums, workshops, seminars, and conferences.

# **Communities of Practice (CoPs)**

A community of practice is a network of people who share a common interest in a specific area of knowledge and are willing to work and learn together over a period of time to develop and share that knowledge. CoPs have emerged as an effective way of creating, sharing, validating, and transferring both explicit and tacit knowledge. The interaction among CoP members facilitates learning and trigger new ideas from specific practices to address common challenges.

# Sharing of Best Practices through Multimedia

• *e-Benchmarking*. The i-Bench of the China Productivity Center and the e-Benchmark System of the National Productivity Corporation of Malaysia are two examples of e-benchmarking. Once established, e-benchmarking or benchmarking through the internet is a powerful tool to exchange best practices. It provides greater and faster access to best practice information, thus accelerating the process of sharing and learning across organizations and NPOs. Through e-benchmarking, the exchange of information becomes more economical.

Leading practices from different organizations may be uploaded to the web site for easier access of NPOs, including member organizations of local best practice networks. A feedback mechanism should be integrated into the process to generate comments from those who have downloaded the best practice information. A virtual forum may be added especially for those who have deployed and adopted the best practice.

- *e-Group*. This is an excellent medium for collaboration, which allows members to communicate ideas, issues, and suggestions for improvements.
- *NPO Newsletter*. An NPO newsletter with a section on best practices can help in the dissemination of learning experiences.
- *Video*. Capturing best practices in a video creates a greater recall. If a picture tells a thousand words, a moving picture incites the viewer into action.

# DEPLOYING BEST PRACTICES WITHIN THE ORGANIZATION

# Address the cultural challenge

Not all organizations have the inherent culture of knowledge sharing; though this culture can be embraced overtime through management support and allocation of sufficient resources for driving the change. It is important to pay attention to culture and behaviors on top of introducing new tools and processes. Adapting these tools and processes according to the local culture and ways enables the workers appreciate and apply the best practice. Using the existing or indigenous practices of the organization in the replication process can help facilitate the implementation of a best practice. The key is to gain the commitment of the best practice stakeholders.

# **Establish clear implementation goals**

Expectations and commitment of all stakeholders must be clearly detailed out. Outcomes must be clearly defined including how success will be measured afterwards. Organizations need to identify what they want to achieve and what their specific needs are. There must be a common understanding then of both organizational and individual needs.

# Involve people

When applying a best practice, it is very important to consult stakeholders in the organization and ensure a continuing cycle of feedback and sharing. The use of local champions is also important, for them to ensure that a best practice is identified and shared, and local circumstances are taken into account.

# **Build sound infrastructure**

Necessary structures, procedures, and resources must be determined and mobilized to implement a best practice and attain set goals. It is important to ensure that support for the program will continue, even after the funding (i.e. externally-funded projects) has ended. Leadership is an important element in the deployment of best practice knowledge, as senior leaders are expected to facilitate this process and make it happen. Likewise, effective best practice application will often be most successful if it is entrenched in a team approach.

# **OPPORTUNITIES FOR INTERNATIONAL COLLABORATION**

# MALAYSIA'S E-BENCHMARK SYSTEM

The e-Benchmark System is another initiative of the National Productivity Corporation (NPC) of Malaysia—besides the Benchmarking Online Network Database (BOND)—in promoting organizational excellence through performance measures and best practices. It is a web-based tool which enables the benchmarking community to have a win-win situation in communicating their scores and identifying benchmarks.

# **Objectives**

Through the e-Benchmark, members can share and assess the performance of their business operations, functions, and processes against the best performers in specific areas of interest. Specifically, it aims to assist the benchmarking community members, researchers, consultants, trainers, policy makers, trades, and service associations in managing benchmark data efficiently and effectively.

#### Benefits

The e-Benchmark provides an easy, quick, and effective way to collect data from a wider community. Survey can be done more efficiently because e-Benchmark allows proactive and quick response and real-time data processing and report generation. Organizations can use it as an assessment tool by participating in one or more surveys and cross checking where they stand among others. Further, quantitative performance measures in the e-Benchmark can help in organizational assessment, and provide direction for continuous improvement.

# Process

# Getting Members to Agree

This process applies to new communities who need to deliberate on the scope, measures, and definitions of specific areas of interest. For existing communities, the set of performance indicators as agreed by their members can be found in the interactive ebenchmark system's "Download Indicator" option. Users who are interested to use this system to initiate their own performance measurement are encouraged to contact NPC for further explanation.

# Digitizing Content

Once the community members agree to the key performance indicators (KPI), the contents will be prepared by the assigned manager of Benchmarking Communities (NPC) who will get the indicator form ready for users' data entry.

#### Issuing Password

A password will then be provided to the user (designated representative of each member organization) to access the system anytime through the Internet at his/her convenience.

# Collecting Data

According to the agreement made in the first meeting, members will prepare the required data for entry. Members need to collect data of their own organization for the period (years) agreed.

# Entering Data

Users will key in data for all the indicators and years.

# Transmitting Data into Hub

Upon data entry, data is instantly processed (real-time data processing).

# Real-Time Benchmark Reporting

A real-time benchmark report is then generated for each of the indicator and year selected. Trends in performance of an organization and competitive scores of the community (in terms of maximum, minimum, median, upper, and lower quartiles) will be presented as shown in the following tables and graphs. Ranking of the organization concerned for each indicator is also presented in relation to that of the community's.

Such information serves as useful inputs for members to identify gaps between their own organizational performance against that of their benchmark. It also provides inputs for strategic planning and enables them to focus on areas to improve.

This online interactive system offers members convenience and speed as they are able to key in data and view competitive scores anytime through the Internet. Data is instantly processed through the hub and members are able to view real-time report; competitive score screen showing the organization's performance for each indicator; and the community's performance in terms of minimum, median, and maximum scores.

# e-Benchmark System for APO-BPN SMEs

In 2004, the APO-BPN initiated a benchmarking study on SMEs in Bangkok, Thailand. The study aims to establish KPIs and benchmarks in SMEs using the e-Benchmark System. A total of 26 companies from 5 countries—Malaysia, Philippines, Taiwan, Thailand, and Vietnam—participated in this study. The tables below show the KPIs identified:

No.	Key Performance Indicator	Unit
1	Labor productivity = Total sales / No. of employees	USD
2	Competitiveness = Labor cost / No. of employees	USD
3	Overall yield = (Total sales / total cost of raw material used) $\cdot$ 100%	%
4	Profitability = (Operating profits / Sales) $\times$ 100%	%

# Table 1: Overall Performance

#### Table 2: Productivity

No.	Key Performance Indicator	Unit
5	Productivity = Sales value of production $\times$ No. of employees in production	USD
	department	
6	Quality – Percentage of scrap or rework	%
7	Cost – Percentage of cost reduction	%
8	Delivery = (No. of planned deliveries – No. of late deliveries + Partial deliv-	%
	eries) / No. of planned deliveries × 100%	
9	Innovation	No.

Table 3:	Human	Capital
----------	-------	---------

No.	Key Performance Indicator	Unit
10	Training = Training hours / No. of employees	Hours per
		employee
11	Absenteeism rate = Total absenteeism days / (Total headcount at the end of the	%
	month $\times$ 26 working days) $\times$ 100%	
12	Sick leave rate = Total sick leave / (Total headcount at the end of the month	%
	$\times$ 26 working days) $\times$ 100%	
13	Medical cost per employee = Annual medical cost / (Total headcount at the	USD per
	end of the month $\times$ 26 working days)	employee

# Table 4: Marketing

No.	Key Performance Indicator	Unit
14	Distribution and marketing cost = Distribution and marketing cost / Sales	USD
15	Market share = (Total sales / Total market volume) $\times$ 100%	%
16	Customer complaint = No. of customer complaints / No. of employees	No.
17	Cost of rework = Total cost of rework / No. of employees	USD

# Table 5: Financial

No.	Key Performance Indicator	Unit
18	Current assets ratio = (Current assets / Sales) x 100%	%
19	Fixed assets ratio (Fixed assets / Sales) × 100%	%
20	Inventory ratio (manufacturing sector) = (Inventory / Sales) $\times$ 100%	%
21	Finished goods ratio (manufacturing sector) = (Finished goods / Sales) $\times 100\%$	%

The following figures show the preliminary findings of the project on benchmarking and sharing of best practices for SMEs:

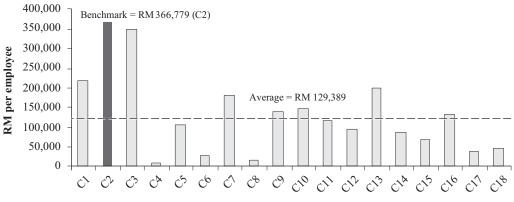
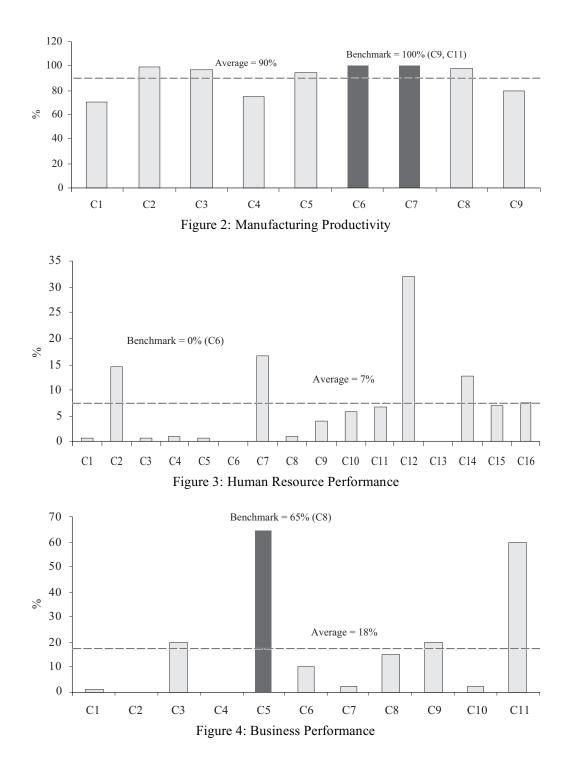


Figure 1: Organizational Productivity



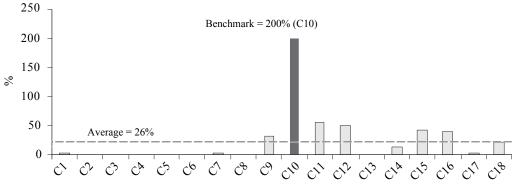


Figure 5: Financial Performance

Table 6: Other Communities of Practice (CoP) in Malaysia Using the e-Benchmark System

No	Communities of Practice	No. of	No. of
Ι	Private Sector	Organizations	KPIs
1.0	Electronic Manufacturing Services Benchmarking Council (EMSBC)	22	21
2.0	Best Practices in Human Resource (BPHR)	10	8
3.0	Human Resource Scorecard	7	15
4.0	Hotel Industry	35	42
5.0	Malaysian Oleo-Chemical Manufacturers Group (MOMG)	10	8
6.0	Energy Use Efficiency	64	13
7.0	World Association for Industrial and Technological Research	8	17
	Organization (WAITRO)		
9.0	Private hospital	22	59
10.0	Power producer	14	14
II	Public Sector		
1.0	Counter service	36	4
	GRAND TOTAL	228	201

# Areas of Study

- Human resource management
- Energy use efficiency
- Organizational excellence
- Organizational management
- Service efficiency
- Technical efficiency
- Environmental management

# Conclusion

Through the study conducted, NPC was able to apply the benchmarking model and establish a benchmarking system for APO-BPN SMEs and other local CoPs. The CoP members benefited through sharing data, benchmarks, and best practices as well as sharing issues and challenges among the SMEs themselves. However, the result would be more reliable and valid if more international companies would participate in the benchmarking projects by using the e-Benchmark System. This internet-based system would bridge the gap among the countries and generate more international benchmarks.

# **REPUBLIC OF CHINA'S i-BENCH**

The China Productivity Center (CPC) established i-Bench in 2004 to enhance industrial competitive advantage and accelerate international benchmarking. The letter "i" means industry, information, interactive, and international.



# Objectives

The i-Bench aims to assist companies in understanding their current competition situation for them to know their position within the industry. It analyzes the gap between a company and another company targeted for benchmarking, and helps enhance industrial competitiveness through learning from best practices.

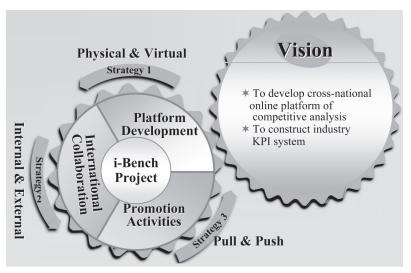


Figure 1: i-Bench Vision and Strategy

# Benefits

Through i-Bench, companies will be able to understand how far the gap is between them and their benchmarking targets. They will be able to assess their organization and have an idea how well they are performing, and use this information as basis to make improvements. Through exchanging information and experiences, companies will be able to broaden their global sight and keep up with the global trend.

The i-Bench platform can also reduce research time and administrative expenses, and raise the quality of benchmarking. Through international collaboration, a channel of direct comparison between domestic and international businesses can be established.

# Content

The i-Bench is an online interactive database containing concepts and methods of benchmarking and best practices worldwide, which companies can use in their benchmarking activities. Companies can also hold online discussions through the i-Bench, or receive suggestions on improvement through online consultation with professionals.

# Milestones

In its first year, after consultation with the academe, private, and government sectors, the i-Bench targeted the automotive accessories and parts industry and the research and development service industry. A benchmarking database was formed to serve as a platform for companies to exchange information.

# Challenges

For a successful benchmarking, the academe, research institutions, and business sector should be involved. To identify the best practices, there is a need for a detailed research method—focusing on industry positioning and performance improvement rather than index analysis.

# **Benchmarking Process**

Seeing that the Republic of China's businesses are mostly small and medium enterprises which cannot afford to collect benchmarking information—a benchmarking platform was established to help them find benchmarks of different industries and assist them in conducting benchmarking. The benchmarking process involves

# Step 1: Setting up a system of competitiveness index

Conferences are held with the academe, private, and government sectors to review the existing information on different industries' benchmarks in other countries. A system of industry success factors and performance index are then established.

# Step 2: Conducting surveys on industry competitiveness

Secondary data on local industries are integrated. A competitiveness survey of local businesses is conducted. To enhance the index system, the latest information in industry competitiveness is collected via conferences.

# Step 3: Analyzing industry and business competitiveness

Reports on industry and business competitiveness are analyzed quantitatively and qualitatively.

# Step 4: Recommending industry policies and offering business guidance and assistance

Based on the results of the analysis on industry competitiveness, industry policies are recommended. Companies are also offered guidance and assistance according to their industry needs and the gap identified between these companies and benchmarks. Reports about benchmark businesses at the local and international level are collected to maximize benchmarking.

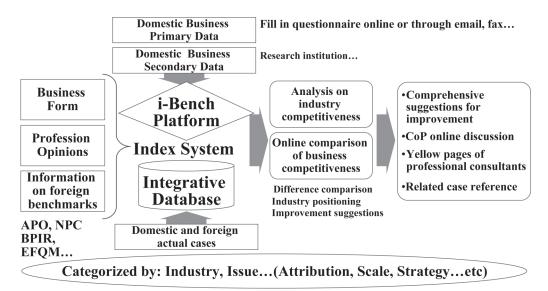


Figure 2: Operating Model of i-Bench

# **GUIDE TO ACRONYMS**

ABEF	Australian Business Excellence Framework
APO	Asian Productivity Organization
APO-BPN	Asian Productivity Organization-Best Practice Network
ARD/GOLDBE	Associates in Rural Development/Governance on Local Democracy
	Business Excellence
CEO	Chief Executive Officer
COMPASS	Communicating and Managing Performance Accountability and Strategy System
CoP	Community of Practice
CQI	Continuous Quality Improvement
DAP	Development Academy of the Philippines
GIS	Geographic Information System
GMP	Good Manufacturing Practice
HACCP	Hazard Analysis and Critical Control Point
ICT	Information and Communication Technology
IT	Information Technology
KPI	Key Performance Indicator
LCP	League of Cities of the Philippines
LGU	Local Government Unit
LMP	League of Municipalities of the Philippines
MIS	Management Information System
NGO	Non-Government Organization
NPC	National Productivity Corporation
NPO	National Productivity Organization
OFI	Opportunity for Improvement
OSA	Organizational Self Assessment
PITO	Provincial Information Technology Office
PMIS	Personnel Management Information System
PSE	Public Service Excellence
QCC	Quality Control Circles
RPTIS	Real Property Tax Information System
SME	Small and Medium Enterprise
SQA	Singapore Quality Award
TPM	Total Productive Maintenance
TQA	Total Quality Assurance
TQC	Total Quality Control
TQM	Total Quality Management
TWG	Technical Working Group
USAID	United States Agency for International Development

# THE 1999 AQC RESEARCH STUDY: LINKING BOTTOMLINE IMPROVEMENTS WITH THE AUSTRALIAN BUSINESS EXCELLENCE FRAMEWORK

A joint project of the Australian Quality Council and University of Wollongong Study Conduct and Report by Dr. Alexander Hausner

For expressions of interest please contact:

**Dr. Alexander Hausner** Phone: +61-2-42943866 • Fax: +61-2-42941717 • e-Mail: alexander\_hausner@uow.edu.au **Norbert Vogel, AQC** Phone: +61-3-98108722 • Fax: +61-3-98599637 • e-Mail: n.vogel@aqc.org.au

# EXECUTIVE SUMMARY

#### Background

A scarcity of information concerning the real impact of implementing Quality Management or Business Excellence strategies on organisational performance is believed to be the principal reason why many organisations are still hesitant to embark on a Business Excellence program, and continue to perceive it as a theory or even a fad with little applicability or benefit for their business environment.

## Objective

The principal aim of this study is to investigate the relationship between management practice and business performance of organisations that have been evaluated through the Australian Quality Awards for Business Excellence. Based on quantitative analysis and empirical validation methods, evidence for the existence or non-existence of benefits is identified, from factual information, which leads to a conclusion of the debate as to whether this concept "works or not". The testing of this relationship also leads to an enhanced understanding of interdependencies and the importance of specific awards criteria (i.e. Items).

## Methodology

The Australian Business Excellence Framework (ABEF) is used as a measure of the goodness of organisations' management practices. Assessment results in the form of scores are generated using a consistent and repeatable process of independent team evaluation, which are correlated with empirical factual data on the same organisations' past Business results. Here 'business results' are defined as the top priority Key Performance Indicators (KPIs) of Australian manufacturing organisations. They include typical bottom-line measures such as profitability, sales, costs and productivity. Other business data and information used for explaining business success includes specific industry characteristics such as rivalry, entry barriers and agility or performance relevant special events (e.g. mergers or catastrophes).

# The Sample

The study draws upon 22 different manufacturing companies, which participated in the Awards during the six years between 1992 and 1997. The companies are taken from a broad range of 13 different industry sectors and their sizes range from 25 to over 2000 employees. This well-diversified sample group includes data from a wide array of low and high performing organisations with respect to both ABEF scores and KPIs. The business performance analysis is based on 945 data points in 283 Key Performance Indicators (KPIs) with a clear emphasis on financial results and other measures which are of primary concern to the business owner (two thirds). These business results have been compared to 34 Awards evaluation results, which consist of ca. 1000 sub-scores. In addition, surveys for identifying industry characteristics regarding the existence of entry barriers, rivalry and agility were conducted.

# Findings

This research outcome clearly identified a strong positive correlation between the Quality Awards evaluation scores and improvements in bottom line business results, including financial ones. Also, multiple-award-entering companies outperformed those who only participated once. Management aspects such as Senior Executive Leadership, Analysis and Use of Data and Information, Measures of Success and Planning Processes were of outstanding importance when compared to the rest of the Business Excellence framework. The study's findings regarding the importance and potential of certain management aspects for improvement provide an empirically validated rationale based on which organisations can direct their organisational improvement efforts.

Organisations achieving high performing scores when evaluated against the Australian Business Excellence Framework (ABEF) were found to belong to that group of firms with the highest profits, productivity and other favourable results. The positive relationship found was strongly significant and suggested that every percent of improvement in the ABEF score is likely to occur with an approximately 2-4% increase in the average annual KPI improvement. The research also found that higher scoring organisations were significantly more successful in continuously improving their business results from year to year.

# Conclusion

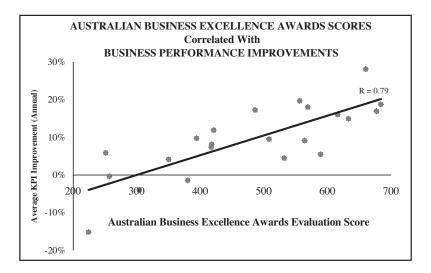
It is concluded that striving for improvements against the ABEF is therefore in the interest of all stakeholders of an enterprise, particularly the business owner and/or shareholder. An organisation's success is clearly correlated with the effectiveness of its management practices as reflected through the ABEF.

# INTRODUCTION

# Quality Awards and Business Excellence Frameworks

The Australian Quality Awards or, as it is referred to today, the Australian Quality Awards for Business Excellence have developed a framework with the primary goal of providing guidance to organisations pursuing holistic business improvements. It is an internationally recognised framework based on Quality or Business Excellence principles on par with other leading National Quality Awards such as the Malcolm Baldrige National Quality Award (MBNQA) and the European Foundation of Quality Management Award (EFQMA).

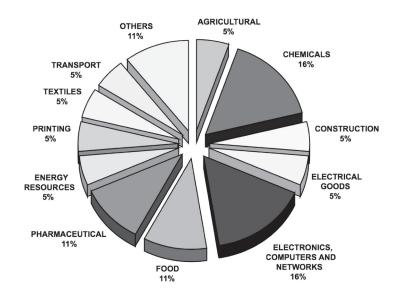
This research study is based on the comparison of organisations with different ABEF evaluation results and therefore different degrees of advancements in a Quality Management or Business Excellence approach. Business results are measured based on the organisations? own and officially recorded set of top key performance indicators.



# **RESEARCH METHODOLOGY**

#### Sample Taken: Industry Sectors Involved

The graph below shows the industries represented in the sample taken.



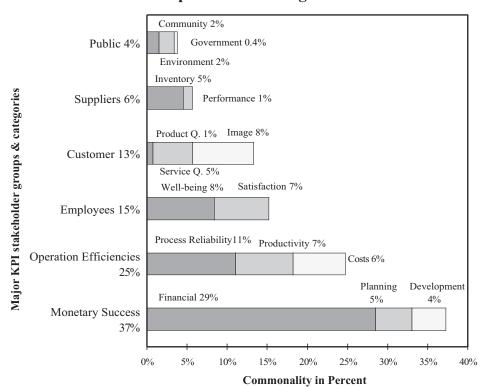
## Size of Companies Involved

Nine companies had two hundred and fewer employees, whilst ten organisations employ between 200 and 1000 employees. Three very large firms employ between 1000 and 2200 people. This results in an average of 529. Overall, it can be concluded that the sample taken is highly representative of the underlying industry population as it contains a good mix of different size of organisations.

# **Business Performance Data Collected**

The process of data collection was facilitated through numerous points of contacts and correspondence via Fax, Phone and mail. The majority of participants received on-site visits conducted with face to face structured interviews. Often data was not readily available but had to be extracted and prepared from past quarterly or annual reports and other official business records. This was usually jointly done in collaboration with the organisation concerned.

As a response to the first request made, all participating companies identified and prioritised their top ten Key Performance Indicators (KPIs). The 283 returned KPIs were grouped together into categories based on the type of business results which each measure is concerned with. They contain a spread of measures relating to various stakeholder groups, with a clear dominance of financial performance measures (29%) and those KPIs concerned with the key stakeholder, the Business Owner.



# MEASURES OF BUSINESS SUCCESS Top Ten KPIs Categorised

# **RESEARCH RESULTS**

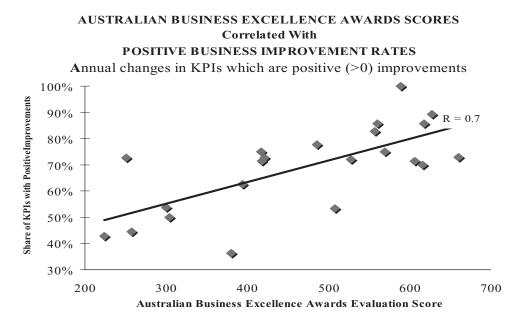
#### **Implication of Higher Award Scores**

#### • The Association with Stronger Business Performance Improvements

The initially shown correlation plot presents the main findings of this research with respect to the relationship between Awards scores and Business performance. A statistically significant and strong correlation (R>0.7 results from various methods of analysis. A significantly different overall annual performance improvement (from -15% to +28%) can be expected, depending on the ABEF evaluation (from 228 to 684 points). This empirical evidence is sufficient to accept that *there is a clear, positive association between an organisation's aggregate evaluation scores and its overall improvement in key business performance results.* 

#### • The association with commonality of actual improvements in business results

Another way of measuring an organisation's success is to look at the commonality of positive improvements achieved, rather than at the actual strength of those improvements. The result shows that organisations' ABEF evaluation scores are significantly and strong positive correlated with their overall share of positive improvement achievements. Some organisations have only 37% of their business performance records with positive improvements whilst others managed to enhance all (100%) of their past annual performance data.

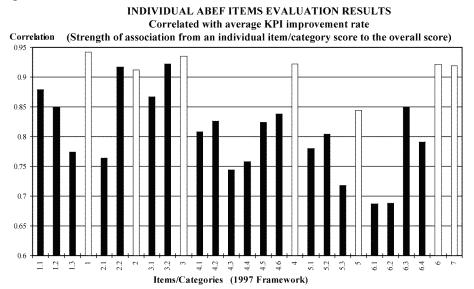


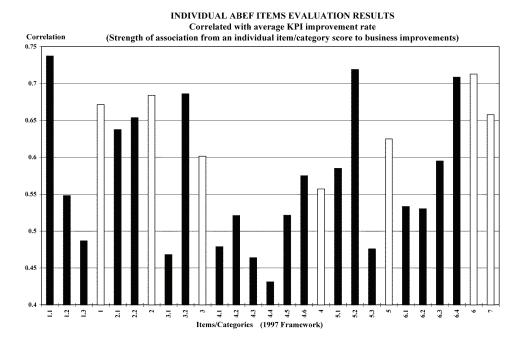
The key findings of this study are that companies with high ABEF scores are much more likely to belong to the better-performing organisations. An increase in the Awards evaluation score is strongly associated with a stronger improvement in an organisation's top ten business measures.

#### **Importance of Specific Items and Categories**

The underlying question was if there are any Items which, when assessed for their predictive power of the overall organisation's business result improvements, can be identified as having a special role if compared to others. It was also of interest to know if there are any Items which have strong predictive power of the overall ABEF evaluation result.

The results are correlation coefficients of specific ABEF items correlated with the same organisation's overall Business performance improvement index or with the aggregate ABEF score.

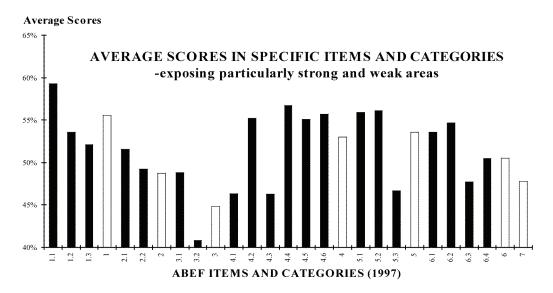




Clearly some items have significantly stronger relationships with KPI improvements or aggregate scores than others. Item 1.1 for example has the strongest correlation with the overall business performance improvement (R=0.74) as opposed to Item 4.4 which only moderately correlates with a coefficient of only R=0.43. Regarding their relationship with the aggregate ABEF score similar observations are made even though at an overall slightly higher level. The highest correlation found here is Item 3.2 with R=0.92, the lowest is Item 6.1 with R=0.69.

#### **Improvement Opportunities**

The graph below shows the average scores of all 75 manufacturing organisations that applied for the Award in the time between 1992 and 1997. It shows that certain items and categories are, on the average, significantly stronger than others. Category 1 (Leadership), for example, is by far the best performing group of items, which stands in strong contrast with results in Category 3 (Information and Analysis). This information can be used to identify the improvement potential of specific principles based on the average scores of the underlying ABEF Items. A relatively low average score (e.g. Item 3.2 Data Analysis and Information) is seen as an area for particularly high improvement potential.



## CONCLUSIONS

#### Association between Business Results and the ABEF

The key findings of this study are that companies with high ABEF scores are likely to benefit from a number of substantial advantages when compared with lower-scoring organisations. They are much more likely to belong to the better-performing organisations. An increase in the Award evaluation score is strongly associated with an improvement in an organisation's most important business measures. Furthermore higher scoring companies are more likely to achieve positive improvements in a greater share of their top KPIs.

# An organisation has therefore substantial incentive to aim for evaluation scores against the ABEF that are as high as possible.

#### Quantitative predictions of expected returns

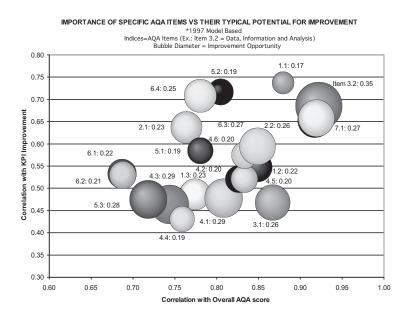
The relationship is strong enough to support its use for predictive purposes. An organisation's overall business performance improvement, whether by strength or by commonality, can to some accuracy be predicted merely by basing it on the evaluation results against the framework.

Based on the slope of the linear regression line with which the first plot was approximated, one can see that for every incremental improvement (e.g. by 5%) made in the ABEF score an increase of twice that much (e.g. by 10%) in business performance improvement rates can be expected. If for example a company with an average annual business performance improvement rate of 10% increases their ABEF score from 500 to 550 points (by 10%), then this development is expected to be accompanied with a jump of the 10% annual rate to a 12% annual business performance improvement rate (by 20%). In other words a 100% increase in the ABEF score is associated with a 200% KPI improvement. Recognising that the relationship which connects ABEF scores with business success is even more progressive for multiple award winners, a substantially stronger benefit from an increase in the score may be realised.

#### **Organisational Improvement Opportunities**

Most organisations have some Items in which they perform particularly poorly, which gives rise to the opportunity of using this information for identifying and prioritising improvement opportunities.

The following bubble chart summarises the importance of specific items based on the three types of information used (correlations with aggregate ABEF results, correlations with KPI Improvements and average evaluation results). Any organisation could use this information to identify and prioritise their own improvement initiatives, which best suit their preferences in terms of preferred importance or benefit to be experienced.



# FINAL REMARK

## **Empirical Evidence Links Business Success with the ABEF**

This study has found a very strong and positive correlation between results of ABEF evaluation and bottomline performance indicators. The strength of the results found is very encouraging to those organisations already using the Framework for self-assessment, or for the purpose of seeking external recognition through an Award, and to those contemplating the use of it. Whilst several other studies have come up with tentative results along the same lines, the solid backbone of this study in terms of a comprehensive collection of hard factual business performance data is likely to be much more convincing.

While this research outcome was specifically gained from Australian manufacturers using the Australian Business Excellence Framework (ABEF) the author believes that similar results could be obtained for the service industry or for other national Business Excellence frameworks.

# LIST OF PARTICIPATING NPOS

Bangladesh	National Productivity Organisation (NPO) Ministry of Industries Shilpa Bhaban (1st Floor) 91 Motijheel, Commercial Area, Dhaka-1000 Tel: (880-2) 956-2883 Fax: (880-2) 956-3553 (Attn: NPO) e-Mail: npobd@gononet.com
Republic of China	China Productivity Center (CPC) 2nd Fl., No. 79, Sec. 1, Hsin-Tai-Wu Road Hsichih 221, Taipei Hsien Tel: (886-2) 26982989 Fax: (886-2) 26982976 e-Mail: 0092@cpc.org.tw URL: www.cpc.org.tw
Fiji	Training and Productivity Authority of Fiji (TPAF) Beaumont Road, 8 Miles, Nasinu Tel: (679) 3392000 Fax: (679) 3340184 e-Mail: jone_u@tpaf.ac.fj URL: www.tpaf.ac.fj
India	National Productivity Council (NPC) Institutional Area, Lodi Road, New Delhi 110003 Tel: (91-11) 24690331 Fax: (91-11) 24615002 e-Mail: is@npcindia.org URL: www.npcindia.org
Indonesia	Directorate General of Training and Productivity Development Ministry of Manpower and Transmigration R.I. Jl. Jendral Gatot Subroto Kav. 51, Floor VII/BJakarta Selatan 12950 Tel: (62-21) 52963356 Fax: (62-21) 52963356 e-Mail: protek@centrin.net.id
Islamic Republic of Iran	National Iranian Productivity Center (NIPC) No. 23, Daneshsara St., Baharestan Sq., Tehran Tel: (98-21) 77646272 Fax: (98-21) 77646271

Japan	Japan Productivity Center for Socio-Economic Development (JPC-SED) 1-1, Shibuya 3-chome Shibuya-ku, Tokyo 150-8307 Tel: (81-3) 34091135 Fax: (81-3) 34095880 e-Mail: Y.Osaki@jpc-sed.or.jp URL: www.jpc-sed.or.jp/eng/
Republic of Korea	Korea Productivity Center (KPC) Saengsansung Bldg.122-1, Jeokseon-dong Jongro-ku, Seoul 110-751 Tel: (82-2) 7241180 Fax: (82-2) 7379140 e-Mail: kbwoo@kpc.or.kr URL: www.kpc.or.kr
Malaysia	National Productivity Corporation (NPC) P.O. Box 64, Jalan Sultan 46904, Petaling Jaya, Selangor Tel: (60-3) 79556323 Fax: (60-3) 79578068 e-Mail: hamdi@npc.org.my URL: www.npc.org.my
Mongolia	National Productivity and Development Center (NPDC) Rooms 102 & 103, Central Cultural Palace Sukhbaatar Sq. 3, Ulaanbaatar 11 Tel: (976-11) 326115 Fax: (976-11) 329799 e-Mail: npdc-mon@mongol.net
Pakistan	National Productivity Organization (NPO) House No. 42-A, Nazim-ud Din Road Sector F-7/4, Islamabad Tel: (92-51) 9215981 Fax: (92-51) 9215984 e-Mail: npopakistan@npo.gov.pk URL: www.npo.gov.pk
Philippines	Development Academy of the Philippines (DAP) DAP Building, San Miguel Avenue, Pasig, Metro Manila Tel: (63-2) 6312143 Fax: (63-2) 6312123 e-Mail: apolu@dap.edu.ph URL: www.dap.edu.ph

Singapore	Standards, Productivity and Innovation Board (SPRING Singapore) 2 Bukit Merah Central, Singapore 159835
	Tel: (65) 62786666
	Fax: (65) 62786665 e-Mail: wong_wai_meng@spring.gov.sg
	URL: www.spring.gov.sg
Sri Lanka	National Productivity Secretariat (NPS)
	134, 4th Floor, CIL Tower, High Level Road, Colombo 06
	Tel: (94-11) 2513156
	Fax: (94-11) 2513296
	e-Mail: nposl@nps.lk
Thailand	Thailand Productivity Institute (FTPI)
	12-15 Floor, Yakult Building, 1025 Pahonyothin Road
	Phayathai, Bangkok 10400
	Tel: (66-2) 6195500
	Fax: (66-2) 6198099
	e-Mail: pornchan@ftpi.or.th
	URL: www.ftpi.or.th
Vietnam	Directorate for Standards and Quality (STAMEQ)
	8 Hoang Quoc Viet Street, Cau Giay District, Hanoi
	Tel: (84-4) 7911633
	Fax: (84-4) 7911595
	e-Mail: vpc@fpt.vn
	URL: www.tcvn.gov.vn