

# *Singapore Government*

## ***MEDIA RELEASE***

Media Division, Ministry of Information and the Arts, 140 Hill Street #02-02 MITA Building  
Singapore 179369. Tel: 837 9666

---

---

### **EMBARGO INSTRUCTIONS**

The attached press release/speech is **EMBARGOED UNTIL AFTER DELIVERY**.  
Please check against delivery.  
For assistance call 837 9666

---

---

SPRInter 4.0, Singapore's Press Releases on the Internet, is located at:  
<http://www.gov.sg/sprinter/>

---

---

**EMBARGOED UNTIL AFTER DELIVERY  
PLEASE CHECK AGAINST DELIVERY**

**ADDRESS BY MR LIM SIONG GUAN, HEAD OF CIVIL SERVICE, AT  
THE NATIONAL QUALITY CIRCLE CONVENTION AWARD  
PRESENTATION CEREMONY 2000 HELD ON FRIDAY, 11 AUGUST  
2000 @ 9.20 AM AT SINGAPORE INTERNATIONAL CONVENTION &  
EXHIBITION CENTRE**

Good Morning

Distinguished guests

Ladies and Gentlemen

### **The Knowledge-Based Economy**

Nowadays, the term “Knowledge-Based Economy” is widely used in newspapers, magazines, TVs and talkshows. In abbreviated form, it is known as KBE. We are told time and again that our economy is fast progressing into a KBE. This is the reason for the drastic paradigm shift in thinking, planning and doing a whole lot of things in Singapore.

But what exactly does a KBE mean? If you ask around, many will say that it has to do with information technology, the Internet, e-commerce and intellectual property. There is some truth to that, but a KBE is more than that.

Information technology and globalisation are changing the way the world does business, and the way people live and work. The rules have changed. Competition has intensified and change is now a constant. We have to deregulate, liberalize and open up all sectors of the economy. We have to let creativity and entrepreneurship flourish. Fundamentally, a KBE is about creativity, innovation and a passion for new and better ideas. It is about an economy which will depend more and more on new knowledge, rather than physical resources, to drive its growth. The creation, application and distribution of knowledge have become critical to enhancing productivity and economic growth.

Thus, what we need in a KBE are people with the imagination and the willingness to think big and take risks to bring their ideas into the marketplace. This means that we will benefit most from the KBE if we are able to learn, create and deploy new knowledge. Hence, to thrive in the KBE, the workforce needs to constantly re-tool themselves with new skills, absorb new knowledge, and apply the knowledge to their work. In this way, they will retain their confidence to meet and adapt to the changing conditions and the resultant uncertainties.

## **The QC Movement**

What is the implication of this new environment for the National QC Movement? Before I attempt to answer this question, let us recap the achievements of the QC Movement. Today, the QC Movement is a mass movement, involving some 11% of the workforce and still growing. QCs now thrive in the retail & hotel industries, transport & communications, hospitals, schools, the armed forces, police force and even golf clubs. It is a far cry from the early days of 1983 when only a few companies had QCs.

Over the years, QCs have saved more than \$450 million for their organisations. At this year's two National QC Conventions, about 900 circles reported savings of \$79 million. This is highly commendable. Beyond the monetary benefits, these projects reflect the commitment of our workers to continuous improvement and innovation at the workplace. Let me share with you the achievements of four circles that participated in the Conventions. These are examples that typify what

QCs have achieved over the years.

The first is “Brutal Force” a QC from Chartered Semiconductor Manufacturing. The circle, comprising process and equipment engineers from their Fab 3 Diffusion module, reduced the number of wafers scrapped by 96%. This resulted in an annual saving of \$9 million. Besides the monetary savings, the project also helped to protect the environment through waste reduction.

The second circle is from Singapore Bus Services Ltd. “Eastern Breeze” is a service quality improvement team consisting of bus captains, traffic inspectors, technicians and route masters. The team came up with a number of solutions to ensure a clean and pleasant travelling environment for passengers. These include regular pep talks to bus captains and setting up of a self-service counter for the exchange of spoilt broom/dustpan. The result is a reduction in the number of unsightly areas on board buses by 86%, and hence, a higher level of satisfaction among the passengers.

The third circle is “Armour Fist” from PSA Corporation Ltd. The circle succeeded in reducing the frequent failure of the trolley brake system by replacing the mechanical limit switches with proximity switches. Besides creating a smoother vessel operation, the team from the Pasir Panjang Terminal engineering department managed to completely eliminate the problems of faulty limit switch and signal absence, which had contributed to 80% of the trolley brake system failures. In addition, savings in man-hours and opportunity cost were also achieved as a result of the reduction in the breakdown of the trolley brake system.

The fourth example is “Skylift” Circle from the HDB’s Building Project Management Department. The team came up with an inexpensive multi-direction laser to reduce the installation time for sanitary stack during construction. The device helped to reduce manpower, materials, equipment and defects, leading to annual savings of \$1.9 million.

These are just four of the many outstanding cases that we have in this year’s QC Conventions. Every QC receiving an award this morning has made a significant contribution to improving their work. So have all the other QCs that have undertaken the various types of projects in the past.

## **Paradigm Shifts for QCs**

Looking back, the national QC Movement has indeed done well in its 19 years of history. What about the future? How should the QC Movement respond to the KBE?

To seize the opportunities presented by the new environment, it is inevitable that changes are necessary so that the QC Movement can continue to be a potent force in the KBE. At the Productivity Campaign Rally in April this year, the Prime Minister stressed that QCs should expand their scope beyond quality to include innovation. Hence, QCs should be repositioned as Innovation and Quality Circles or IQ Circles. This is the fundamental change that must take place. To become IQ Circles, several paradigm shifts are needed. Let me elaborate these paradigm shifts.

Over the past years, QCs have been encouraged to solve problems as this is the quickest way to achieve tangible results. However, the results achieved are usually incremental improvements. There is a need to encourage QCs to progress from problem solving to innovation and value creation that will lead to quantum improvements for the organisations. Innovative thinking in QCs requires them to constantly question the work processes themselves and not just look for ways to improve the processes. We must be careful we do not perfect processes that are no longer relevant.

Instead of waiting for problems to surface and then focusing on corrective actions, QCs should take the lead to be more pro-active, constantly examining and questioning their work environment and processes. They should continuously look for projects that will impact the organisation's bottomline and competitiveness. Thus there is a need to establish a learning culture – one that fosters continuous improvement, learning and knowledge sharing. One way for QCs to be pro-active is to engage in benchmarking – that is, comparing with world-class standards, regardless of industry. For example, hotels and hospitals belong to two different industries, but hospitals can actually benchmark the hotels for many of their services like quality of food and comfort of the rooms.

To help the companies remain competitive and profitable, QCs should not be content with just cost savings. They should look into value creation, which will generate higher revenue for their organisations. So QCs should actually search for opportunities to innovate and create wealth for the company.

Unlike in the past where QCs comprised mainly members from the same department, they should now be extended across functions. To fully exploit the vast reservoir of knowledge that exists within the organisation, cross-functional circles should be formed to tap internal and external knowledge for the creation of

value. This is especially important in the workplace of the future, which calls for multi-tasking and increasing interaction among departments.

In fact, the composition of QCs should even be extended beyond the confines of the organisation. With globalisation, it has become increasingly difficult for an organisation to compete on its own. A more viable approach is to build up its own strengths and combine these strengths with those of their business partners so that they can face the competition together as one effective team. Through stakeholder quality circles, with joint participation from suppliers or customers, cross fertilisation of ideas from different perspectives can be achieved. This will provide a well-balanced view of an issue, as well as throw up solutions that are feasible to all parties involved. Such partnership across organisations in a seamless manner will become the norm in the KBE.

## **Conclusion**

All these paradigm shifts must take place before QCs can become IQ Circles that are able to generate breakthrough ideas and manage corporate projects encompassing collective innovations, knowledge sharing and continuous learning to achieve significant business outcomes.

I am told that PSB has already revised the National QC Judging Criteria to reflect the changes brought about by KBE. Greater weightage is now placed on innovation to encourage the circles to embrace creative and innovative thinking. To be fair to the QCs at this Covention, the new judging criteria will be introduced in the next QC Convention.

Finally, I would like to commend all circles for the efforts that they have put into the various projects. I wish you and your organisation continued success in your quest to achieve business excellence. I am confident that as you transform yourself to IQ Circles, you will make an even bigger difference to your respective organisations. Thank you.

\*\*\*\*\*