



Hong Kong Society for Quality (HKSQ)

“Summary of Views and Suggestions to Testing and Certification Industry”

Introduction of HKSQ

The predecessor Society was the Hong Kong Group of the American Society for Quality Control (ASQC) International Chapter which was formed in 1986. As a consequence of increasing local involvement, the name of the Society was changed to Hong Kong Society for Quality Control (HKSQC) in 1989. This was agreed by ASQC and all parties concerned. However, the Society remained to affiliate with ASQC. In early 1997, ASQC was renamed as American Society for Quality (ASQ). At its AGM held in July 1997, a resolution was passed to rename HKSQC as Hong Kong Society for Quality (HKSQ).

The Society is a non-profit making organization with the objectives to promote a greater awareness of the need for quality in Hong Kong to ensure product and service excellence through continuous improvement of quality and customer satisfaction, and to provide continuing education to professionals involved in quality and reliability.

Testing and Certification (TC) industry is developed as a part of Hong Kong quality movement (including manufacturing to servicing industries) in which different industries, societies and government departments contributed (See Figure 1). HKSQ members are from different industries and engaged with quality engineering and management. They are either industries employees or users of the testing and certification industries. Therefore, we would like to share our members' views and suggestions in the Testing and Certification industry

Opinions from HKSQ

Based on HKCTC survey questionnaires, we have so far received 29 responses and summarized the result in the appendix I.

TC industry is a multi-disciplinary industry which mainly consists of two folds: (1) quality assurance and accreditation and (2) product testing and certification. Practitioners in this industry not only test the product whether they are up to standards, more importantly suggest ways of prevention of problems at the early stage of new



product development and determine ways of improvement based on the test results. High cost and cross-border transportation of testing samples between Hong Kong and Mainland are the major concerns in TC industry.

HKSQ has provided supporting to Testing and Certification (TC) industry in the past years. We organize professional training in quality assurance / management in manufacturing and laboratory, and arrange professional exams (ASQ, HKSQ CLabQS and our coming HKSQ CQE) to upgrade the knowledge of the practitioners in the industry based on Quality Professional Development Model (See Figure 2). We observed that current graduates from science (such as Chemistry) or engineering (such as mechanical/industrial/electronic engineering) may not well fit to the industry's requirements. New programmes from university (such as BE Total Quality Engineering in CityU and BS Quality Management in PolyU) and from IVE (Product testing) could help but may not be adequate. The HKCTC should work with the UGC/IVE to develop a long-term plan for this.

Moreover, the strong international network of HKSQ, with Asian Network for Quality (ANQ) and ASQ, will certainly facilitate our understanding of other Asian countries and US about their trend of development in quality assurance and product testing requirements and practices. We are pleased to share the information to Hong Kong industry. On the other hand, we could also promote the Hong Kong TC Industry to other countries, particularly the Asian countries.

Finally, we hope that Hong Kong will become the hub in Asia for Testing and Certification through HKCTC efforts.

Reference:

- Lai, Lotto K.H., Chin, K.S. & Tsang, A.H.C. (2008) "A Conceptual Model on Development of Quality Professionals" *Proceedings CD-ROM of The sixth ANQ Congress*, paper C1-05.
- Lai, Lotto K.H., Chin, K.S. & Tsang, A.H.C. (2007) "Quality Movement and Evolution in Hong Kong: A Critical Review" *Proceedings CD-ROM of The Fifth ANQ Congress*, paper A7-03, pp.225 - 238.



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Year	Government & Industry	Societies	Quality Award
60s	1934 – CMA 1960 – FHKI 1963 – HKSTC 1967 – HKPC	1960 – HKMA	
70s	1978 – Hong Kong Q-Mark Council 1979 – CMATCL		
80s	1985 – HOKLAS 1989 – HKQAA	1983 – HKQMA (HKQCA) 1986 – HKSQ (ASQ – HK)	1989 – Governor’s Award for Industry
90s	1998 – HKAS (HKCAS) 1999 – HKIAS	1991 – IQA (HK Branch)	1991 – HKMA-QA 1993 – HKQCA 1994 – HKIA 1997 – Hong Kong Award for Services
2000	2001 – HKSTP 2001 – ASTRI 2001 to 2006 – HK R&D Centre	2003 – SSI 2004– SSS	2005 – HKIA (Merge Service; Merge Productivity & Quality)

Figure 1 Hong Kong Quality Development Roadmap
 (Source: Lai *et al.*, 2007)

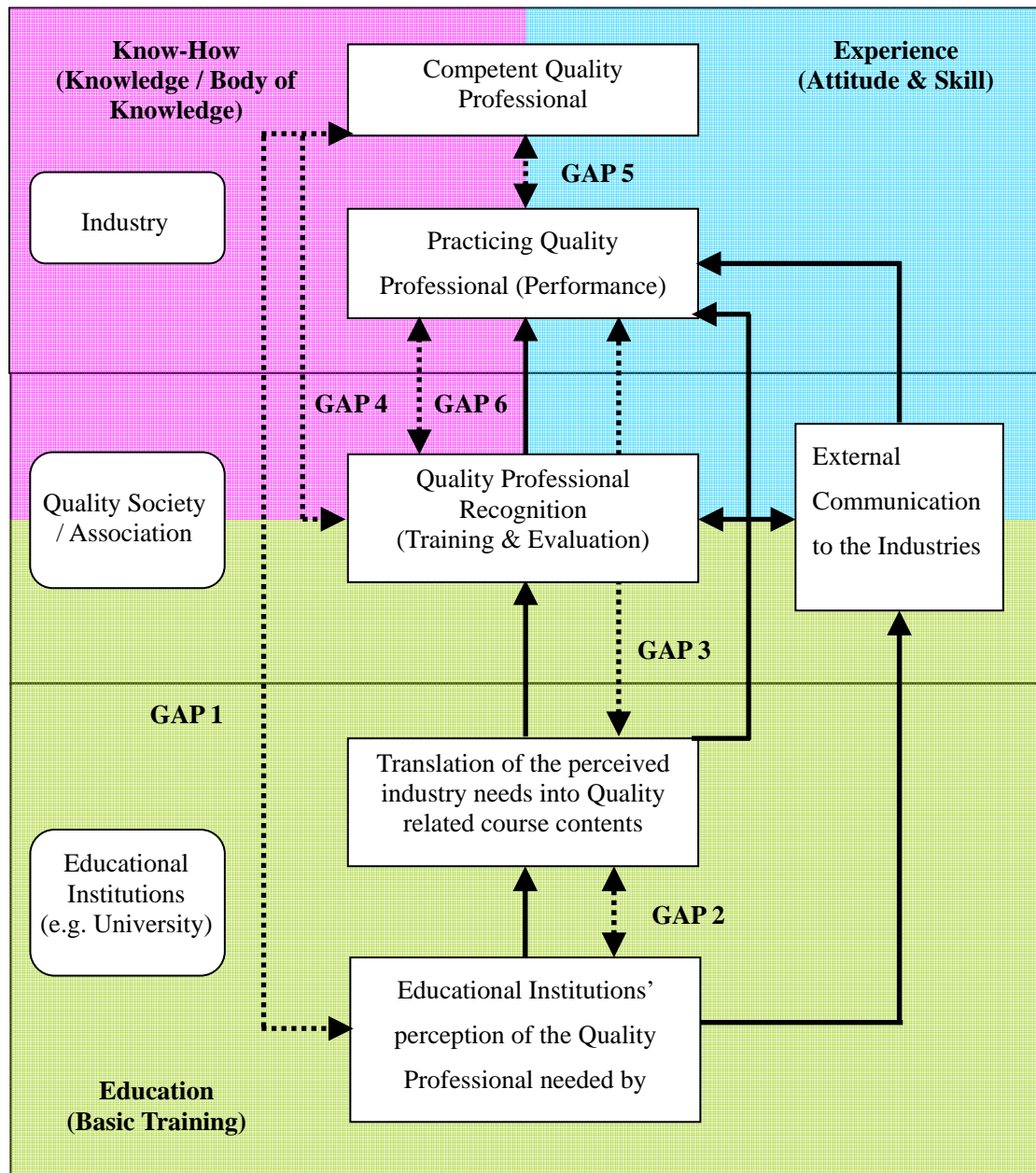


Figure 2 Quality Professional Development (QProfD) Gap Analysis Model
(Source: Lai *et al.*, 2008)

Note:

Gap 1: Differences between Industry's expectations of competent Quality Professionals, and Educational Institution's perceptions of those expectations



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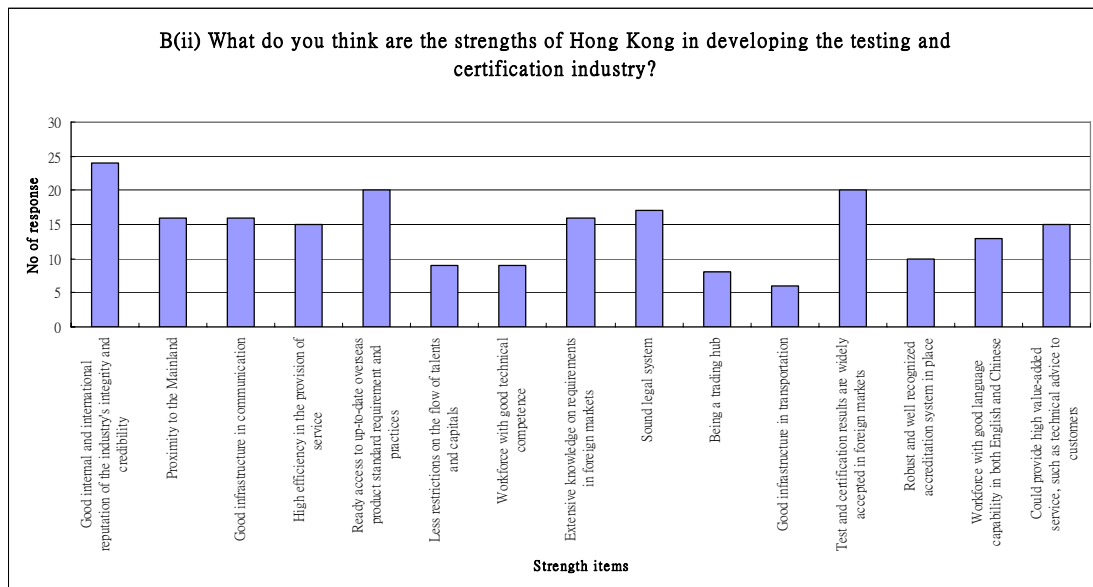
- Gap 2: Differences between Educational Institution's perceptions of the requirement of Quality Professionals and the design of quality related study programs
- Gap 3: Differences between Educational Institution Graduates' ability and Industrial employment requirements for Quality Professionals
- Gap 4: Differences between the abilities of Competence Quality Professionals required by industry and Quality Society recognition (e.g. HKSQ Certified Six Sigma Green Belt, HKSQ Certified Laboratory Quality Specialist, etc.)
- Gap 5: Differences between Industry's expectations of competent Quality Professionals and the average performance of practicing Quality Professional
- Gap 6: Differences between the abilities of professionals recognized by Quality Society and Industrial employment requirements for Quality Professionals



APPENDIX I

Summary of the results obtained from HKSQ members via HKCTC questionnaires (Remark: B(i) is missing and B(ii) choice of Robust IP Rights Protection is missing.)

B (ii) What do you think are the strengths of Hong Kong in developing the testing and certification industry?



Top three responded the strengths of Hong Kong in developing TC industry are:

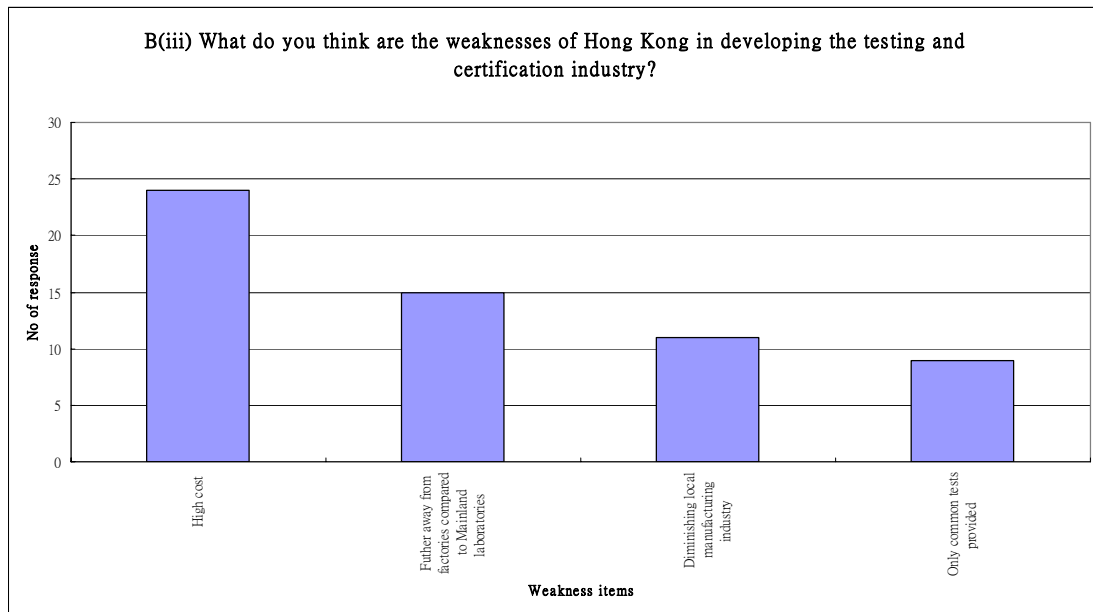
1. Good internal and International reputation of the industry's integrity and credibility;
2. Ready access to up-to-date overseas product standard requirement and practices;
3. Test and certification results are widely accepted in foreign markets

Others:

1. Encouraging manufacturing industries back to HK
2. International Mentality



B (iii) What do you think are the weaknesses of Hong Kong in developing the testing and certification industry?



More than 50% responded the weakness of Hong Kong in developing TC industry are “High Cost” and “Futher away from factories compared to Mainland laboratories”.

Others:

1. Professionals
2. lack of well-trained human resources
3. bad understanding the background of testing process
4. Most Hi-end Technical Professionals NOT in HKG
5. Sometimes problems in sending samples across the border from the mainland



B (iv) What do you think should be the areas for improvement in order to develop the testing and certification industry in Hong Kong?

Training Related

1. Knowledge of testing (not only the test method but also the testing facility) and certification (requirements of different regulations and certifications)
2. Lack of talent
3. Develop competent workforce for the testing and certification industry
4. Training and development for a team of practitioners with strong technical knowledge (testing capability and quality assurance skills and concepts) and ethical values
5. Course for understanding famous testing process/ specification/ regulation
6. Human resources development and training

Supporting Related

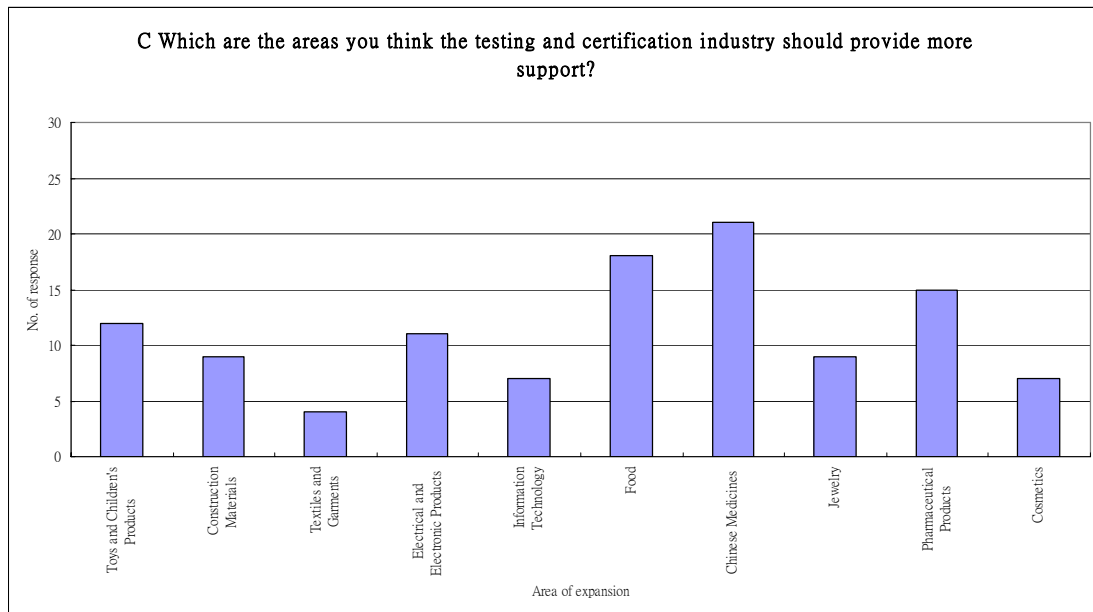
7. Support from universities
8. Support from science park
9. Setting an environment with workable systems to attract related professionals to come back to work in HKG and for HKG for this task
10. Support manufacturing industry in HK area
11. Support in research and development of new area of product testing.

Others

12. Promotion to oversea buyer
13. It would be better if the testing result could be accepted by China Inspection Quarantine
14. Shall be able to perform a wider range of tests based on common international or national standard such as GB, CSA, US, EN standards, etc.
15. An effective global chain of testing and certification should be well defined and established
16. More intensive knowledge exchange with overseas testing centres (within same company).



C Which are the areas you think the testing and certification industry should provide more support?



Top three responses for more support the areas are:

1. Chinese Medicine
2. Food
3. Pharmaceutical Products

Others:

1. Aged people's products
2. Professional recognition
3. Green Manufacturing and Consumption
4. Software Test
5. Common Household Products in Contact With Food

How & Why?

Weakness

1. Low level of know how and low knowledge
2. Lack of the establishment of local relevant regulations

Strength

3. High valued added products and have factories in Hong Kong
4. Recognized professional status system
5. IT related: it change fast but HK can keep up



6. well equipment
7. Regulate the standards to world-class level

Opportunities

8. Food & Chinese Medicines: great needs and HK is part of the China
9. They are safety related or not well developed in HK
10. This is to fit the market trend. Continuous attention will be paid on children and aged people. An electronics product of course is the main stream of consumer products. In addition, food and Chinese medicines will get more attention in Hong Kong
11. Firstly Universities and Industries to collaborate to work with International Authorities in related fields to register for and formulate local working systems under a timely schedule, but Government MUST listen and co-operate with all necessary systems instead the other way round, i.e. must prepare true-heartedly for system and mindset renovation
12. The selected areas are not the key competencies of the local testing & certification sector. However, they are likely to be the major growth areas in the sector.
13. If HK testing lab could be provided 'one-stop' solution for product testing and certification for China import/export. Also facilitate talks with China CIQ to reduce redundant testing, as CIQ is proposing new toy export requirements which are even more restricted than the imported countries.
14. Identify the needs of the construction industry, work closer with local and overseas Architect and main contractors, explore the needs of the current and future markets
15. Construction products testing in Hong Kong is not well established as compared with consumer products. Construction industry does not recognize the importance of 3rd party testing or products certification when purchasing construction products for their projects.

Others

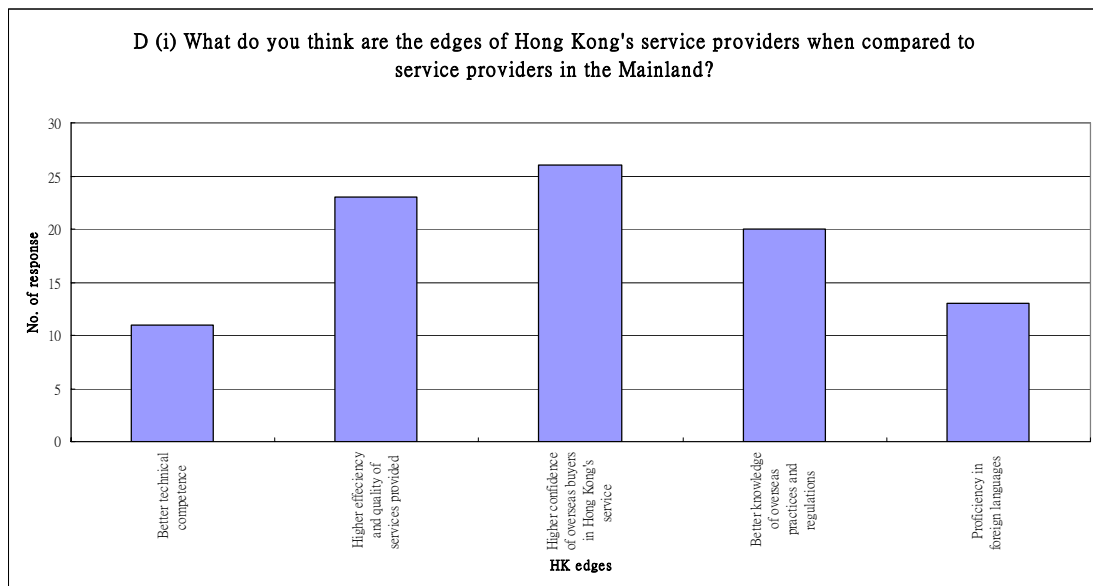
16. Setup special task force to closely update the industry standard and support to the industry
17. HK has so many import products and it is vital to ensure the safety of the food or medical treatment. As we know, shortage of resource will be one of the major problems we will be facing in the near future. I think it is the right time to



establish this industry and, more or less, it may help reduce the production of low quality food and medical products, hoping that more resources will be input to produce good products, but not wasting resource on bad products.

18. They are high runner testing items in manufacturing industry. HK Government may strengthen advertising and communication on how powerful of certificate and testing business in HK through overseas exhibitions and conventions. Assign some promotion officers to quality department or top management of big brands for introduction and share with some training scheme.
19. These are our main areas of trading. More support could be given, if closer internal exchange with European testing centres (same company) would be implemented.

D(i) What do you think are the edges of Hong Kong's service providers when compared to service providers in the Mainland?



Three edges of HK's service were identified in sequence:

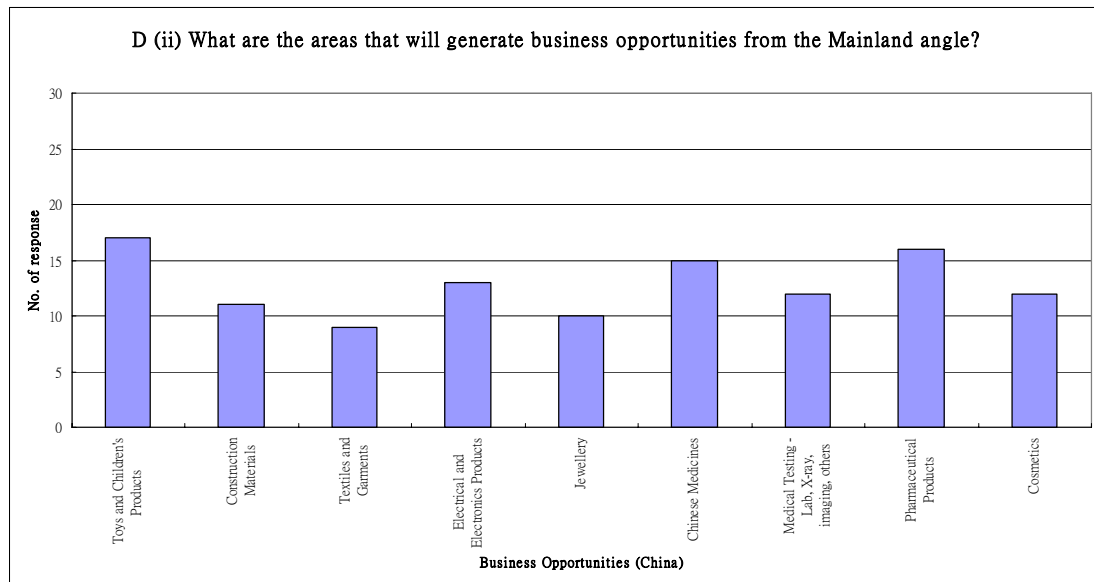
1. Higher Confidence of overseas buyers in HK's service;
2. Higher efficiency and quality of services provided; and
3. Better knowledge of overseas practices and regulations

Others:

1. International Mentality



D(2) What are the areas that will generate business opportunities from the Mainland angle?



More than 50% responded the opportunities from the Mainland angle are:

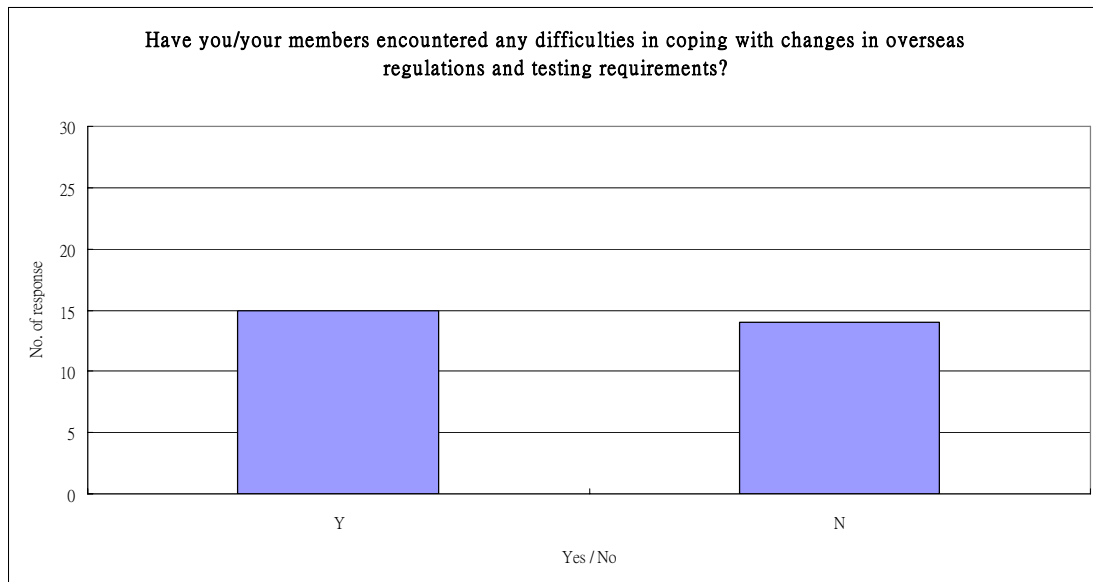
1. Toys and Children's Products
2. Pharmaceutical Products
3. Chinese Medicines

Others:

1. People competence
2. aged peoples' products
3. Very specialized fields such as ESD Control and Clean room Consumable products
4. Software
5. Household items in contact with food



E Have you/your members encountered any difficulties in coping with changes in overseas regulations and testing requirements?



The responses showed it is about fifty-fifty of the difficulty to cope the overseas regulations changes.

F Do you have any proposals or suggestions in developing new testing and certification services in Hong Kong?

1. (1) The testing services provided by commercial labs should be accredited. Currently, it is optional. (2) Related training, such as understanding of HOKLAS, should be provided.

Reason:

In my company, we need oversea accredited test lab to perform test for us.

2. Not exactly catch the meaning of 'new'. The current development of the testing services is on the right direction. Government should provide more support in the human resource development in various levels, such as university programmes, AD/HD programmes, technician levels, etc. In addition, through the CEPA, it may help Hong Kong companies to easier get in the market, such as mutual recognition, etc. On the other hand, Government may need to make more



promotion to foreign markets about our testing and accreditation services.

3. Microbiology test in pharmaceutical

Reason:

Change requirement from HKGMP to PIC/S

4. Deep training on the know how of the testing process

Reason:

Based on my own testing experience, there is no training for the know-how.
Technician only follows the procedure without any understanding of the process

5. Set achievement timeframe; cut away broad and lengthy discussions with non-related sectors; link with internationally related fields and authorities and form learning and marketing partnerships with them as necessary.

Reason:

HK Government's cutting edges can be upgraded only through international linkage and non-stop learning and global exposure.

6. Focus on local market first (e.g. tests currently done by Government Lab); improve efficiency (turnaround time); improve HR through education system

7. Government support: sponsorship & promotion; University support: talent & know-how; Respective Industries: business vision

8. How about red wine or expensive spirit?

Reason:

Due to counterfeit in mainland

9. Simplifying the testing procedure

10. Construction products certification

11. Nowadays, many professionals working in third party certificate body or laboratory are come from manufacturing industry with own academic



background. Experience or knowledge they learnt is from mainland China after many years. Introducing some professional testing and certificate services course can speed up relevant service to local and mainland China manufacturing industry. Besides, if HK Government can support HK industry, especially high end products, like provide more funding or layout some industry area close to China broader could help to speed up the testing and certification service efficiency and effectiveness. Finally, help to give more funding or financial support on high precision or accuracy testing equipments and facilities in HK can also give a hand in establishing our reputation on it.

12. Food and Chinese medicine safety
13. Market specific testing. E.g. provide for German importers test marks or test packages which (really!!) guarantee German market compliance (in theory this is possible already, but in reality there is still a lot of uncertainty and also different applications of test standards among different labs in HK for the same item).