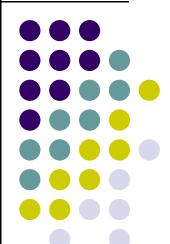
# Certification of Lean & Six Sigma Professionals

Dr. Albert H.C. Tsang

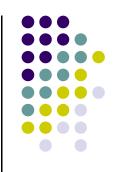
email: albert.tsang@polyu.edu.hk

24 September 2011





Hong Kong Society for Quality



## Agenda

- HKSQ and its international partners
- Six Sigma Professionals
- ASQ Certification programs
- How can HKSQ help you
- Lean Certification
- > Q&A





## 香港品質學會

## **Hong Kong Society for Quality**



#### • Objectives:

To promote a greater awareness of the need for quality in Hong Kong for ensuring product and service excellence through continuous improvement of quality and customer satisfaction, and to provide continuing education to professionals involved in quality and reliability.

www.hksq.org









## 香港品質學會 Hong Kong Society for Quality



• WorldPartner® of ASQ

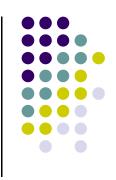


• Founding member of ANQ





### **American Society for Quality**



- A professional, not-for-profit society founded in 1946
- A world-wide leader in the development, promotion and application of quality related information and technology for the quality professional
- Mission: "To advance individual, organizational and community excellence through learning, quality improvement and knowledge exchange"
- Offers professional certification programs in more than 40 countries





### **Certification Programs**



- Established in 1968 to give recognition to those individuals who have demonstrated proficiency in a specified body of knowledge (BoK) relating to quality and reliability
- More than 90,000 individuals have earned certification through ASQ's programs
- More than 125 companies have formally acknowledged ASQ certification as verification of an individual's mastery of a specified BoK



## Types of ASQ Certification



- Certified Six Sigma Black Belt (CSSBB)
- Certified Six Sigma Black Belt (CSSGB)
- Certified Master Black Belt (CMBB)
- Certified Quality Engineer (CQE)
- Manager of Quality/Organization Excellence Certification
- Certified Quality Auditor (CQA)
- Certified Reliability Engineer (CRE)
- Certified Software Quality Engineer (CSQE)

.... and others





#### From employees' perspective:

- Realize your salary goals
- Advance within your organization
- Enhance your career & self esteem
- Gain recognition for performance excellence
- Affirm your commitment to quality







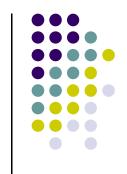


#### From employers' perspective:

- Incorporate ASQ certification in your strategic plan
- Initiate your quality improvement
- Create a quality system with quality tools
- Provide your employees with the tools they need to do quality work
- Organizational excellence starts with ASQ certification



# ASQ SSGB and SSBB Certification Requirements



#### ASQ SSGB Certification

3-year work experience in one or more areas of the six sigma body of knowledge

#### ASQ SSBB Certification

Completed 2 six sigma projects, or

Completed 1 six sigma project plus 3-year work experience in one or more areas of the six sigma body of knowledge





## ASQ Master Black Belt Certification Requirements



#### Work Experience

5-year experience in the role of a Six Sigma Black Belt or Master Black Belt, or

Completed 10 Six Sigma Black Belt projects

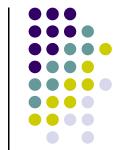
#### Portfolio Review

Meet minimum requirements in 3 areas:

Teaching, coaching, mentoring Occupational experience & responsibility Technical experience / innovation



# What is a Six Sigma Black Belt Project?



 It is a project that uses appropriate tools within a Six Sigma approach to produce breakthrough performance and real financial benefit to an operating business or company

### **Examples of Six Sigma Black Belt Project**

- Manufacturing product defect reduction
- Human resources recruitment cycle time reduction
- Reduced accounts payable invoice processing costs
- Reduced Manufacturing machine setup time



http://asq.org/certification/fag/six-sigma-project.html

# Projects that are not qualified as Six Sigma Black Belt Projects



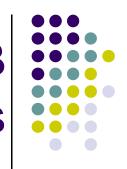
- Prepackaged or classroom exercise that are mock, or simulated projects that were previously completed and/or that do not include actual "hands on" work.
- No real organization or business unit; no current problem or cost benefit.
- Basic product improvement projects not associated with process improvements.
- Software maintenance or remediation without detailed process measurements.
- Any project without measured before-and-after cost benefits.



http://asq.org/certification/fag/six-sigma-project.html

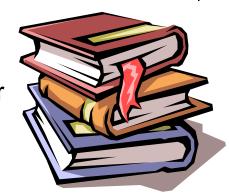


## ASQ SSGB, SSBB and MBB Certification Examinations



- Conducted twice a year —
   in June & December, or March & October
- Conducted in English
- Open book
- Multiple choice questions (& constructed response questions, in the case of MBB Certification examination)
- CSSGB examination is of 4-hour duration, with 100 questions CSSBB examination is of 4-hour duration, with 150 questions CMBB examination is of 5-hour duration, with 100 questions, plus a component with questions related to directed reading materials









#### For Six Sigma Black Belt Certification

Body of Knowledge (BoK) —
 http://www.asq.org/certification/six-sigma/bok.html

Examination dates —

http://www.asq.org/certification/six-sigma/dates.html

Coming exam: 1 October 2011

(Application deadline: 12 August 2011)





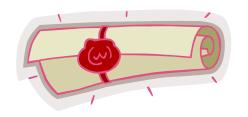


#### The Venue



- HKSQ acts as proctor of ASQ Certification Examinations conducted in Hong Kong
- Examinations are normally held at The Hong Kong Polytechnic University, details of which will be sent to candidates upon successful application for taking the examination

## After the Examination



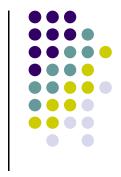


- Examination results are mailed within 6 weeks after the examination date (longer with international mail)
- The passing score of an examination is determined by the judgment of a representative group of ASQ division members
- If you pass the examination, you will receive a letter of congratulations from the Certification Board, a wallet card and certificate showing your certificate number
- If you do not pass the examination, you will receive an analysis of the complete exam. to assist you in prepare for retakes





- No limit to the number of retakes
- A fee will be charged for each retake
- A retake must be made within 2 years of your last attempt
- A retake after a lapse of 2 or more years will be considered a new application and full fees will be charged

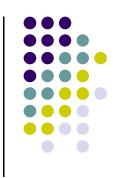


#### Re-certification

- ASQ certification needs to be recertified every 3 years
- Can be done by Re-certification Units (RU) or by testing
- To obtain RU's, you must participate in professional activities that either increase your knowledge of the BoK or are job enhancing



#### **Certification Fee**

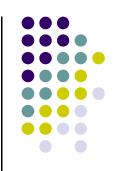


Certification	Normal Fee	ASQ Member Fee
Six Sigma Green Belt - CSSGB	US\$339	US\$199
Six Sigma Black Belt – CSSBB	US\$449	US\$299
Master Black Belt - MBB		
Portfolio Review	US\$650	US\$495
Examination	US\$2,150	US\$1,995

Source: <a href="http://asq.org/certification/index.html">http://asq.org/certification/index.html</a>, August 2011



## Statistics of CSSBB Exam.



Exam. Date	# of Takers Worldwide	Passing Rate
Oct. 2007	892	6o%
Mar. 2008	941	55%
Oct. 2008	1,072	57%
Mar. 2009	1,036	69%
Oct. 2009	1,226	68%
Mar. 2010	928	6o%
Oct. 2010	1,142	62%
Mar. 2011	893	56%

Source: Quality Council of Indiana, August 2011



### Statistics of CSSGB Exam.



Exam. Date	# of Takers Worldwide	Passing Rate
Dec. 2007	570	79%
Jun. 2008	716	70%
Dec. 2008	741	66%
Jun. 2009	955	71%
Dec. 2009	911	75%
Jun. 2010	1,024	72%
Dec. 2010	1,069	71%
Jun. 2011	1,125	71%

Source: Quality Council of Indiana, August 2011



### Statistics of CMBB Exam.



#### First Examination: October 2010

Exam. Date	# of Takers Worldwide	Passing Rate
Oct. 2010	18	100%
Mar. 2011	7	57%



Source: Quality Council of Indiana, August 2011



## How can HKSQ help you?

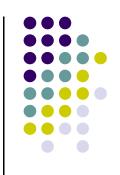


- Body of Knowledge Workshops organized by HKSQ
- HKSQ Six Sigma Green Belt Program
- ASQ Six Sigma Black Belt Program
- HKSQ members can take ASQ Certification Examinations at ASQ member rates if their applications are processed through HKSQ
- HKSQ members can order ASQ Certification Examination suggested reference materials at ASQ member rate
- Primers for ASQ Certification published by Quality Council of Indiana can be ordered from HKSQ





## Six Sigma Green Belt Program



#### Who are eligible?

- Individual members of HKSQ
- Successfully completed, in previous 2 years, a course accredited by HKSQ's Accreditation Board

HKSQ members registered as Certified Six Sigma Green Belt under this scheme are listed on HKSQ's website

This certification needs to be re-certified after 3 years







Members Students Volunteers Employers Advertisers & Exhibitors Media



#### This Lean program is the benchmark for achievements and personal growth in Lean.

Designed by three organizations - the Society of Manufacturing Engineers (SME), the Association for Manufacturing Excellence (AME) and The Shingo Prize for Operational Excellence - this alliance has established the standard for continuous improvement and Lean practices.



In 2010, the American Society for Quality (ASQ) joined this collaborative alliance, which truly aligns these leading organizations to a single standard for Lean certification, providing manufacturers and their supply chains with a roadmap for workforce development.







#### SME Certification

Certification Home

**CMfgT** 

**CMfqE** 

**Engineering Management** 

Preparing for Certification

Classroom Review Programs

: About SME

.: Store

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Six Sigma

Students

Corporate Groups

Exams

Exam Tips

Recertification

Pricing

Inquiries

FAQs

Committee

#### Lean Certification

Lean Home

Bronze Level

Silver Level

Gold Level

Preparing for Certification

International Reseller

Online Review Program Classroom Review Programs

Corporate Groups



## Lean Certification Program



- Bronze Level tactical application of Lean
- Silver Level integrative application of Lean
- Gold Level strategic application of Lean

#### Examination (open book, 3-hour):

- Bronze Level 170 questions
- Silver Level 150 questions
- Gold Level 150 questions









#### **Bronze Portfolio should document**

- Completion of 80 hours minimum of education/training requirements.
- Five tactical projects: events, projects and/or activities to which specific lean principles and tools were applied
- Portfolio reflection: results of the events, projects and/or activities.



## Lean Certification Program



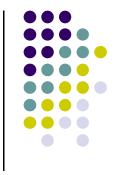
#### Silver Portfolio should document

- Completion of 160 hours (80 hours from Bronze + 80 additional hours) minimum education/training
- Three tactical projects and Two Integrative (Value Stream) projects: events, projects and/or activities to which specific lean principles and tools were applied
- Mentoring/Coaching
- Integrative portfolio reflection: results of the events, projects and/or activities.





## Lean Certification Program



#### **Gold Portfolio should document**

- Completion of (200 hours 80 from Bronze, 80 from Silver + 40 additional hours) minimum education/training requirements.
- One tactical project, two Integrative (Value Stream) projects and two Strategic (Enterprise) Projects: events, projects and/or activities to which specific lean principles and tools were applied
- Mentoring/Coaching
- Integrative portfolio reflection: results of the events, projects and/or activities.







Lean Cert Home Bronze Leve	Silver Level	Gold Level
----------------------------	--------------	------------

Certification	Bronze	Silver	Gold
*Please note that there is an additional \$30 surcharge for all paper pencil exams.	List Price \$690.00	List Price \$1,330.00	List Price \$1,970.00



## How to contact HKSQ?



Web site: <a href="https://www.hksq.org">www.hksq.org</a>

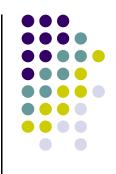
E-Mail address: info@hksq.org

Phone number: (852) 2766–6591

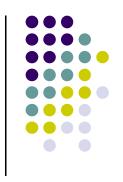
Mailing address: PO Box 84375, Hunghom

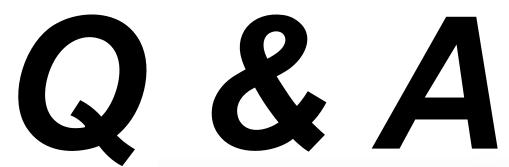
Bay Post Office, Kowloon,

Hong Kong



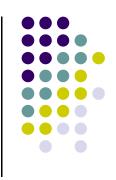












**Dr. Albert Tsang** is a long serving faculty member of the Industrial & Systems Engineering Department at The Hong Kong Polytechnic University. He had extensive work experience in the manufacturing industry, covering functions such as industrial engineering, quality assurance, and project management. Dr. Tsang is a founding member, former Chairman and serving Executive Committee member of Hong Kong Society for Quality (HKSQ). He is the contact person and serves as proctor of ASQ certification examinations held in Hong Kong. He had developed and conducted customized training courses on various aspects of quality and engineering management for many organizations and professional bodies as well as workshops that help candidates prepare for ASQ certification examinations. He has also provided consultancy services to organisations in various sectors on matters related to quality, reliability, maintenance and performance management. Dr. Tsang's publications include four books in the areas of quality, reliability, maintenance and performance management, as well elearning materials on reliability engineering.