Quality for Market Relevance

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Presentation Outline

- Introduction
- Industrial Scenario
- Standardisation
- Quality Conformance
- Effects on Trade
- SIRIM’s Activities in Quality
- Concluding Remarks
More Intense Challenges

- Product Individualisation
- Mass Customisation
- Customer Satisfaction
- Globalisation
- Technology
- Environment
- Social Trends
- Time
- Cost
- Quality
- Product innovation
Top 5 Pressures

- Shorter product development schedules
- Reduced development budgets
- Increased product complexity
- Accelerated development customisation
- Increased quality-related costs (warranty, etc)
Reality of Product Development

- Products ultimately define a manufacturing company’s success
- Various studies estimate new product failure rates from 30 percent to as high as 90 percent, with little to no improvement throughout the past few decades
- Less than 5 percent of new products have complete customer requirements
- 85% of product’s costs are committed when 5% of work is completed
Why Products Do Not Meet Customer Requirements?

- Not able to identify and understand the needs of customers and to quickly create products that meet these needs
- Use of outdated product development process
- Lack of effective collaboration between suppliers
- Lack of thorough product validation and testing
- Lack of effective internal preparations for a successful external launch (including packaging and branding)
Competitive Factors - Where We Need to Focus

Competitive Disadvantage

Competitive Advantage

- Quality
- Innovation, Technology
- Performance
- Cost Structure

Source: 2003 OEMSA - McKinsey
Different Perception of Quality

Good, luxury, expensive, nice to have, the best
or
Continuous improvement, focus on the customer, valuing employees ....
SIRIM’s Perspective of for Quality

- R & D, Technology Application & Development
- Tools, Techniques
- Standards Development
- Conformity Assessment
- Quality Services
- Intellectual Property
- Metrology
Why is Quality Important?

- Customers expect it
- We need to get better to compete
- Need to be able to measure our progress
- Business sustainability
Quality Conformance and Trade

Standards and technical regulations, together with conformity assessment are the pillars which support world trade
Requirements for Exporters

- National and Regional Governments
  - Technical regulations

- Buyers
  - “Voluntary” quality standards
  - Product specifications
Technical Regulation

A document which lays down product characteristics or their related process or production methods, including administrative provisions, with which compliance is mandatory. It may also cover terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.

WTO TBT Agreement
Standard

A document approved by a recognized body that provides, for common and repeated use, rules, guidelines or characteristics for products and their related processes or production methods, with which compliance is not mandatory. It may also cover terminology, symbols, packaging, marking or labelling requirements as they to a product, process or production method

WTO TBT Agreement
Standardization Space

Level

International
Regional
National
Association
Company

Category

Food
Agriculture
Textiles
Building
Transport
Chemicals
Health & Safety
Services
Environment
ICT
Management Systems
Nanotechnology

Subject

Terminology
Classification
Method of testing and analysis
Specification
Code of practice
PS Measures

Environment

Management Systems

Nanotechnology
Performance Based Standards

Wherever appropriate, the standardising body shall specify standards based on product requirements based on performance rather than design or descriptive characteristics*

Why? Standards should not restrict trade or innovation but serve needs

Why Standards are Important

- Consumer Safety & Health
- Global Trade
- Productivity and Efficiency
- Innovation
- Environmental Protection
- Industrial and Economic Development
- Vehicle for Technology Transfer and Dissemination
- Competitiveness
Standardisation Facilitates Innovation

through:

- Enabling higher value innovations
- Commercialization (bringing to market)
- Facilitating collaboration through knowledge transfer
- Reducing risk
Strategic Use Of Standardisation – Benefits To Company

- Understand and anticipate market forces to better serve customer needs
- Become better connected to regulatory agencies
- Achieve interoperability of products and services
- Respond to external events that threaten or restrict markets
- Create strategic partnership and collaborative opportunities
- Gain industry foresight and forecast industry and technology trends
Standardization-Adding Value to a Company

Sales
- Meet Customer Requirements
- Simplify Contracts
- Increase Customer’s confidence
- Low Trade Barriers

Marketing
- Identify Target Markets and New Opportunities
- Promote Market Awareness and Product Uptake
- Enhanced Brand Reputation

R&D/Engineering
- High Value Innovation
- Ensures Interoperability
- Identify Requirements
- Reduce Risk
- Regulatory Compliance
- Guarantee Quality

Operations and Manufacturing
- Increase Efficiency
- Economies of Scale
- Ensure Agility
- Regulatory Compliance
- Health and Safety
- Enable Global Sourcing

Finance
- Code of Ethics
- Regulatory Compliance
- Strategic Resource Allocation
- Billing and Payment Best Practices

Customer Services
- Create Consistency
- Ensure Quality Plan
- Capitalize on Best Practice

Company Wide
Standards and Regulations as Information

- 60% of all enterprises who are innovative are users of standards as a source of information, with 80% of this are large business units.

- 25% of business who are not active in innovation record finding standards a valuable knowledge input.
Standards and Regulation – Joint Impact

- 25% of enterprises reported that they do not hamper innovation

- 60%, however, found that regulations and standards plays two roles i.e. as knowledge input as well as hampering innovation.

- This overlap suggests that standards and regulation tends to channel rather than prevent innovation

- Standards and regulations can be innovation friendly in their essential characteristics
There is a need to:

- Strategically think about costs involved in standardisation and the potential return in investment
- Conduct corporate tracking and/or analysis of involvement
- Look at the opportunities that have resulted from the strategic standardisation activities

For businesses to understand the significance of standardization and to take advantage of the opportunities it generates, tangible value must be assigned to it.
Conformity Assessment

Any procedure, used directly or indirectly, to determine that relevant requirements in technical regulations or standards are fulfilled.

WTO TBT Agreement

Conformity Assessment covers testing, inspection and certification
Conformity Assessment – First Party

- Declaration / attestation by a manufacturer or supplier that a product, process or service complies with specified requirements
- Also known as Supplier’s Declaration of Conformity (SDoC)
Conformity Assessment – Second Party

- Evaluation of a product, process or service (including management systems) by the purchaser or end user

- Second parties include e.g. purchasers / users of products, or potential customers seeking to rely on a supplier’s management system, or organisations representing those interests
Conformity Assessment – Third Party

- Evaluation of a product, process or service (including management systems) by an organisation that is independent of the supplier and the end-user

- Also known as “certification”

SIRIM QAS International provides Product Certification Scheme for many sectors that give a credibility and cost effective 3rd party assurance on quality, safety and reliability of products
Conformity Assessment Regimes

- **Mandatory**
  - Covered by Technical Regulations

- **Voluntary**
  - Product certification
  - System certification
Conformity Assessment - Mandatory Sector

- Information on requirements specified in technical regulations of the target market must be obtained
- WTO/TBT Agreement facilitates process through obligation on members to establish national enquiry points
- WTO/TBT Agreement aims to remove differences in national technical regulations and related conformity assessment procedures – not always possible
Conformity Assessment - Mandatory Sector

- Common methods for demonstrating conformity
  - Testing by independent or government recognized laboratories
  - Product certification from certification bodies acceptable to the regulator
  - Quality System Certification from certification bodies acceptable to the regulator
  - Consignment inspection by either government or acceptable third party organizations
  - Supplier’s declaration of conformity
Conformity Assessment - Mandatory Sector

- Appropriate conformity assessment procedures are specified depending on the type of health, safety and environmental risk related to the products concerned.

- Supplier’s declaration of conformity (SDoC) – gaining popularity and most trade-friendly approach but only applicable if:
  - low risk product
  - well developed legal framework for product liability
  - effective market surveillance mechanisms
Conformity Assessment – Voluntary Sector

● Product certification
  - Certificate or mark to denote product meets defined requirements specified in a standard

● System Certification
  - Assurance that organization is able to consistently supply products conforming to customer and applicable regulatory requirements
Conformity Assessment – Voluntary Sector

- Many products traded not covered by regulations
- Suppliers have to ensure customer requirements are met
- ISO 9001 is globally accepted standard for providing assurance about quality in supplier-customer relationships
Conformity Assessment – Voluntary Sector

- ISO 9001 standard is generic
- Applicability of ISO 9001
  - Any product type
    - Hardware
    - Software
    - Services
    - Processed material
  - Any size of organization
  - Any industry / economic sector
Conformity Assessment and the Market Place - Who are the players

- Suppliers of goods and services
- Prospective buyer(s)
- National and regional governments
- Conformity Assessment Bodies
The market and Conformity Assessment

Demands for conformity assessment

Certification body
Inspection body
Testing laboratory

Market

Product/Service
Producer

Consumer + Regions + Nat. Govern.
Requirements
Other Market Requirements

- Apart from product requirements, other requirements increasingly imposed on suppliers
- Requirements ostensibly aimed at ensuring that economic activities are carried out in a sustainable manner, with adequate consideration for health, safety, environment and other issues
Other Market Requirements

- Common products
  - EMS
  - OHSMS
- Food products
  - HACCP
- Forest products
  - Forest certification
  - Chain-of-custody
- Farm products
  - EUREP GAP
- Palm oil & related products
  - Roundtable for Sustainable Palm Oil (RSPO)
Confidence in Results of Conformity Assessment

Accreditation provides assurance that conformity assessment services are provided in a manner that is:

- Consistent
- Impartial
- Competent
Accreditation

Demands for accreditation

Market

Conformity assessment

Accreditation

Certification body Inspection body Testing laboratory

Product/Service

Producer

Consumer Regions + Nat. Govern.

Requirements
Enhancing Market Position of a Product

Manufacturers may wish to:

- Consider which (if any) certification programs will advance their competitive position
- Analyze the costs and benefits, both short- and long-term, of compliance and certification
- If merited, pursue certification
- Market to customers with an environmentally preferable procurement policy and those pursuing certification of their own offerings
Meeting the challenges

● Suppliers have no choice but to meet
  - regulatory
  - market, and
  - individual customer requirements

● Suppliers face many challenges in terms of:
  - Understanding requirements,
  - Meeting requirements, and
  - Demonstrating compliance with requirements

● Many trade facilitation mechanisms / initiatives are in place or under development
Conformity Assessment Services by SQASI

Testing, Certification and Inspection by SIRIM QAS International Sdn Bhd for:

- Support Law Enforcement Agencies
- Commercial
- Overseas Certification Bodies
Conformity Assessment Services by SQASI

ACREDITATION

- ENVIORNMENTAL MANAGEMENT
- INFORMATION SECURITY MANAGEMENT

RECOGNITION

- IATF - FOR AUTOMOTIVE SECTOR

- ISO 9001:2015
- ISO 14001:2015
- OHSAS 18001:2007
- ISO 27001:2013

- ISO 13485:2016
- IATF 16949:2016
# Certification Signs

## PRODUCT CERTIFICATION

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## MANAGEMENT SYSTEM CERTIFICATION

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Testing Services

- Emc Testing
- Communication Equipment Testing
- Chemical Testing
- Electrical Testing
- Mechanical Product Testing
- Construction & Building Materials Testing
- Fire Engineering Testing
Legal Metrology

- Oil Measurement Tool
- Smoke Metre
- Breath Analyser
- Parking Metre
- Radar Gun
- Water Measurement Tool
Standardisation and Certification provide the essential means needed to compete in today’s complex environment. Used strategically, both mean enable businesses to achieve market differentiation through innovation, cost leadership, access to new markets and seize new opportunities quickly and effectively. They are powerful strategic management tools for understanding and impacting the global market.
Thank You

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