June 21, 2011 (Tuesday) 55th EOQ Congress

CONCURRENT SESSIONS **Tuesday 13:30 – 17:30**
KEMPINSKI HOTEL CORVINUS **Erzsébet tér 7-8, Budapest V.**

SALON CORVINUS **Tuesday 15:30 – 17:30**

14.1. QUALITY DEVELOPMENT AND MEASUREMENT METHODS

Session Chair: ***Miflora M. Gatchalian****, Quality Partners Co. Ltd., Philippines*

15.30 Seven Tools for Management of Quality
Hitoshi Kamikubo, Union of Japanese Scientists and Engineers, Japan

Kamikubo, Hitoshi (Japan)

As an associate director & the general manager in charge of the ISO Certification Center, the ISO Training Division and the International Office of JUSE (Union of Japanese Scientists and Engineers), and having gained experience as a manager in the Seminar Operations on Quality Management from Top management to Quality Engineers, Corporate Strategic Planning and ISO Management Systems, Hitoshi Kamikubo is well versed in Quality Management. He also serves as a country councillor and senior member of the ASQ (American Society of Quality) as well as a member of board of JACB (Japan Association of Management System Certification Bodies), a member of Standardization Committee of JSQC (Japan Society for Quality Control), etc.

Seven Tools for Management of Quality

Hitoshi Kamikubo
Associate Director, JUSE

2011/6/21

Brief Sketch of History on Quality

- Dr. W.A. Shewhart – control chart (1924)
- Howthorne Plant of Western Electric Co. (1927)
- Dr. J.M. Juran – Pareto principle(1940's)

- ASQ, JUSE founded (1946)
- Deming Application Prize (1951)
- EOQ founded (1956)
- ICQC (1969)
- NBC "If Japan can, why can't we?" (1980/6)

- a c a e at na a ty wa (198)
- 9001 (198)
- (1988) → (1991)
- a ty ay ta te (1989)

- apan a ty ec n t n wa (000)
- apan a ty n t at n ( ) ey (00)
- e t (00)

JUSE Activities

- n e n 19 6 n e t e ct n t e n t y cat n, t e, p t , c ence an ec n y ( )

- e na n , , , , ,
- n e ence an y p
- at n w e ca pa n n a ty a ty nt ”
- wa y te e n , ,
- e t, ey

- ta t w t cat n a n n , an en w t t ” *For continuous challenge to quality by industrious persons*

Management of Quality

- ***WHAT*** : Many tools/methods for quality improvement

Q7, N7, P7, S7, R7, DoE, QFD, SE, RE, IE, VE, Housin Kanri, Bios, CT, Multivariate Analysis, FMEA/FTA, TRIZ, ISO,……

QC Circle, Coaching, Motivation, Creativity Development, Operations Research, Management Mathematics,…..

Tools: Scientific approach for fact finding

- Carpenters use their own tools: When they cut a big tree, they use a most suitable axe and they don't use a knife.
- A tool has aims/uses to be used in itself.
- In addition, QC should have its own tools, and RE should have its own tools for its effectiveness and efficiency.

- "Seven" is a superstitious odd number in Japan

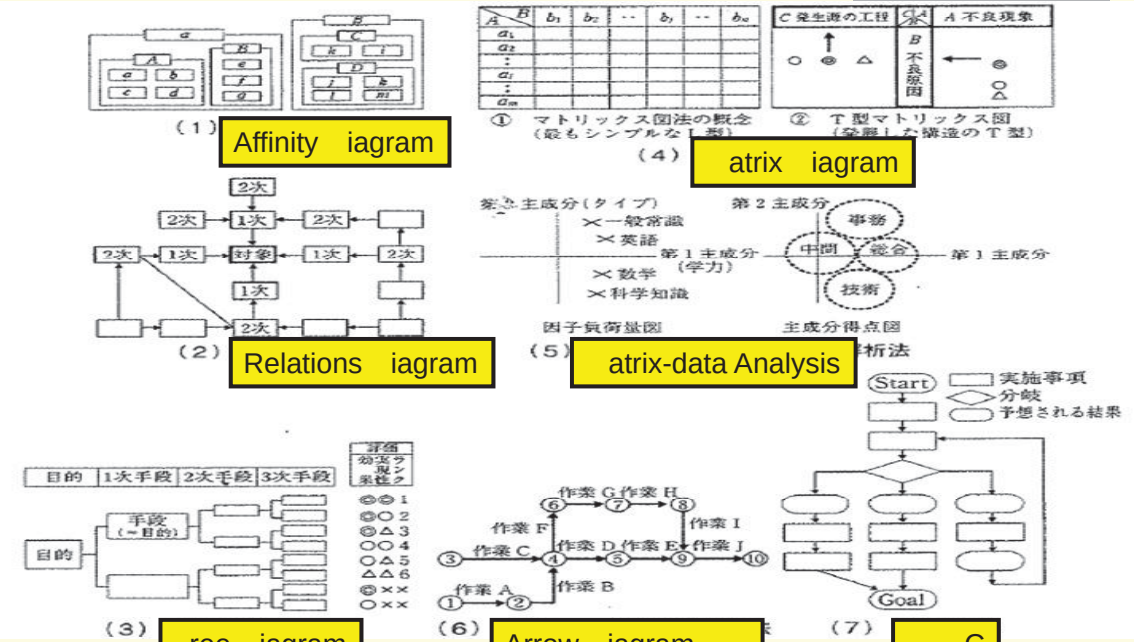
Q7: 1950's

- - Check-sheet
- - Scatter iagram
- - areto iagram
- - istogram
- - Control Charts
- - Cause and Effect Analysis iagram
- - Stratification

N7: 1977

- - Relations iagram
- - ree iagram
- - Affinity iagram
- - atrix iagram
- - atrix-data Analysis
- - Arrow iagram
- - C iagram rocess- ecision- rogram- Chart

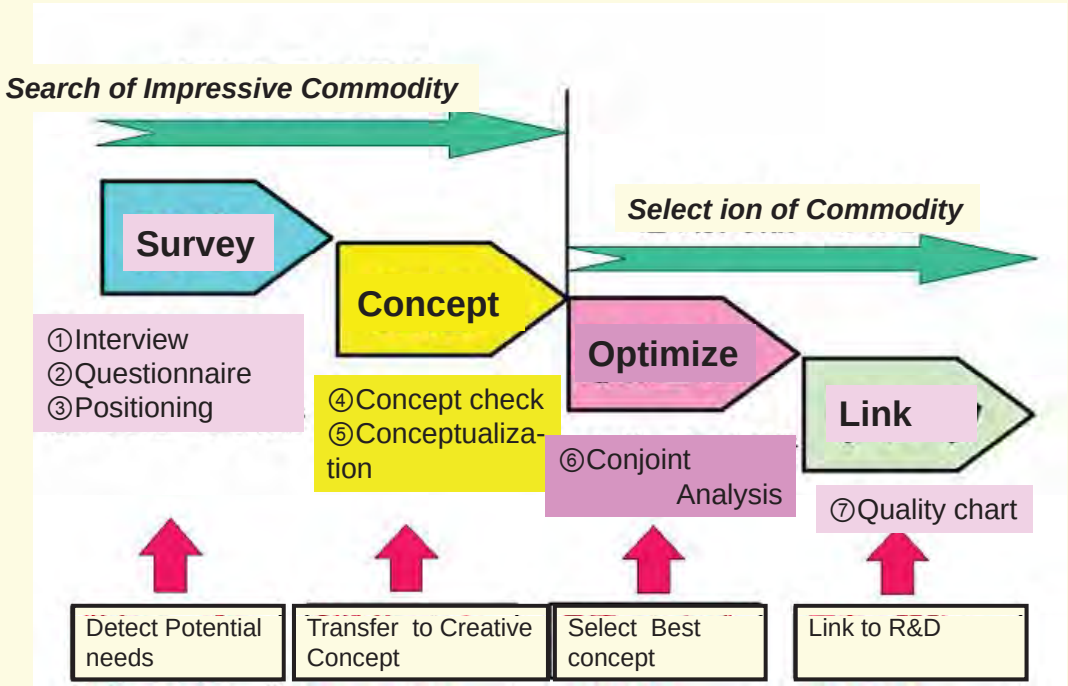
At a glance



P7: 1994

- - Group Interview
- - Questionnaire Survey
- - Positioning Analysis
- - Concept Checklist
- - Table-type Conceptualization
- - Conjoint Analysis
- - Quality Chart

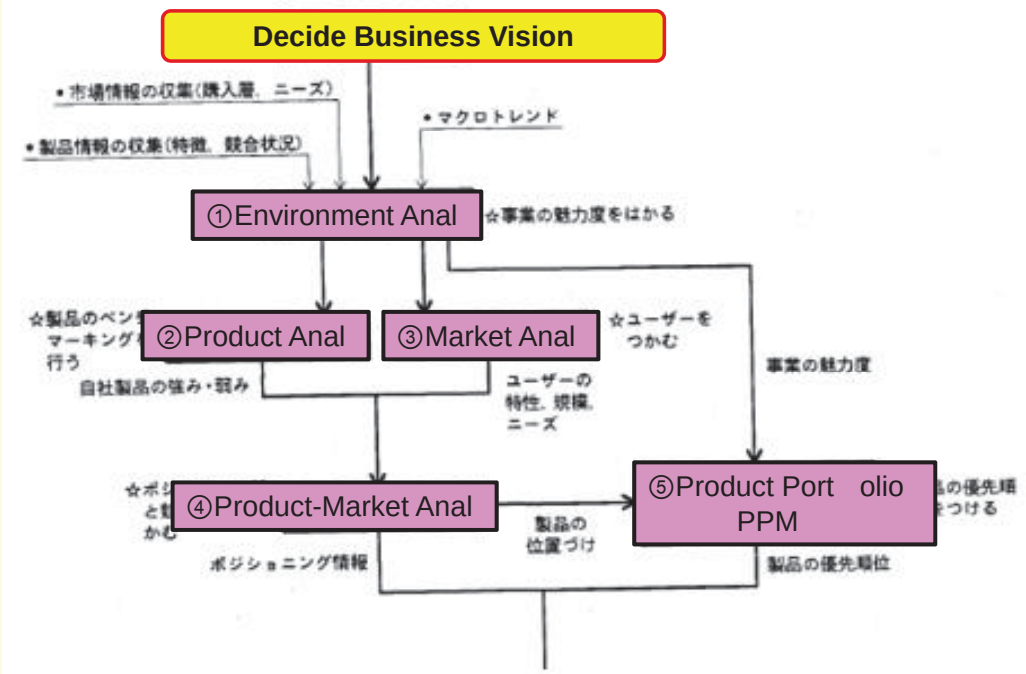
At a glance P

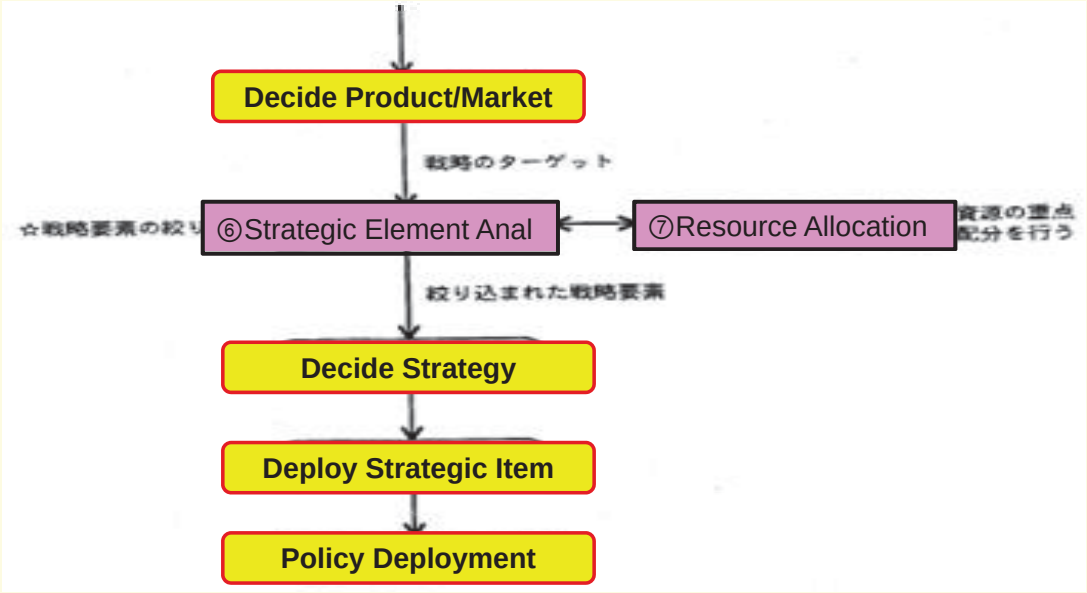


S7: 1996

- - Environment Analysis
- - Product Analysis
- - Market Analysis
- - Product-Market analysis
- - Product Portfolio Analysis
- - Strategic Elements Analysis
- - Resource Allocation Analysis

At a glance S

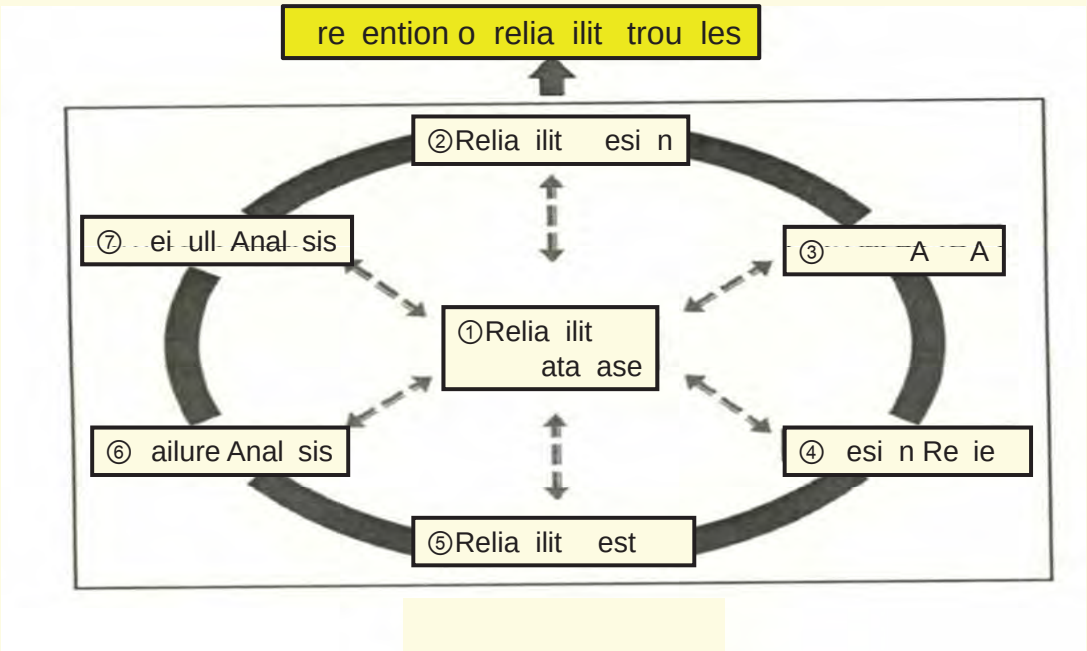

Decide Business Vision
• 市場情報の収集(購入層、ニーズ)
• 製品情報の収集(特徴、競合状況)
• マクロトレンド
①Environment Anal
☆事業の魅力度をはかる
②Product Anal
③Market Anal
☆ユーザーをつかむ
自社製品の強み・弱み
ユーザーの特性、規模、ニーズ
事業の魅力度
④Product-Market Anal
⑤Product Port olio PPM
製品の位置づけ
ポジショニング情報
製品の優先順位


Decide Product/Market
戦略のターゲット
☆戦略要素の絞り
⑥Strategic Element Anal
⑦Resource Allocation
資源の重点配分を行う
絞り込まれた戦略要素
Decide Strategy
Deploy Strategic Item
Policy Deployment

R7: 2008

- Relia ilit est
- Relia ilit esi n
- Relia ilit ata ase
- esi n Re ie et o
- ei ull Anal sis
- ailure Anal sis
- A A

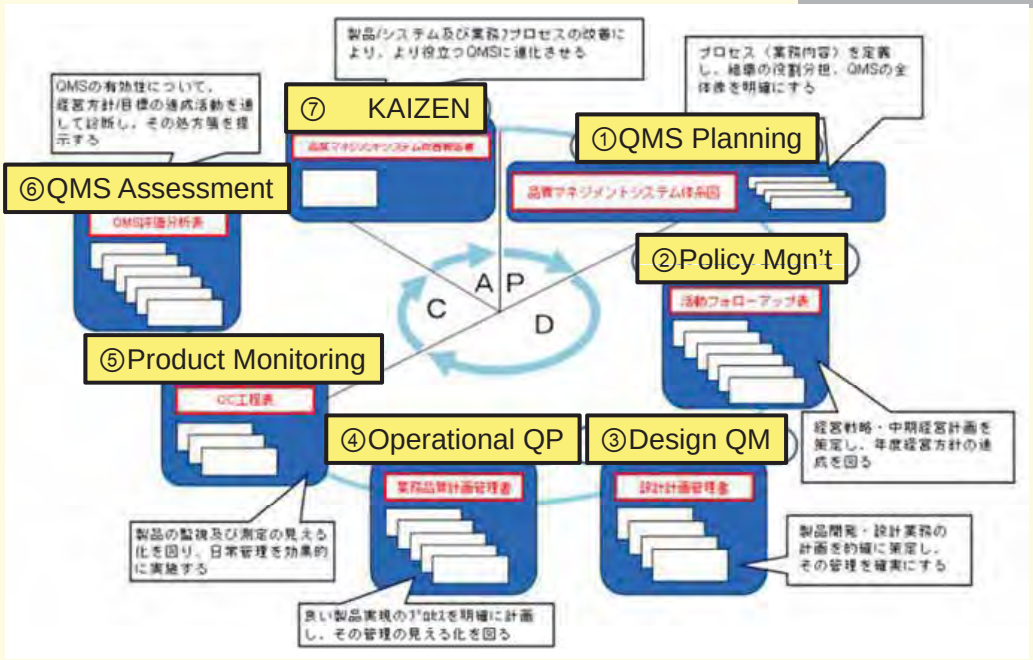
At a lance R



ISO7: 2010

- - QMS Planning Method
- - Corporate Policy Management Method
- - Design Quality Management Method
- - Operational Quality Programming Method
- - Products/Services Monitoring Method
- - QMS Assessment Method
- - QMS KAIZEN Method

At a glance ISO7



Principles:

Tools and/or Methods should be :

- - Used easily at the workshop,
- - Less time and easy work to draw it,
- - Easy to understand the process situation
- - Easy to see the difference during diagrams
- - Traceable within the QC Story
- - Useful for Objective Decision-making
- - Effective for Fact Finding

Thank you for attention!

e-mail: h-kamikubo@juse.or.jp