

Statistics in Asia

Perspectives from
Singapore and SE Asia

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Area: 4 million km²
(1.6 million sq miles).

Population: 600 million

Encouraging

- Increasing awareness of the need for Statistics in recent years
- More emphasis on the statistics dimension in Quality applications – SPC, DOE
- Increasing use by semiconductor and electronics industry
- Increasing instances of on on-the-job training
- More enrolled in ISE graduate program

Notable Patterns of Learning and Application

- More multinationals: Hewlett Packard, Agilent Technologies, Seagate International, General Electric
- Universities: Courses still limited to Mathematics or Statistics departments
- Engineering and Technical education: More Mathematical Statistics and probability maneuvers than ideas and tools in practice

Notable Patterns of Learning and Application

- Individuals: Tendency to either be lost in details or use superficial understanding
- Unrealistic expectations of what Statistics could achieve, e.g.
 - Expecting results without (adequate) data, or
 - Expecting results with (inappropriate) data
- Proliferation of “trainers” and “consultants” of uneven proficiency
- Disjointed learning – SPC, DOE, Regression,...

Issues as Statistics is Promoted Among Non-Statisticians

- What is being learned and applied: Statistics or software?
- Uninformed adoption and unrealistic expectation – e.g. “\$200,000 savings per project” with *Six Sigma*
- Poor awareness employee’s capacity to learn and apply Statistics; software as an end rather than a means
- Risks: from euphoria to dejection (whose fault is that? Academics? Consultants? Learners?)
- Responsibility assignment: Statisticians > Engineers > Managers?
- Where do we go from here? – To discuss

Thank You