## Complementing Each Other: GQM & DMAIC

### GQM

(Goal-Question-Metric)

- CMM sometimes criticized for emphasizing repeatability over improving productivity.
- GQM strong in defining metrics appropriate to business goals and nature of the process.

### DMAIC

(Define-Measure-Analyze-Improve-Control)

- Six Sigma sometimes criticized as inappropriate for processes characterized by knowledge efforts.
- DMAIC strong in focus on continuous iterative process improvement.
CMM+6σ Process Improvement Cycle

Define
Measure
Analyze
Improve
Control

Define
Measure
Collect Data
Assess
Analyze
Improve
Control

Hypotheses
Trends
Indicators
Causes

Progress
Defects
Delays
Dissatisfactions

Requirements
Activities
Changes
Time
Results

Baselines
Weaknesses
Opportunities
Areas of Concern

- Architecture
  - Design weaknesses
  - General or for new demands
- Bottlenecks
  - Areas for focused attention
- Causal Connections
  - System view of process
  - Root cause analysis