

Operations Management in Turbulent Times

What is going on in Operations...
and why should I care?

The Center for Professional Management 2005

Introduction - Topics

- What is Happening at APICS
- **Operations Management**
- Interesting Developments at CfPM

Introduction –

Operations Management in Turbulent Times

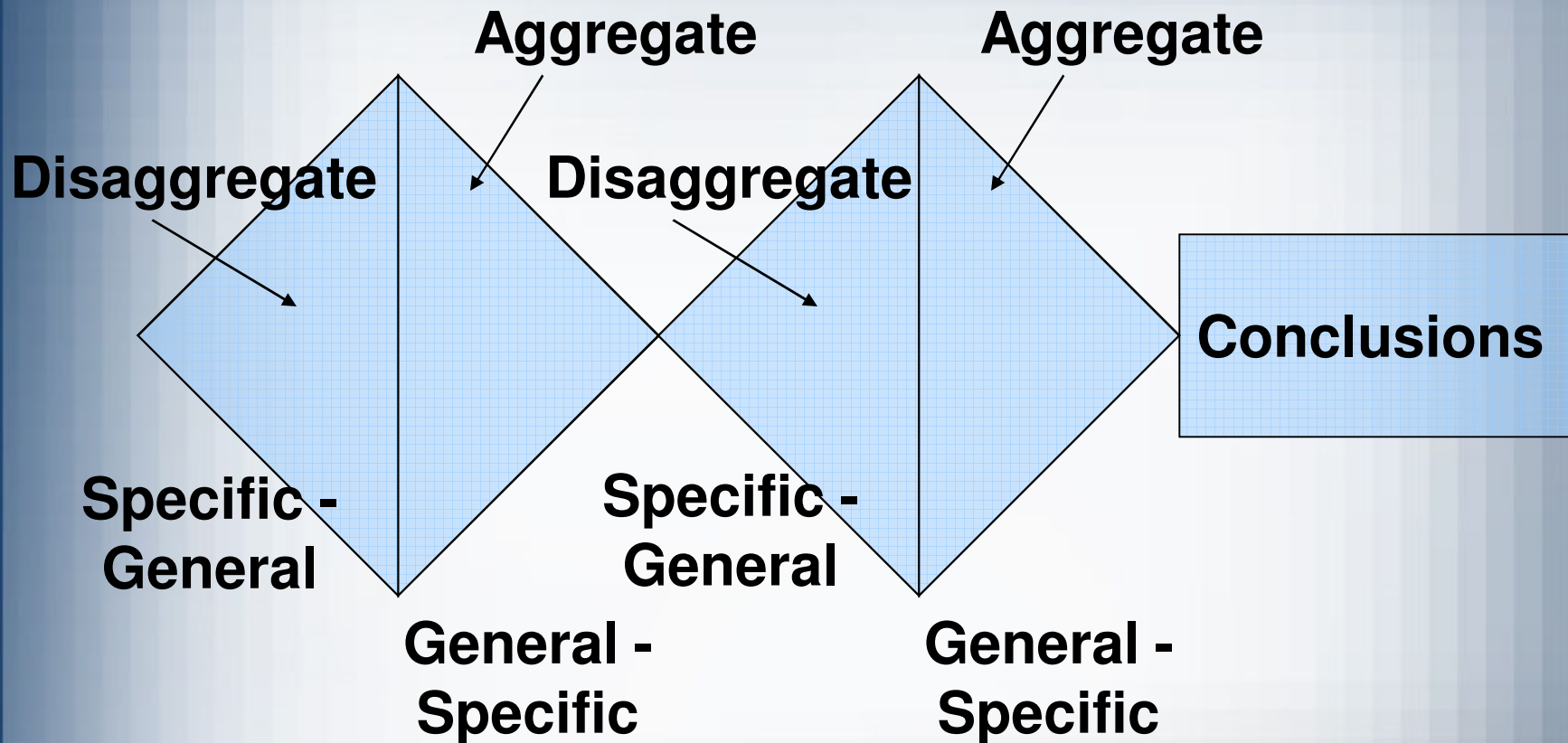
- How is Operations Management responding to the challenges presented by fluctuations in **supply & price** in a *global trade* environment influenced by *spiking energy costs*, *natural disasters* and *political instabilities*?
- What are the **tools** available to the manager and how are they being used?
- Where do these Operations Management tools **intersect** with Quality Systems Management?

Introduction

Presentation Structure

“Begin at the beginning...”

Lewis Carroll - Alice's Adventures in Wonderland



Agenda

- Intro
- Definitions
- What's Happening at APICS
- Functions
- Management System
- A Sampling of Planning & Processes
- Methods/Approaches/Practices
- Interesting CfPM Stuff
- Summary
- Conclusions

Operations Management Defined

text book definition

Production is the creation of goods and services

Operations Management is the set of activities that creates value in the form of goods and services by transforming inputs into outputs

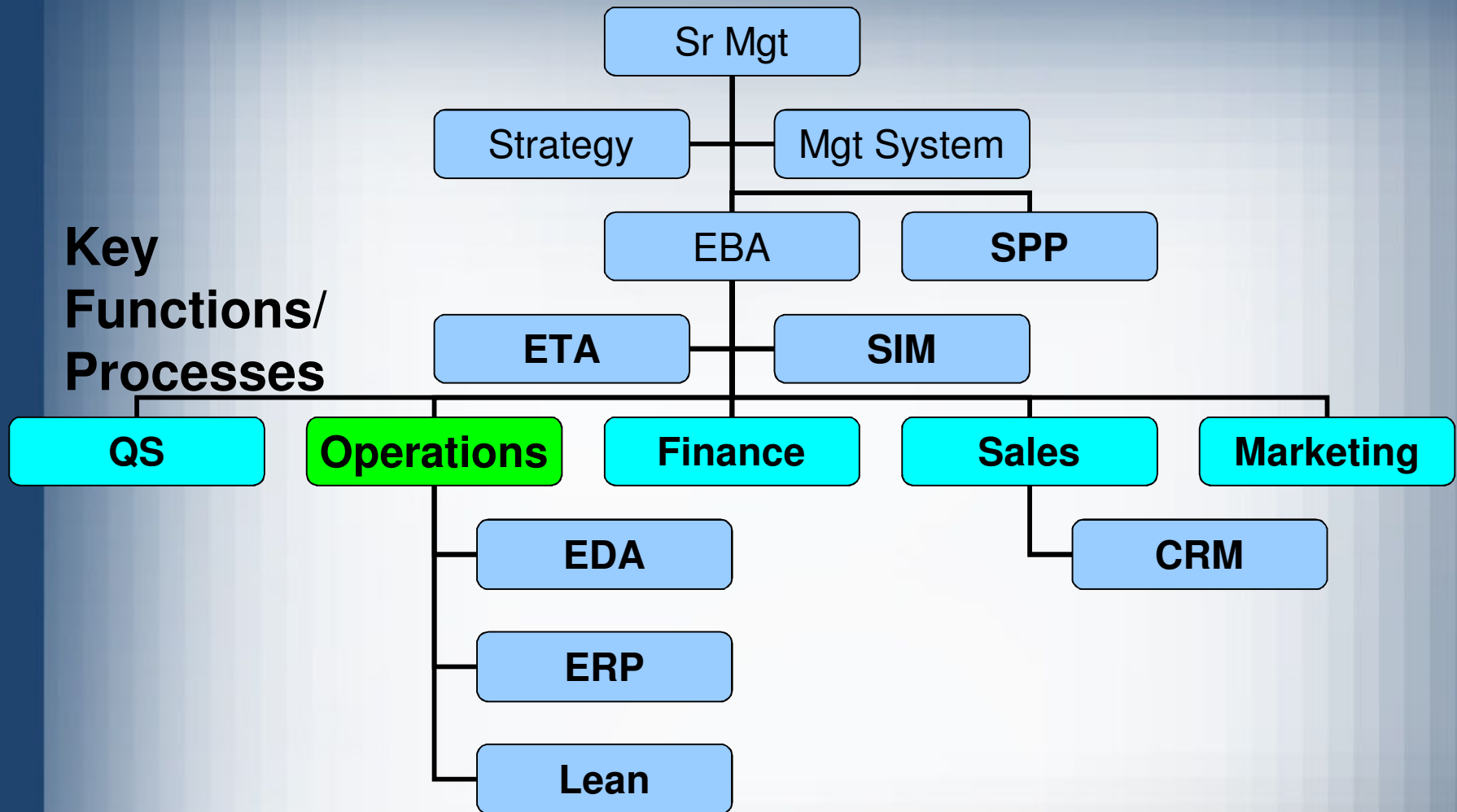
~ Heizer/Render - Principles of Operations Management, 5e, and Operations Management, 7e - 2004 Prentice Hall

APICS Definition –

Operations Management:

- 1) The planning, scheduling, and **control** of the activities that transform inputs into finished goods and services.
- 2) A field of study that focuses on the effective planning, scheduling, use, and **control** of a manufacturing or service organization through the study of concepts from design engineering, industrial engineering, management information systems, quality management, production management, inventory management, accounting, and other functions as they affect the operation. ~ APICS Online Dictionary 2005

Enterprise Process/Function Model Business Model



APICS – Rebranded as **AOM**



*The Association for
Operations Management*

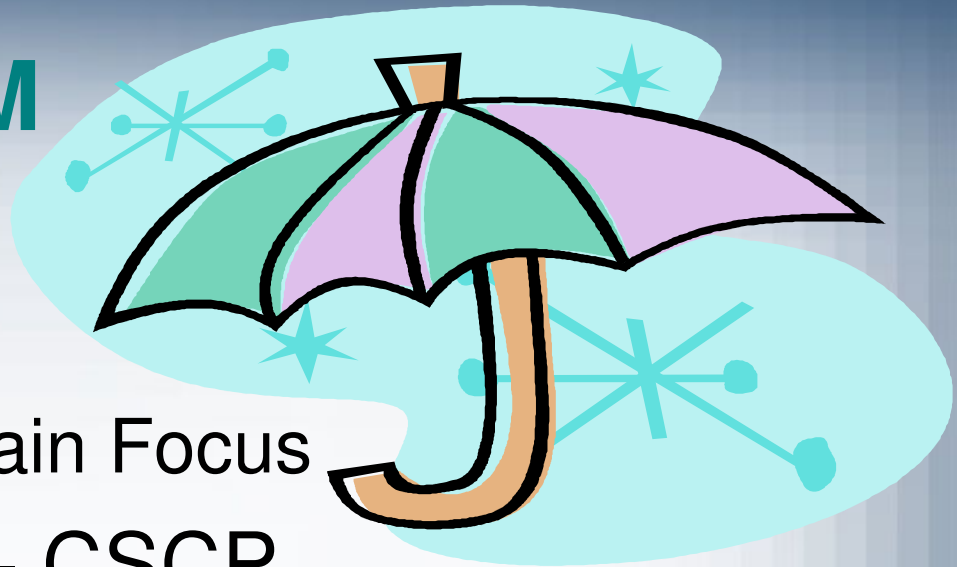
Advancing
Productivity
Innovation &
Competitive
Success

*The
Association for
Operations
Management*

What's Happening at APICS?

- New Name - **AOM**
- Bigger Umbrella
 - All of Operations
 - Added Supply Chain Focus
- New Certification - CSCP

Certified Supply Chain Professional



Key APICS – AOM Points

- Individual Benefits
 - Understanding of underlying principles
 - Certification
 - Portability
- Corporate – Aggregate Benefits
 - Common understanding
 - Common language

Core Functions - Operations

- **Manufacturing**
 - **Production**
 - Receiving Whse
 - Matl Handling
 - Production
 - **Engineering**
 - Mfg. Eng
 - Design Eng (e.g.,Pkg)
 - Industrial Eng
- **Material Mgt.**
 - **Planning**
 - Master Planning
 - Forecast
 - Scheduling
 - **Procurement**
 - **Distribution**
 - Customer Service
 - Shipping Whse
 - Logistics

Core Functions - Operations (continued)

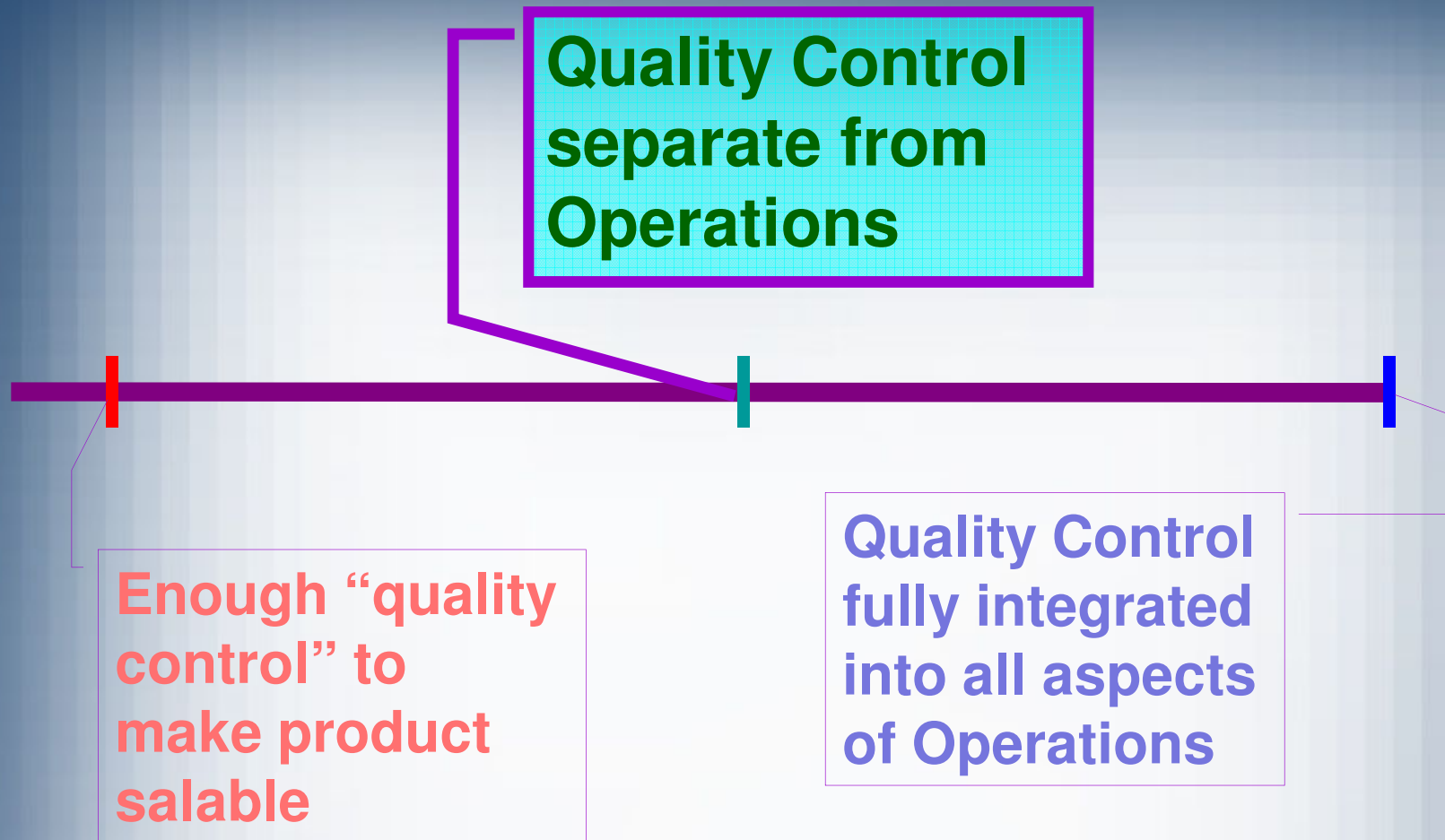
Quality Systems/Quality Management

???

Quality Systems Continuum – A Working Reference



Quality Systems Continuum – A Working Reference



Core Functions – Quality Systems

– Quality Control

- Inspection
- Lab

– Quality Assurance

- Documentation Review
Specification Review
- Data Integrity

– Regulatory Affairs

- Domestic
- International

– Mgt. Systems Support

- Quality Policy Manual
- Audit
- Mgt Review
- Document Control

Ancillary Functions – Operations

- **Cost Accounting**
- **Facilities Management**
- **R & D**
- **IS Support**
- **HR Support**
(e.g., Training)

Management System

Why Not ISO 9001:2000



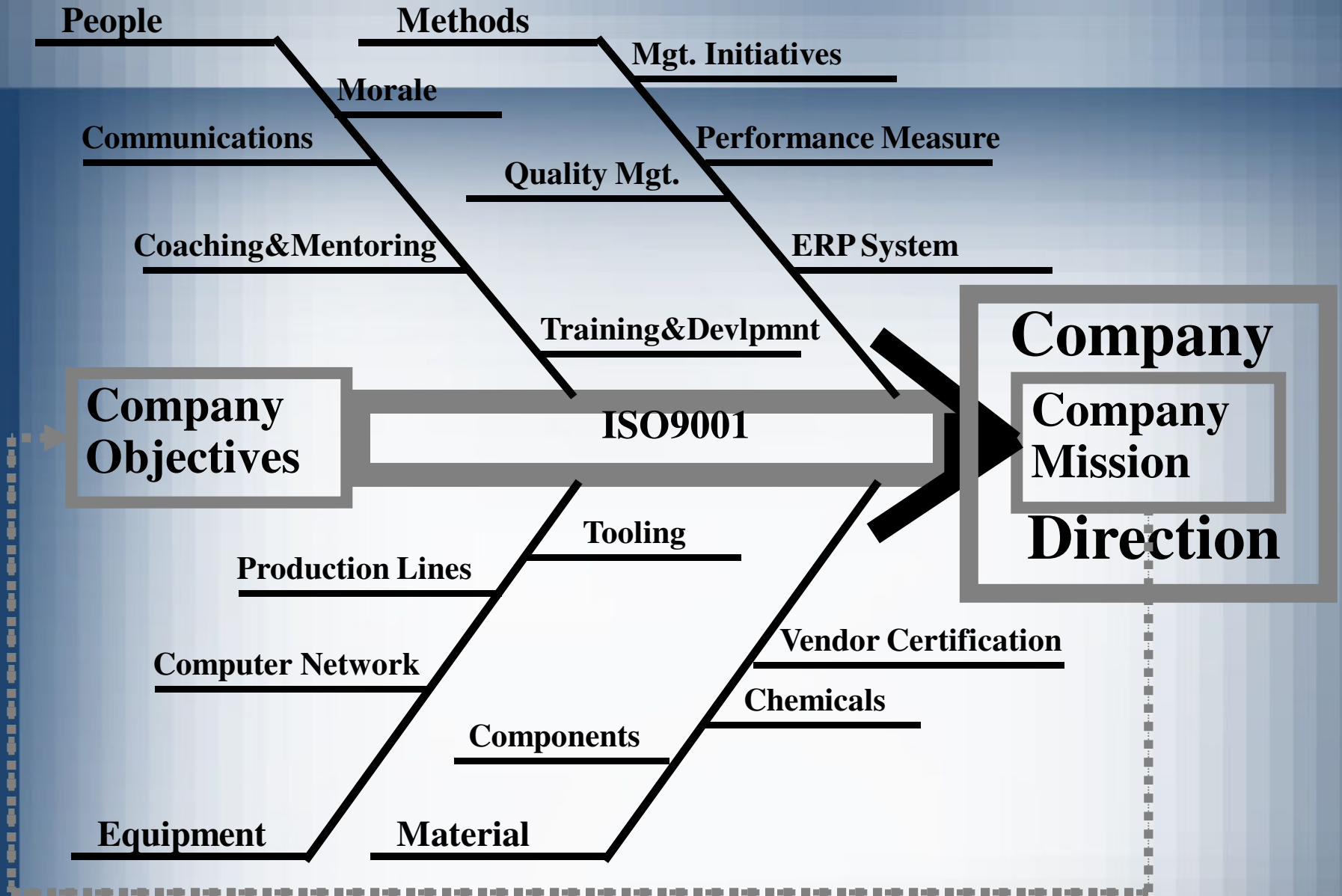
Model of a Process Based QMS

Continual Improvement of the Quality Management System



Put
ISO9001:2000
to work
for
you

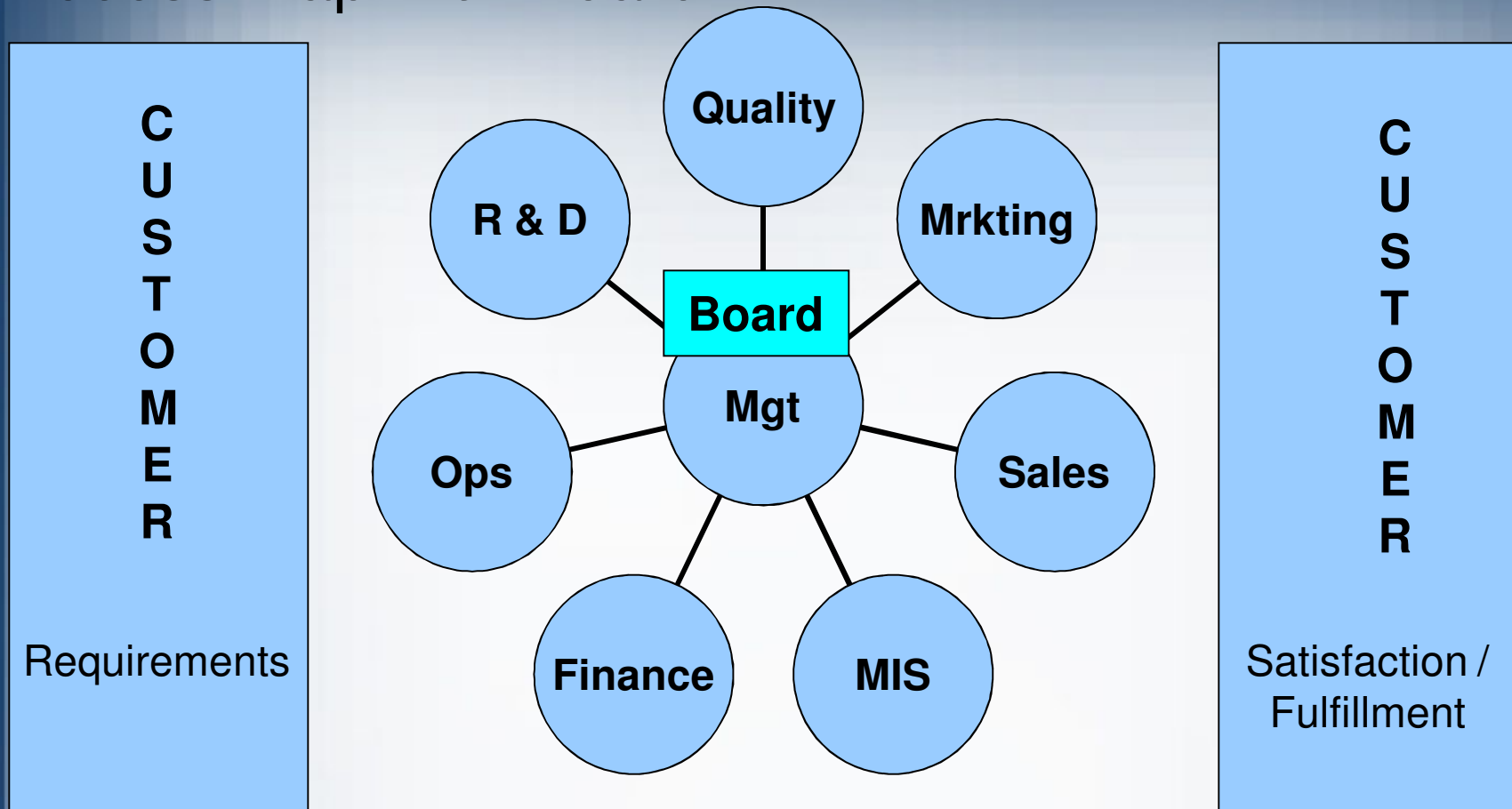
ISO as 'Backbone' Model



Management System

Use ISO to Provide S-Ox Visibility

Process Map with Board

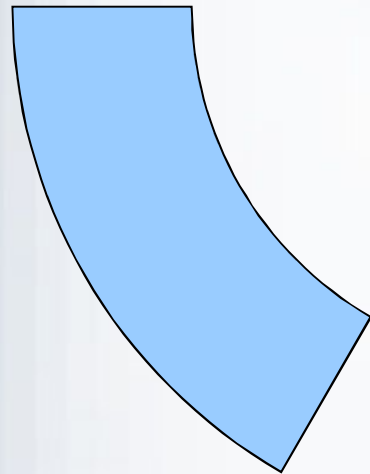
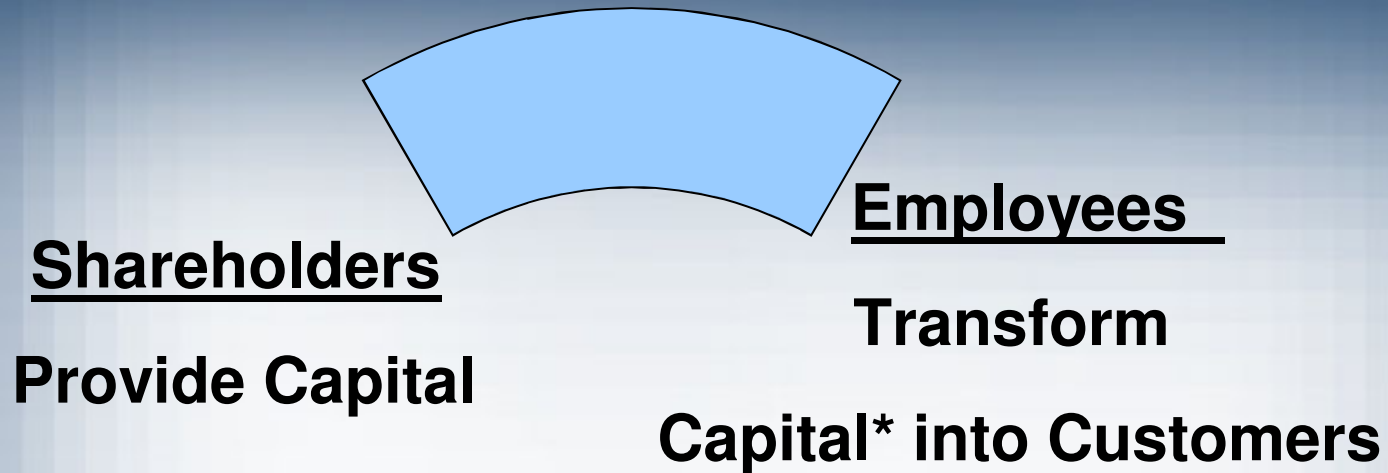


Management System - Roles

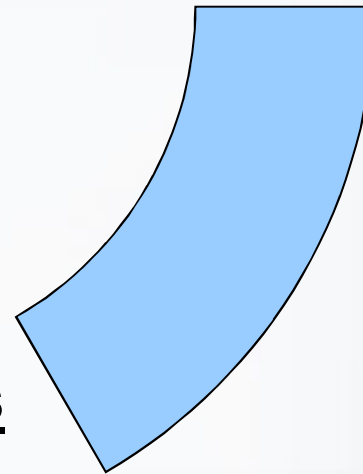
- Supervisors manage tasks
- **Managers manage to goals**

Management System

Customer Focus & the rest of the story



Customers
Create Value



* Capital in
the form of
resources

Copyright CfPM 2005

Management System

Customer Focus & the rest of the story

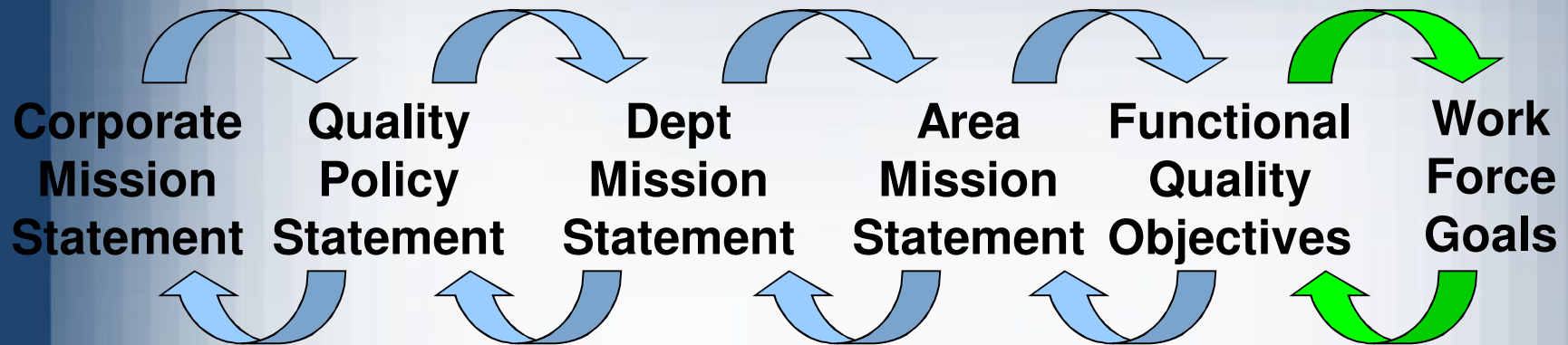


Management System

Customer Focus & the rest of the story



Linkage and Alignment of Organizational and Workforce Objectives (Management System)



Product Realization

A Sampling of Planning Tools & Processes

- Aggregate Planning
- Supply Chain
 - Globalization
 - SC Systems - SCM/SCE
 - Inventory Replenishment
 - SC Modeling
 - Procurement
 - Demand Planning
- Inventory Control
- Systems

Planning Tools & Processes

Aggregate Planning

Test assumptions regarding Forecast & Cashflow

- Production Smoothing
- Capacity
 - Facility
 - Equipment
 - Staffing
- Cash flow

Planning Tools & Processes

Supply Chain

- Globalization – lengthening the chain
- SC Systems - SCM/SCE
- Inventory Replenishment
 - SC Modeling
 - Procurement
 - Demand Planning

Planning Tools & Processes

Inventory Control

- Replenishment
- IRA

Broad Economic Benefit?

Planning Tools & Processes Systems

- ERP
- Advanced Planning Tools
- eCommerce
- CRM

Methods/Approaches/Practices

- Lean
- Six Sigma
- Agile

Methods/Approaches/Practices

Lean

“the 5Ss, Value Analysis & Kanban” – 4 Goals

- Improve Quality
- Eliminate Waste
 - 2 Categories of waste (Eliminate, Reduce)
 - 7 types of waste (Overproduction, Waiting, Transport, Extra Processing, **Inventory**, Motion, Defects)
- Reduce Lead Time – cycle time/total time
 - Product Design - Simplification
 - Manufacturing (SMED, **One-Piece Flow**, Postponement)
- Reduce Cost

Methods/Approaches/Practices

Agile

"When change is discontinuous, the success stories of yesterday have little relevance to the problems of tomorrow; they might even be damaging. The world at every level, has to be reinvented to some extent"

~ Charles Handy, "Beyond Certainty", Arrow Business Books, 1996

Agile Attributes

- Niche Production
- Knowledge Based
- Highly Adaptive

M/A/P Replenishment Strategy – Push or Pull Manufacturing?

- ERP
- Kanban
- Hybrid – ERP/Kanban
- Constant Work-in-Process (CONWIP)
- ReOrder Point

What's Happening at CfPM

The Center for Professional Management

- “Bridging Strategy to the Operation”
 - Strategic Planning
 - Developing a Strategy Canvas
 - Strategic Planning Process
 - Strategy – Operations Gap Analysis
 - Operations Process Improvement
- Operations Maturity Continuum Index

That's all nice, but... *So What*

**Everything has got a moral if
you can only find it.**

~Lewis Carroll

Summary

- Most organizations will benefit from a holistic business approach & Mgt System
- No single Method or Approach works best for all companies or in all situations
- Most organizations have not appropriately considered or reviewed the utilization or direction of:
 - Strategy
 - Business Model (EBA)
 - Manufacturing Approach

Summary

- Many functions and business processes are under utilized and/or improperly focused.
- Successful process execution requires a plan.
- Increasing external pressures require business to look in new ways at how to make product and do business.
- *A recognized* common purpose is necessary to energize the workforce toward accomplishing corporate objectives and goals.

Conclusions

- Individuals need to be knowledgeable and proficient in their chosen field
- Ultimately, to be successful, an Individual needs to be a “Smart person at the table”
- To be ‘smart’, individuals need to be multi-functional and familiar with the business considerations of the organization

Conclusions

WIIFM - The Bad News

- Turbulent External Environment
- Cost Reduction Approaches

Conclusions

WIIFM - Just More Requirements?

Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!

~ Lewis Carroll, *"Through the Looking Glass"*

Conclusions

WIIFM - The Good News

- Turbulent External Environment
- Cost Reduction Approaches
- Need for Succession Planning

= Opportunity



Conclusion

Operations Management
or
Quality Management

We are all in Business Management...

Corporate and personal success requires that we fully incorporate the business considerations with the functional considerations.

**Success does not just
happen – Success is
caused**

Cause Success



Thank You

CfPM