



Quality in Outsourcing

Based on the Quality Progress Article:

Quality in Outsourcing - Essentials for Today's Global Marketplace

<http://www.asq.org/quality-progress/2008/08/global-quality/in-the-know.html>

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<http://www.asq.org/sixsigma/about/govind.html>



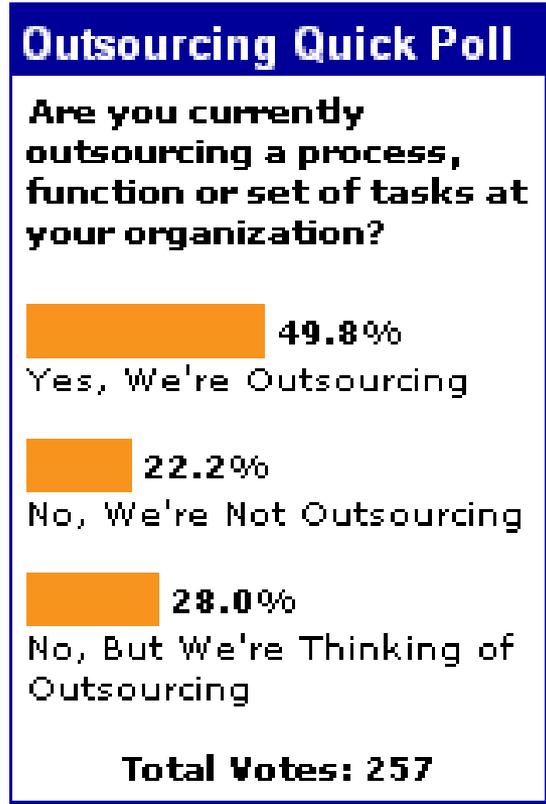
What Is Outsourcing?

- Outsourcing involves the transfer of products, services, and business processes to an external service provider.
- The outsourcing organization and the outsourcing partner enter into a service level agreement that defines the contractual conditions for transferred products and or services.
- “Outsourcing” and “offshoring” are used interchangeably. However there are technical differences. Outsourcing involves contracting with an outsourcing partner, which may or may not involve offshoring.
- Offshoring is the transfer of an organizational function to another country, regardless of whether the work is outsourced or stays within the same corporation/company.
- Other terms used in the outsourcing world are “multisourcing”, “nearshoring”, etc.



Why Outsourcing?

- **Significantly reduce overall costs by generating products and services from locations that have lower labor, materials, infrastructure and maintenance costs.**
- **Reduce “time to volume” (TTV) for new products.**
- **Access to an abundance of human resources, localized skills and knowledge, unique patented supplies.**
- **Supply chain efficiencies when products are shipped directly to customers. (Drop Ship)**



As of 13th Oct 2008



3 Minutes – Allow audience to interact and provide any other reasons for outsourcing.



What Does “Quality” Have to Do with Outsourcing?

- Quality is not limited to product or service issues*. Quality is also applicable to the overall process of creating products and or services.
- Quality considerations apply to every aspect of outsourcing, not just auditing and surveillance.
- Lack of quality at any point in the outsourcing process can result in product recall or major outsourcing risks.
- Without due diligence and appropriate controls, outsourcing could end up being costlier than in-house manufacturing or service, resulting in high defect rates, late deliveries, poor service and customer dissatisfaction.

July 2008 Quick Poll Quality Progress Site

Which Quality myth is hardest to disprove to management?

#1 : Quality is strictly about product or service issues- 35.4%

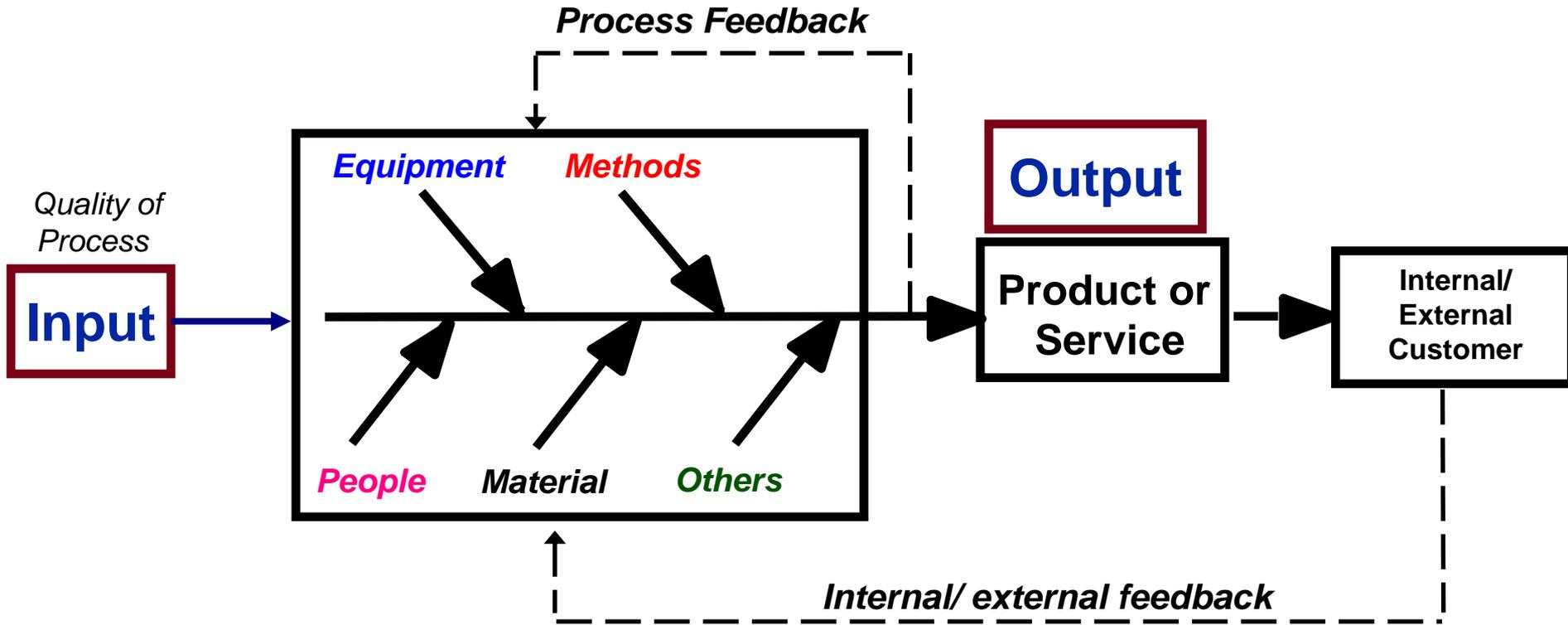


What Does ISO9001:2008 say about Outsourcing?

- An "outsourced process" is identified as one being needed for the organization's quality management system but chosen to be performed by a party external to the organization.
- Ensuring control over outsourced processes does not absolve the organization of the responsibility of conformity to all customer, statutory and regulatory requirements. The type and nature of control to be applied to the outsourced process may be influenced by factors such as:
 - a) the potential impact of the outsourced process on the organization's capability to provide product that conforms to requirements;
 - b) the extent to which the control for the process is shared;
 - c) the capability of achieving the necessary control through the application of clause 7.4.

(ISO 9001:2008 4.1 Notes 2 and 3)

Quality of Overall Process (Process Model)



15 Minutes –

Take an example of process within Outsourcing and brainstorm with the audience. Example: “ Testing Equipment Transfer” process.





When to Apply Quality in Outsourcing?

- Quality for the outsourcing process must commence at the planning stages of new product development.
- For an existing product or service, a comprehensive plan also must be developed for the outsourcing process prior to execution.
- Planning must cover material, equipment, manufacturing and transactional processes, hardware, software, domain knowledge, skill sets, people availability, communication protocol and more.



Considerations for Quality in Outsourcing?

Two high-level requirements for successful outsourcing:

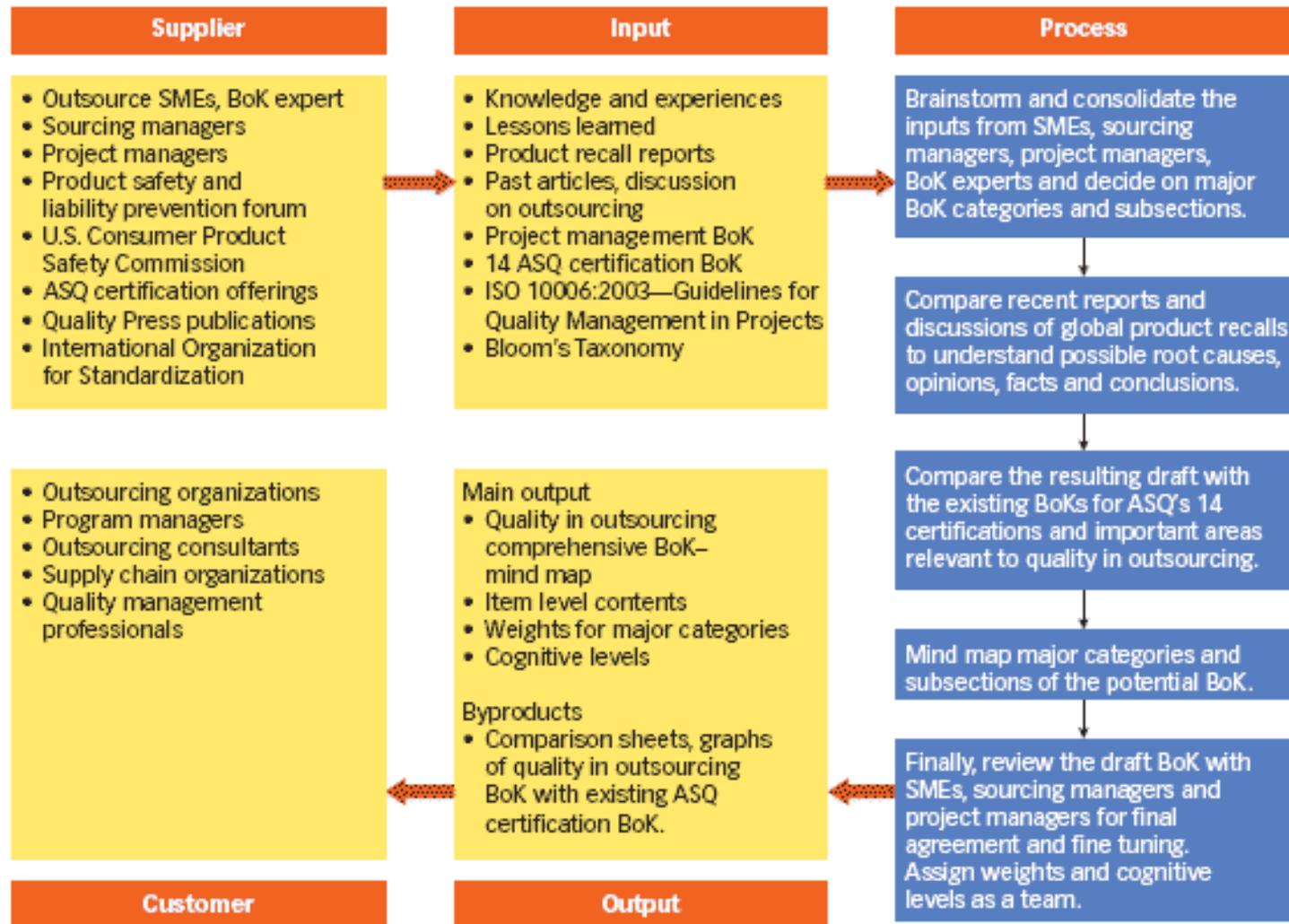
- Due diligence in applying quality basics that might seem generic to any program. (Example: scope management, roles and responsibilities, risk management, communication protocol, lessons learned, etc.)
- Careful advance consideration of the special circumstances presented by projects and programs in the current global economy. (Intellectual property, trade compliance, cultural differences, communication, virtual teams, tacit knowledge, logistics, process maturity, etc.)

Quality in Outsourcing Body of Knowledge



Body of Knowledge development

SIPOC for quality in outsourcing BoK / FIGURE 2



Comparison of Bodies of Knowledge

ASQ Certifications Body of Knowledge and Corresponding Cognitive Levels																
Outsourcing Bok	Expected cognition	Perceived weight	CMQ/ICE	CGE	CGA	CSQE (New)	CRE	CSQB	CSQCB	CCT	CBA	CHA	CQT	CCPA	CGA	CCI
Project management		10														
Project charter	Create							Create	Apply							
Project estimation and tracking	Analyze		Apply	Apply		Apply	Understand	Create	Apply					Analyze		
Risk management	Evaluate		Apply		Understand	Evaluate		Apply	Understand		Evaluate					
Lessons learned	Apply		Apply			Apply		Apply	Apply							
Team management		10														
Structure	Understand							Apply					Understand	Analyze	Apply	
Stage	Understand		Apply			Apply		Apply					Apply			Understand
Dynamics	Apply			Analyze	Analyze	Apply		Evaluate	Understand			Apply			Apply	Understand
Team building techniques	Apply		Apply					Apply				Apply	Apply	Apply	Apply	Understand
Roles and Responsibilities	Understand		Analyze					Understand	Apply	Understand		Apply		Understand	Understand	
Team decision tools	Apply					Apply		Apply	Apply							
Team performance evaluation	Evaluate		Evaluate					Analyze								
Communications Management		15														
Listening skills	Apply		Apply													
Types of communication	Analyze		Understand	Analyze	Analyze	Apply		Apply	Apply	Apply		Apply				
Global economy	Understand		Understand										Understand			
Technology	Understand		Analyze													
Translation quality*	Apply															
Knowledge management		15	Apply													
Structure*	Apply															
Skill, competency assessment*	Evaluate															
Training and development	Apply		Apply					Apply					Understand			
Tacit knowledge transfer*	Evaluate															
Regulatory limitations	Understand		Understand			Understand										
Supply chain management		30														
Supplier selection	Evaluate		Evaluate	Analyze		Evaluate										
Supplier communication	Apply		Evaluate													Understand
Supplier performance	Evaluate		Create	Analyze										Understand	Understand	
Supplier improvement	Apply		Create	Analyze												
Certification partnership	Evaluate		Evaluate							Understand						
Logistics*	Evaluate		Understand								Understand					
Lean Concepts	Apply		Understand					Analyze	Understand					Apply		
Quality engineering and management		20														
Code of ethics	Apply		Apply	Evaluate	Apply	Evaluate	Evaluate			Apply	Apply	Apply		Apply		
Business model and leadership*	Evaluate		Analyze	Apply	Apply	Apply		Understand								
Quality systems and auditing	Evaluate		Evaluate	Apply	Analyze	Apply				Understand	Evaluate	Analyze	Apply	Understand		Understand
Quality tools	Analyze		Create	Evaluate	Analyze	Apply	Apply	Evaluate	Evaluate	Analyze	Apply	Analyze	Create	Analyze	Apply	Apply
Product and process conformance	Evaluate			Analyze		Apply		Evaluate	Evaluate		Understand	Understand	Analyze	Understand		Understand
Product safety and liability*	Evaluate						Analyze				Apply					
		100														

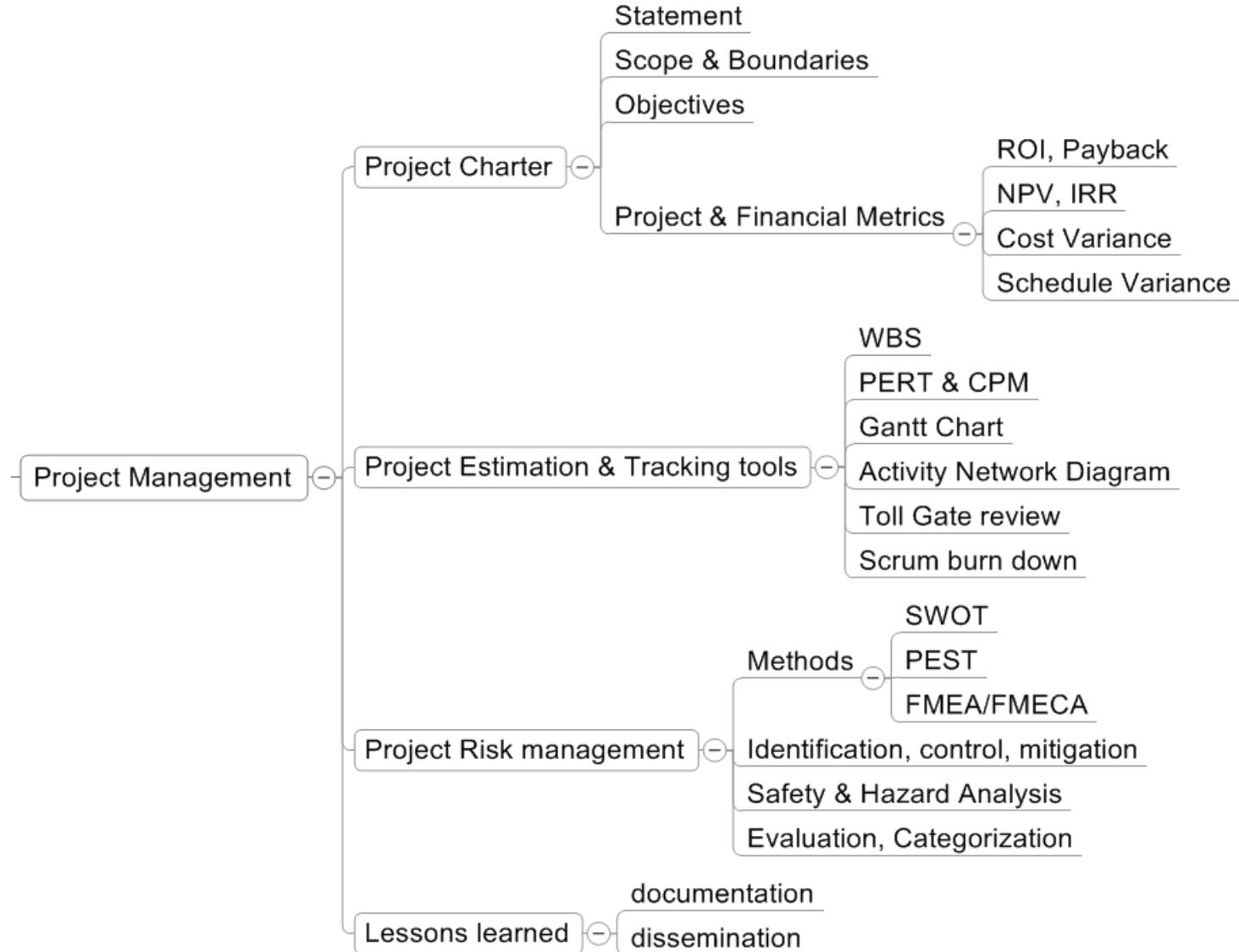


Exploring Major categories of Body of Knowledge



Allow audience to interact and provide any feedback on additional challenges & issues faced in every major category discussed in subsequent slides. (3 minutes / Category)

Project Management





Quality in Project Management

- Scope Creep: Scope creep can result in cost overrun and project delays, causing frustration and strain in the relationship with outsource partners.
- Risk Management: Do not underestimate the importance of a substantive approach to risk management. Quantifying risks in terms of dollars is one way to guarantee attention from team participants.
- Lessons Learned: Sharing project experiences can reduce waste, keep costs down and prevent embarrassment for management. Report items relevant to the current project in the first planning meeting.

Related Reading:

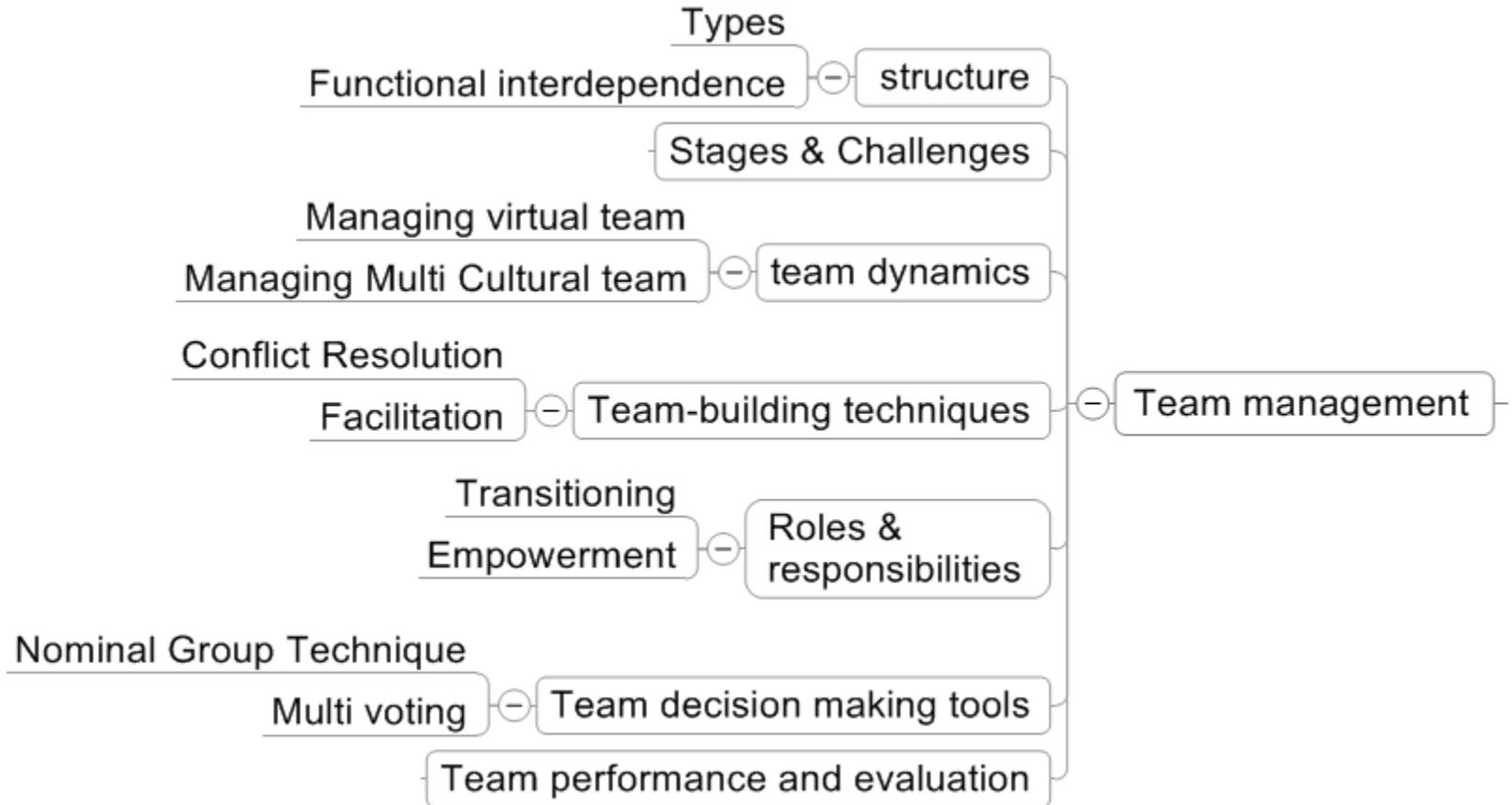
ISO 10006:2003, Quality management systems - Guidelines for quality management in projects

Project Management: A Systems Approach to Planning, Scheduling, and Controlling – Harold Kerzner





Team Management



Quality in Team Management

- Managing multicultural team: Cross-culture training for all team members will reduce the impact of cultural differences.
- Roles & responsibilities: A RACI or RASCI* format approach to roles and responsibilities can help identify gaps, overlap, and other aspects like accountability, consultation, support and information.
- Challenges-
 - Team attrition: Booming economy creating high demand for quality human resources.
 - Virtual teams: Productivity, tracking progress, lack of participation (cultural, communication), morale issues not visible.

Related Reading :

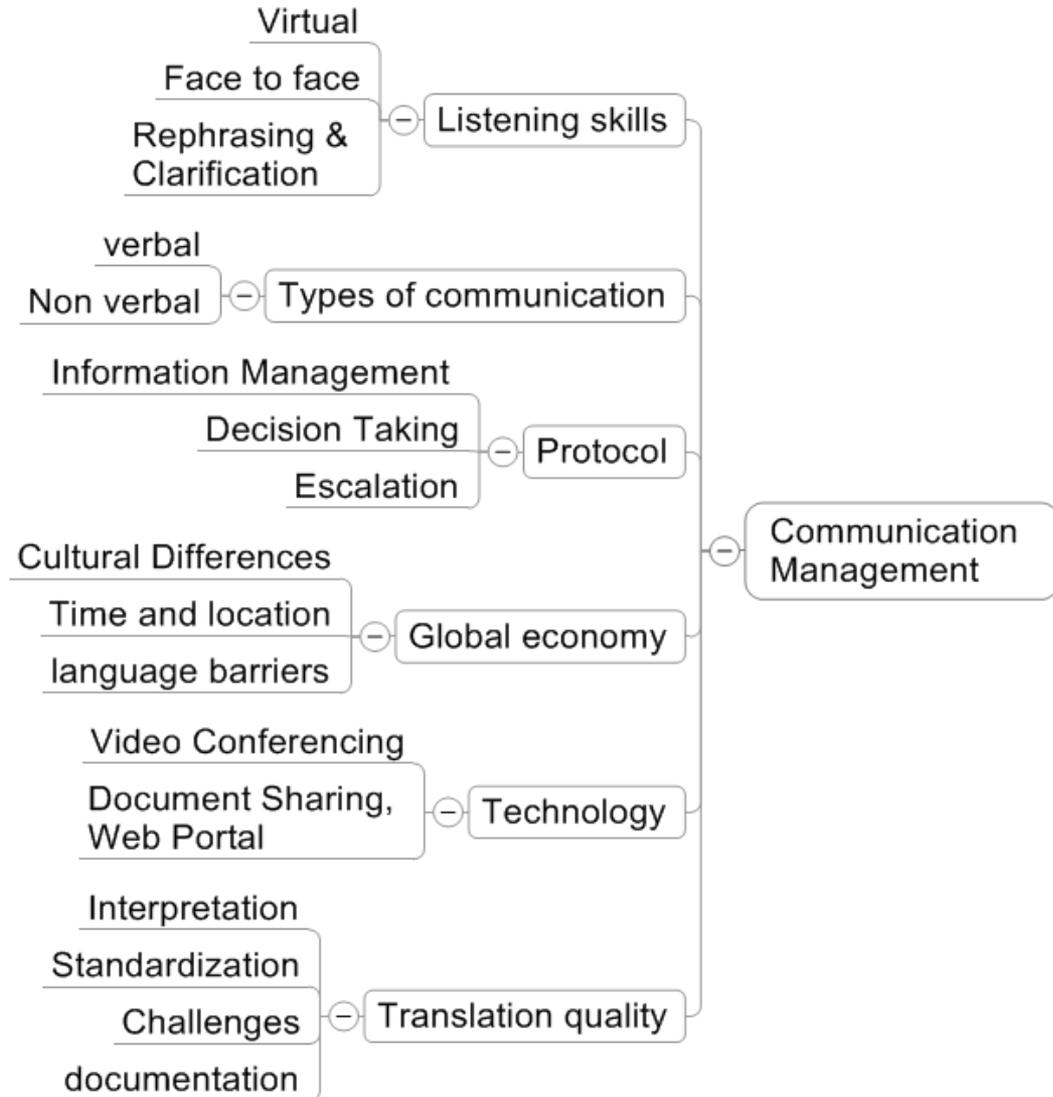
*RASCI- http://www.valuebasedmanagement.net/methods_raci.html

The Team Handbook, Third Edition, Joiner, Brian L.; Streibel, Barbara J.; Scholtes, Peter R.





Communications Management





Quality in Communication Management

- The lost art of listening: Active listening helps focus on the critical aspects of the communication from the noise around the process.
- Protocol: Develop communication and escalation protocol between the teams.
- Challenges:
 - Technical interpretation: We might need more than department admin asst and pocket translator. Develop a glossary of common vocabulary and operations definitions to be used consistently across both sides.
 - Virtual teams: Impact to the advantages gained from face-to-face interaction, nonverbal communication and personal relationships.

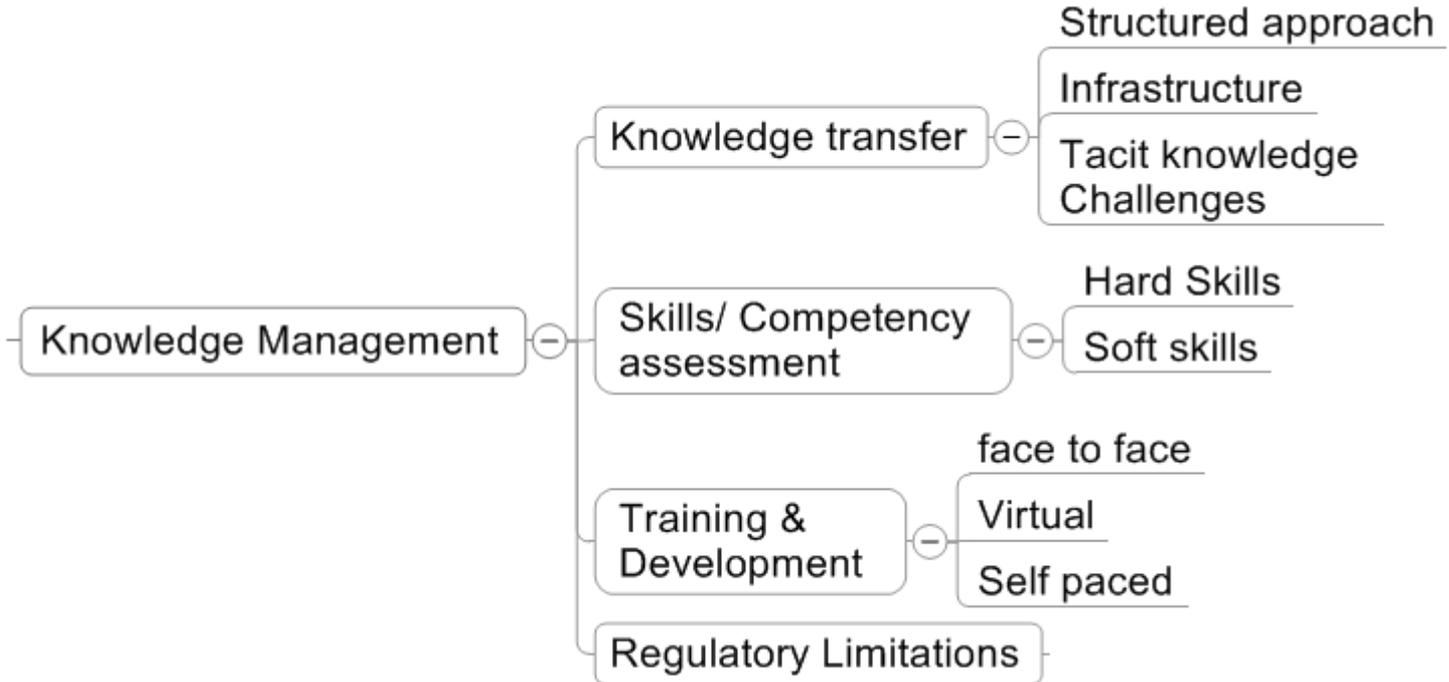
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Knowledge Management



Quality in Knowledge Management

- Structured Approach: Understand the DIKW chain-the metaphorical link, pace and mode of transfer.
- Infrastructure: Explore web portal, SharePoint[®], custom database with intelligent query options, etc. Wealth of information is useless if we cannot retrieve.
- Scope: Knowledge management should extend beyond domain expertise. Should also cover statutory, regulatory, legal requirements.
- Challenges:
 - Tacit Knowledge: Encourage documenting tacit knowledge by driving out fear.

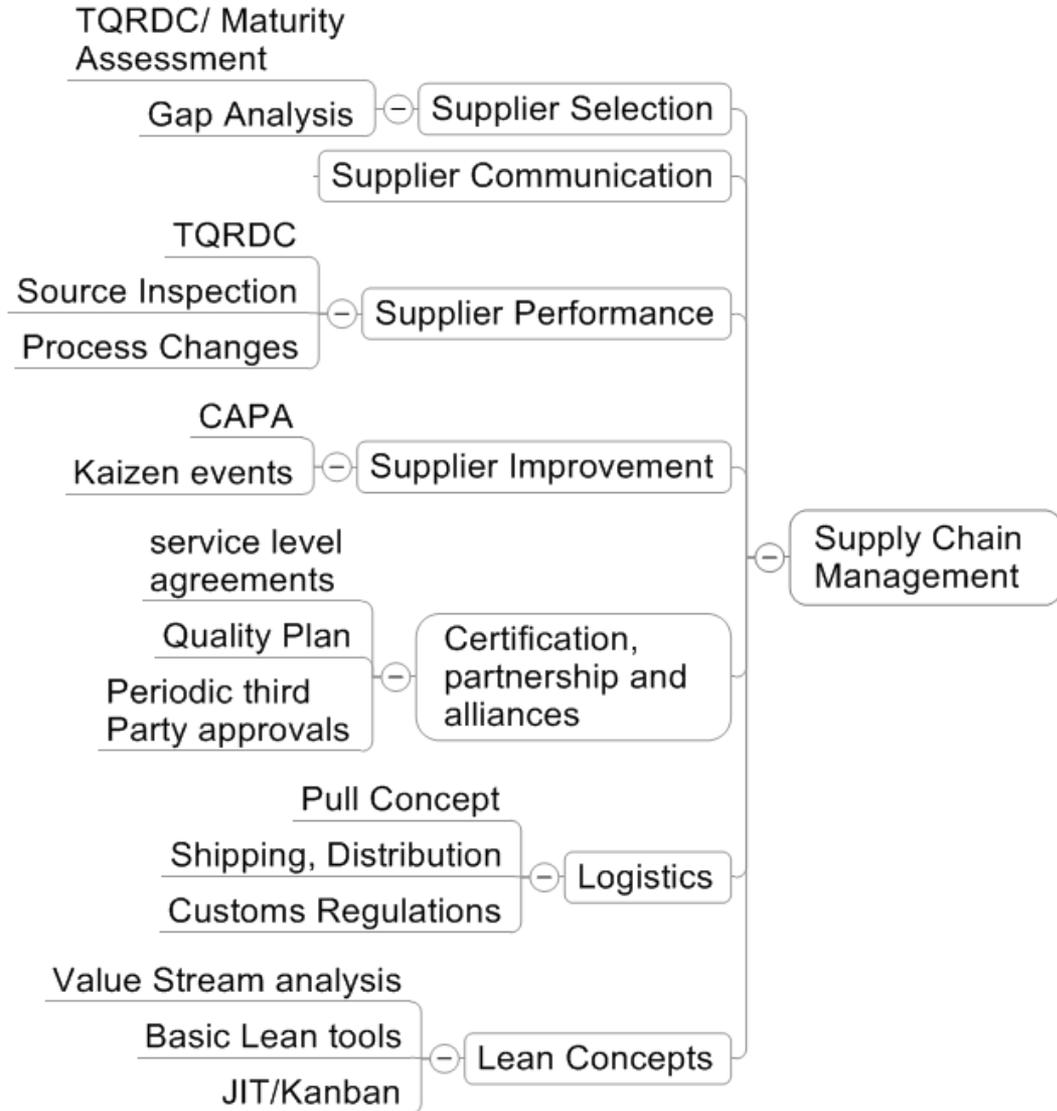
Related Reading :

Managing Industrial Knowledge: Creation, Transfer and Utilization, Editors: Nonaka & Teece
Sage Publications





Supply Chain Management



Quality in Supply Chain Management

- Maturity Assessment: Effective supplier relationships are built on comprehensive maturity assessments, and understanding the gap.
- Service Level Agreements: Cost reduction from outsourcing partner should come from efficiency and not compromising the requirements.
- Partnership-Collaboration: The fundamentals at each location must first be in place. The maturity assessment should reveal the outsource partner's readiness for such collaborations .
- Challenges:
 - Intellectual Property: Your outsourcing partner likely also provides service to your competitors, so you should assess the controls in place for the security of your intellectual property.

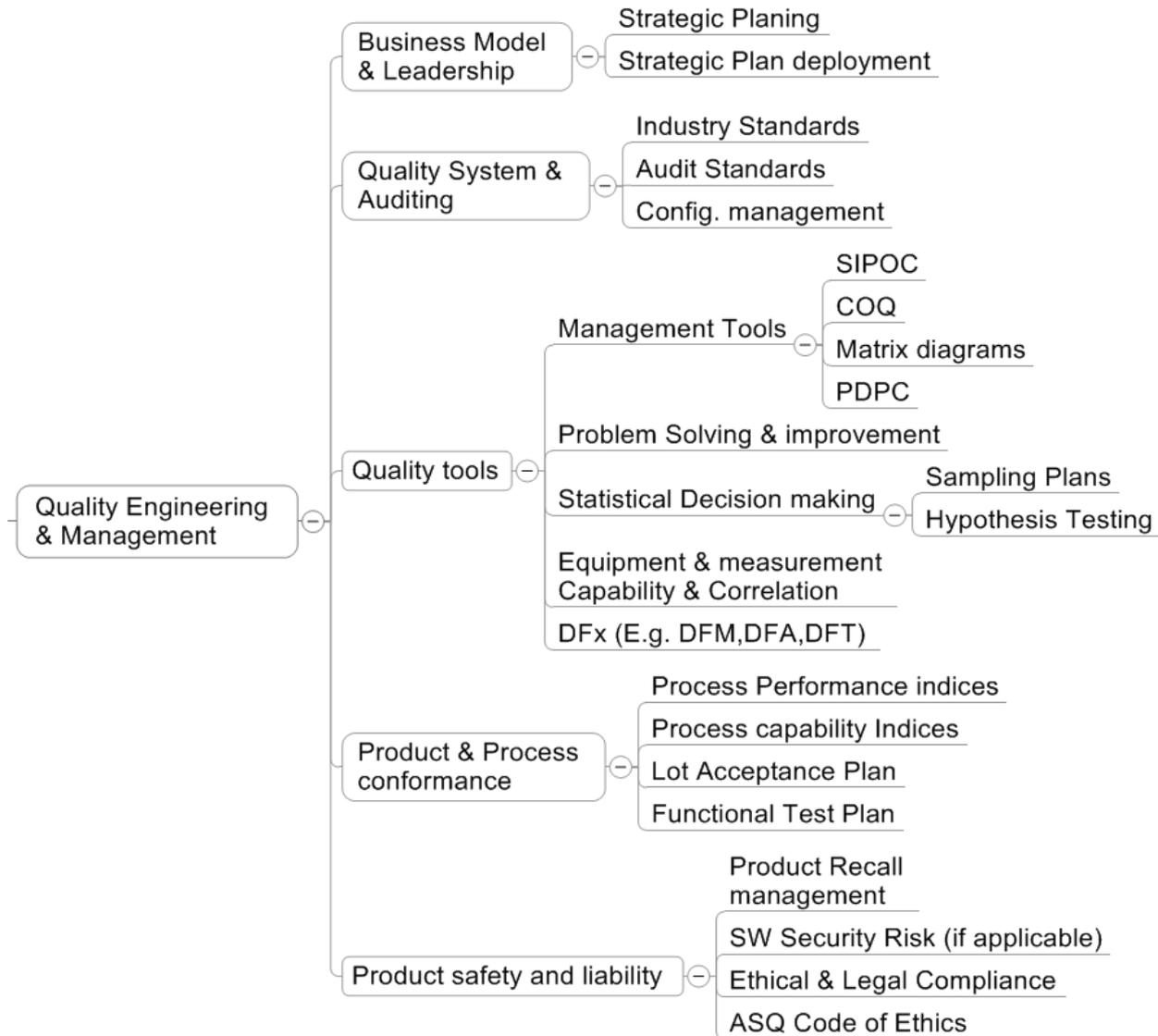


Related Reading :

Purchasing and Supply Chain Management, by Robert M. Monczka (Author), Robert B. Handfield (Author), Larry C. Giunipero (Author), James L. Patterson (Author)



Quality Engineering & Management





Quality Engineering and Management

- Business model :Awareness of the outsource partner's business model, strategic planning and deployment helps in identifying any synergy between the organizations and areas to strengthen future collaboration.
- Traceability-record retention: This suddenly becomes very important in times of field failures and subsequent product recalls. The level and depth of traceability is usually an economic decision.
- Third party surveillance: Organization should set up an independent third party to periodically certify product safety. Products' and services' overall life cycle costs should always be kept in mind while outsourcing.
- Challenges:
 - Failure cost: One major product recall, liability suit or intellectual property violation might wipe out the initial savings.

Related Reading :

Juran Quality Handbook, by J.M. Juran (Author), A.Blanton Godfrey (Author) (McGraw-Hill International Editions)





Acronyms & Abbreviations

- **CAPA = corrective and preventative actions**
- **CPM = critical path method**
- **COQ = cost of quality**
- **DIKW = Data, information, knowledge, and wisdom**
- **DFA = design for assembly**
- **DFM = design for manufacturability**
- **DFX = design for excellence**
- **DFT = design for test**
- **FMEA = failure mode effects analysis**
- **FMECA = failure mode effects criticality analysis**
- **IRR = internal rate of return**
- **NPV = net present value**
- **PDPC = process decision program chart**
- **PEST = political, economic, social and technological analysis**
- **PERT = program evaluation and review technique**
- **ROI = return on investment**
- **SWOT = strengths, weaknesses, opportunities and threats**
- **SW = software**
- **TQRDC = technology, quality, responsiveness, delivery and cost**
- **WBS = work breakdown structure**



Recommended Reading

- Randall L. Goodden, “Better Safe Than Sorry,” *Quality Progress*, May 2008, pp. 28-34, addresses product safety and liability in detail.
- Cliff Welborn, “Using FMEA to Assess Outsourcing Risk,” *Quality Progress*, August 2007, pp. 17-21.
- George C. Elliott, “International Outsourcing: Values vs. Economics,” *Quality Progress*, August 2006, pp. 20-25.
- David K. Watkins, “Quality Role in Management’s Global Sourcing,” *Quality Progress*, April 2005, pp. 24-31.
- Yule S. Peterson, “Outsourcing: Opportunity or Burden?,” *Quality Progress*, June 1998, pp. 64-65.



Acknowledgements

- Ms.Noel Wilson, ASQ Body of Knowledge for review, suggestions, manuscript coordination and being a continuous source of encouragement.
- Dr. Harvey Trop, PhD, JDSU for the initial review and suggestions.
- Mr. Randall L. Goodden, ASQ Fellow, president of Goodden Enterprises LLC for the initial review and feedback.
- Mr. Pradip Mehta, P.E, ASQ Fellow, Principal Mehta Consulting, LLC, for the initial review and feedback.