ORGANIZATIONAL KNOWLEDGE

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The IAQG is a legally incorporated international not for profit association (INPA) with membership from the Americas, Europe and the Asia Pacific Region (Rev. 08-2015)
Requirement

• **AS9100:2016 Clause 7.1.6**
  – The organization shall determine the knowledge necessary for the operation of its processes and to achieve conformity of products and services.
  – This knowledge shall be maintained and be made available to the extent necessary.
  – When addressing changing needs and trends, the organization shall consider its current knowledge and determine how to acquire or access any necessary additional knowledge and required updates.
Requirement

• NOTE 1: Organizational knowledge is knowledge specific to the organization; it is generally gained by experience. It is information that is used and shared to achieve the organization's objectives.
Requirement

• NOTE 2: Organizational knowledge can be based on:
  
  – Internal sources (e.g., intellectual property; knowledge gained from experience; lessons learned from failures and successful projects; capturing and sharing undocumented knowledge and experience; the results of improvements in processes, products, and services);
  
  – External sources (e.g., standards; academia; conferences; gathering knowledge from customers or external providers)
Definitions

• Law Dictionary
  – “The sum of all knowledge within an organization pooled between all of it’s members”

• BusinessDictionary.com
  – “Individual knowledge paired with that of other individuals in an organization. Organizational knowledge is the type of company asset to which no value can be named. When individuals pool their knowledge within an organization, that knowledge
Definitions

• BusinessDictionary.com
  – “Individual knowledge paired with that of other individuals in an organization. Organizational knowledge is the type of company asset to which no value can be named. When individuals pool their knowledge within an organization, that knowledge can give the organization advantages over others in the same field”
Definitions

• Cambridge English Dictionary
  – “The different knowledge and skills that the employees of a large company of organization have, and how these can be used and shared to make the organization more effective”
AS9100:2016 Definition

  – Organizational knowledge is knowledge specific to the organization; it is gained by experience;
  – It is information that is used and shared to achieve the organization’s objectives.
AS9100:2016 Definition

• IAQG International Dictionary 11 Jul 2013
  – Knowledge - Combination of data and information. If expert opinion, skills and experience are added, this will result in a valuable asset which can be used to aid decision making.
  – Note 1: Knowledge may be explicit and/or tacit, individual and/or collective.
Types of Knowledge

• Explicit
  – Formalized, codified
  – Referred to as “know-what”
  – Easier to replicate
  – Easier to document and share
  – Fairly easy to identify, store and retrieve
  – Contributes to efficiency
  – Found in: databases, memos, notes, documents
Types of Knowledge

• Tacit
  – Intuitive, experience-based
  – Referred to as “know-how”
  – Context dependent, personal in nature
  – Hard to articulate
  – Difficult to document
  – Harder to steal
  – Found in: the minds of stakeholders
    • Includes cultural beliefs, values, attitudes, skills, expertise
Types of Knowledge

EXPLICIT

TACIT
Rationale

• (AS9100:2016 FAQ)
  – Requirements regarding organizational knowledge were introduced for the purpose of safeguarding the organization from loss of knowledge and encouraging the organization to acquire new knowledge as its business context changes and share the knowledge with others.
  – Knowledge within the company is not passed on or only available to one or a few people.
  – Lack of knowledge could lead to ineffective performance.
Rationale

• ISO9001:2015 A.7
  – Addresses the need to determine and manage the knowledge maintained by the organization
    • To ensure the operation of its processes
    • To ensure it can achieve conformity of products and services
Rationale

• Requirements were introduced to:
  – Safeguard organizations from loss of knowledge
    • Through staff turnover
    • Failure to capture and share information
  – Encourage organizations to acquire knowledge
    • Learning from experience
    • Mentoring
    • Benchmarking
Rationale

- Failure to learn from mistakes is just another trait of dysfunctional organizations.
- “Those whose cannot remember the past are condemned to repeat it.” George Santayana
- There are things that schools can’t teach
  - An experienced machinist knows how his equipment behaves – especially important with older equipment.
Audit Considerations

• 9100:2016 Auditor Guidance Material
  – Organizational approach towards the determination and capture of knowledge including for example:
    • Planning for knowledge capture (knowledge management plan, present and future needs, sustainability, knowledge sources, approach, scope, ownership, timeliness, knowledge distribution)
    • Knowledge gained from experience (personal development, succession planning, subject matter expertise, mentoring programs, coaching, peer reviews, business exposure)
Audit Considerations

• **9100:2016 Auditor Guidance Material (Cont)**
  
  • Knowledge acquisition (intellectual property, patents, lessons learned over time, explicit and tacit knowledge, professional membership, industry associations, benchmarking, conferences, communities of practice, interested parties, journals, academia)

  • Maintain and share organizational knowledge (knowledge management system, electronic media, intranet, database, repository, libraries, communities of practice, newcomers mentoring, subject matter experts, continual improvement, sharing good practice, QMS updates)
Audit Considerations

• International Accreditation Forum
  – Auditing Practice Group Guidance on Organizational Knowledge dated 13 January 2016
  – Auditors must be aware that having documented information may not necessarily mean that the organization’s knowledge is appropriately determined.
Audit Considerations

– Many organizations have already initiated systematic approaches to knowledge management and have mature approaches

– Others will be taking their first steps
  • Auditors should bear in mind Plan-Do-Check-Act (going from a starting point, then develop and improve)
  • Different situations should be addressed appropriately
Audit Considerations

– Knowledge and knowledge management very considerably
  • Organization’s context
  • The sector the organization operates in
  • The competitiveness of its markets
– Some organization’s operate at the “Frontier of Knowledge”
  • In competition for knowledge with other organizations
– Others operate in relatively stable environments
Audit Considerations

– Organizational knowledge also includes the knowledge related to quality management and quality activities

– Strong link between organizational knowledge and competence of people
  • The latter being the ability to apply knowledge

– Look at how the organization determines and makes available knowledge needed on changing situations and for new products and services
Audit Considerations

• Evaluate if the organization considers internal and external sources:
  – Learning from failures, near miss situations
  – Gathering knowledge from customers, suppliers, partners
  – Capturing knowledge that exists within the organization
  – Benchmarking against competitors
  – Sharing organizational knowledge with relevant interested parties
  – Updating based on results of improvement
  – Knowledge from conferences, workshops, etc
Audit Considerations

• The requirements for organizational knowledge in the context of a QMS can be summarized as follows:
  – Determine
  – Make available
  – Preserve
  – Protect
  – Acquire and access new knowledge

• The knowledge needed for the operation of QMS processes and achieving conformity
Audit Considerations

• **AS9100:2016 FAQ**
  – Implementation considerations include:
    • Benefits of lessons learned
    • Identification of experts able to transfer knowledge
    • On the job training
    • Tutorial sessions
    • Documented information on how to perform tasks
    • Competency matrices
    • Succession planning activities
Final Thought

• “The only irreplaceable capital an organization possesses is the knowledge and ability of its people. The productivity of that capital depends on how effectively people share their competence with those who use it.”  Andrew Carnegie
Final Thoughts

Questions?
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