[Selected ANSI/ISO/ASQ Q9004 clauses for resource management and measurement, analysis and improvement]

ISO 9004 Assessment Criteria Checklist for Performance Improvement Instructions:

These assessment questions are organized by standard (ANSI/ISO/ASQ Q9004: Quality management systems – Guidelines for performance improvements) clause numbers starting with clause 4. The question order matches the order of the criteria in the guideline standard. This assessment assumes the organization has implemented an ISO 9001 quality management system or equivalent (no ISO 9001 questions are included). Key words are bolded to aid assessors and comments (not included in the standard) are in italic. ISO 9000 word definitions apply. Some word definitions have been augmented or taken from other sources for value added purposes. To conduct the assessment:

- 1. Read the question and collect evidence.
- 2. Rate the deployment of the criteria by the organization using the following 1-5 rating scale.

Maturity Rating	Description	Guidance
NA	Not Applicable	These criteria are not appropriate for the organization.
1	No formal approach	No systemic approach is evident. There are no results, poor results or unpredictable results
2	Reactive approach	Problem or corrective-based systemic approach. Minimum data on results is available. The organization responds to issues as needed.
3	Stable formal system approach	Systemic process-based approach. This is an early stage of systemic improvements. There is data available on conformance to objectives and existence of improvement trends. There is an established method or an approach.
4	Continual improvement emphasized	Improvement process in use, with good results and sustained improvement trends. The process is effective and is continually improved.
5	Best-in-class performance	Strongly integrated improvement process; best-in-class benchmarked results demonstrated.

Table 1: Ratings Table

3. Determine if there is a need for improvement and how adherence to the criteria would benefit the organization. If implementation would benefit the organization, mark the 'improvement' column with an 'X.' The maturity of some criteria may be rated a 2 or 3 but improvement may not be warranted or recommended at this time.

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I	Ref.	Question	Rating	Improve	Observation/Improvement
		(comments in italic are not in the	1-5	X	Action
		standard)	1-3		[evidence - data - action plan]

- 4. Record evidence and rationale for improvement in the observation/ improvement action column.
- 5. Answer all the questions and report areas identified as needing improvement.

There is some redundancy in clauses 4 and 5, however we decided to include all ISO 9004 criteria to ensure all important criteria are included in this assessment tool. Once you are beyond the system and management

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criteria, the guidance becomes less abstract. To conduct the assessment you will need a good grasp of some frequently repeated terms and phrases. Become familiar with the terms in table 2 appendix.

Effectiveness: 1) extent to which planned activities are realized and planned results achieved (ISO 9000, 3.2.14). 2) the consideration or balance between achieving the desired results (the product) and how they were achieved (the process) [After the Quality Audit, Quality Press, 2nd ed, page 116].

Efficiency: 1) relationship between the result achieved and the resources used (ISO 9000, 3.2.15). 2) accomplishes objectives and goals with optimal use of resources [After the Quality Audit, Quality Press, 2nd ed, page 113].

Examples of **support processes (7.1.3.1):** managing information, training of people, finance-related activities, infrastructure and service maintenance, application of industrial safety/protective equipment, and marketing.

Interested Party: person or group having an interest in the performance or success of an organization (ISO 9000, 3.3.1). Interested party examples include: customers and end-users, people in the organization, owners/investors (such as shareholders, individuals or groups, including the public sector, that have a specific interest in the organization), suppliers and partners, and society in terms of the community and the public affected by the organization or its products. ISO 9004, 5.2.1

Performance: 1) the act or process of carrying out something: the execution of an action. 2) the ability to perform: capacity to achieve a desired result. Accessed 5/20/03 Merriam-Webster Dictionary, http://unabridged.merriam-webster.com.

Continual Improvement: 1) recurring activity to increase the ability to fulfill requirements (ISO 9000, 3.2.13); 2) a process of on-going changes that add value to an organization (*Continual Improvement Assessment*).

Table 2: Key Words

Some of the ISO 9004 criteria is new and some is an expansion of the scope of ISO 9001. A common theme throughout ISO 9004 is improving the effectiveness and efficiency of processes. Efficiency was excluded from the ISO 9001 conformance standard. In the simplest terms, adding efficiency means that process outputs should not only meet requirements, but be done on-time, within budget, without redundancy or waste and in a manner that pleases the output users (customers). The ISO 9004 criteria goes beyond meeting customer requirements to embrace the requirements of all interested parties. The performance improvement criteria scope also includes control of support processes as part of a mature management system. Overall, ISO 9004 criteria should apply to the entire organization and should not be limited to product or service line processes.

Tip: When assessing a function, first brainstorm and list interested parties. This will help you apply the criteria when asked about meeting the needs of interested parties.

We have reworded some criteria to improve the understanding and usefulness. If you have a question about the intent of the criteria refer to the standard for further clarification.

Now you are ready, Good Luck

Selected Example Clauses 6.5, 6.6, 6.7, and 8.1 ANSI/ISO/ASQ Q9004 Assessment Criteria Checklist for Performance Improvement

Ref.	Question (comments in italic are not in the standard)	Rating	Improve X	Observation/Improvement Action
0.5		1-5	^	[evidence - data - action plan]
6.5 6.5-1	Information (resource management) Is management using data to make factual			
0.5-1	decisions and stimulate innovation? Does			
	management:			
	a. identify its information needs,			
	b. identify and access internal and external			
	sources of information,			
	c. convert information to useful knowledge,			
	d. use the data, information, and knowledge			
	for setting and meeting strategies and			
	objectives, e. ensure appropriate security and			
	confidentiality, and			
	f. evaluate the benefits derived from using the			
	information in order to improve information			
	and knowledge conversion processes?			
6.6	Suppliers and partnerships			
6.6-1	Does management establish the kind of			
	relationships with suppliers and partners that			
	fosters good communication, and 2) mutually enhances the effectiveness and			
	efficiency of processes (customer, supplier,			
	and partner) by creating value?			
	9004 examples of increasing value include:			
	optimizing the number of partners, setting up			
	two- way communication links for rapid			
	resolutions of problems, conducting joint			
	capability studies, monitoring supplier delivery process efficiency, promoting continual			
	improvement, participating in joint continual			
	improvement projects, involve suppliers in			
	product/service design stages, involve			
	suppliers in determination of purchasing needs			
	and strategies, and recognize achievements of			
	suppliers and partners.			
6.7	Natural resources			

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6.7-1	Has management considered the availability of natural resources which may influence the organization's performance? Definition: natural resources: capacities (as native wit) or materials (as mineral deposits and waterpower) supplied by nature. Accessed 5/20/03 Merriam-Webster Dictionary, http://unabridged.merriam-webster.com Bottom of Form			
6.7-2	Does the organization have plans (such as contingency plans), to ensure the availability or replacement of these resources in order to prevent or minimize negative effects on the performance of the organization?			
6.8	Financial resources			
6.8-1	Does management define financial resources needs and sources just as they do other resources (such as people or infrastructure)?			
6.8-2	Does the control of financial resources include activities for comparing actual usage against plans, and taking the necessary action?			
6.8-3	Does management plan, make available, and control the financial resources necessary to achieve the organization's objectives?			
6.8-4	Has management explored the development of innovative financial methods to support and encourage improvement of the organization's performance? Innovative methods could be: Activity Based			
	Costing (ABC), Cost Opportunity Risk ⁱⁱ (COR), Reason-Pain or Finding-Pain Matrix ⁱⁱⁱ , and so on.			
6.8-5	Do management reviews include the financial reports of the quality management system's (QMS) performance and product conformity?			
	Comment: Improving quality and the QMS will also result in financial benefits such as reducing failures and recalls, eliminating waste, reduce cycle times, reduce warranty claims, improve customer loyalty, and so on.			
-	Tag.	ı	1	,
8	Measurement, analysis, and improvement			
8.1	General guidance			

8.1.1	Introduction		
8.1.1-1	1 5		
	measurement, collection, and validation of		
	data? Is the data used to maintain and improve		
	(ensure) the organization's performance and the		
	satisfaction of interested parties?		
8.1.1 -2	Does this (data management process) include		
	review of the validity and purpose of		
	measurements and use of measures (data) to add		
	value?		
	9004 example measurements of performance (comments		
	in brackets): product (yield, rate, throughput, on-time,		
	defect free, etc.), process capability, achievement of		
	objectives (progress), satisfaction of interested parties		
	(survey, goodwill, loyalty, returns, participation, etc.).		
8.1.1 -3	Does the organization continually monitor		
	performance improvement activities (actions)? Are		
	there records of implementation of improvement		
	actions?		
	Comment: Examples may be management review,		
0.4.4.1	functional reports, score cards, MBO, audits, and so on.		
8.1.1-4	Are the results of the analysis of data from		
	improvement activities one of the inputs to		
	management review? Is the information used to		
1	improve organizational performance?		
	Data management issues to be considered	 	
8.1.2 -1	Is measurement data converted to information and	 	
	is that knowledge (information) benefiting the		
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	organization?		
	organization?		
	organization? Comment: Does the process of analyzing and converting		
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8.1.2 -5	Are measurements of customer satisfaction considered vital for evaluation of the organization's		
	performance?		
	Comment: One indication that customer satisfaction measures are considered vital to the organization would		
	be linking individual and functional performance ratings to		
0.4.0.0	customer satisfaction measurements.		
8.1.2-6	Are the results of measurement processes used as the basis for performance improvement and the		
	involvement of interested parties? Is its		
	(information) purpose clearly defined? Are the		
	appropriate tools implemented for the		
	communication of information? Is the		
	communication with interested parties measured for		
	effectiveness and efficiency to determine whether the information is timely and clearly understood?		
	the information is timely and deally anderstood.		
8.1.2 -7	Are statistical techniques used (where appropriate)		
	for the benefit of the organization?		
	Comment: Benefits may be the understanding of process		
	and measurement variation and the subsequent control of		
	variation		
8.1.2 -8	· · · · · · · · · · · · · · · · · · ·		
	gauge (assess) the maturity of the quality management system, 2) determine the level of the		
	organization's performance, and 3) define		
	opportunities for performance improvement?		
8.2	Magazina mantand manifasina		
8.2.1	Measurement and monitoring		
0.4.1	Measurement and monitoring of system performance		
8.2.1.1	General		
V.2. I. I	General		

End example

ⁱ Taken from ANSI/ISO/ASQ Q9004-2000, Appendix A ⁱⁱ Russell and Regel, *After the Quality Audit*, ASQ Quality Press, 2000 ⁱⁱⁱ Russell, *Continual Improvement Assessment*,