Chapter 13. HR, Training & Competency

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0) Introduction

There are many applicable clauses in this chapter. Organization Knowledge is a new, rather confusing addition to this broad area. There are also other new subtle additions. For practical purpose, internal auditor competencies are discussed in Chapter 33, where second party auditor competencies are discussed under Chapter 25, Purchasing.

1) 7.1.1 (Resource) General. (ISO9001)

(Clause Description-Paraphrase)

The organization shall determine and provide the resources needed for the establishment, implementation, maintenance and continual improvement of the quality management system. The organization shall consider: (a) the capabilities of, and constraints on, existing internal resources; (b) what needs to be obtained from external providers.

 (Highlights of the clause)
- (Ref to old Standards)There has been a similar clause, 6.0 Resource Management, 6.1 Provision of Resources, in the older version of ISO9001.
- Basically, resources consist of infrastructure, equipment and people. The Clause explains that these resources are for the purpose of establishing, implementing, maintaining and continually improving the QMS, and to achieve customer satisfaction.
- What is new is that the Organization shall assess if there are constraints and lack of capabilities internally, and what needs to be procured externally
- Severe lack of resources, including manpower, and doing nothing to improve is a nonconformance.

(Compliance Best Practice)

> *7.1.1 (Resource) General.*
> - *This is a concept clause, actual provision is by management and implementation by relevant departments and functions.*
> - *There is generally no need to produce any additional documentation here, as evidence.*

> - *However, if there are obvious lacking of resources, some analysis should be done and actions taken. External procurement to fill gaps is allowed.*

2) 7.1.2 People (ISO9001)

(Clause Description-Paraphrase) The organization shall determine and provide the persons necessary for the effective implementation of its quality management system and for the operation and control of its processes.

(Highlights of the Clause)
- (Ref to old Standards). This is something new and probably came about that many organizations are controlling on headcount too tightly, to the point of quality being affected
- Auditors can now raise NC on lack of manpower, which is rather new. Therefore organization should be more realistic with manpower provision.

(Compliance Best Practice)

> #### 7.1.2 People
> - *See 7.1.1 above.*

3) 7.2 Competency (ISO9001)

(Clause Description-Paraphrase)
 The organization shall: (a) determine the necessary competence of person(s) doing work under its control that affects the performance and effectiveness of the quality management system; (b) ensure that these persons are competent on the basis of appropriate education, training, or experience; (c) where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken; (d) retain appropriate documented information as evidence of competence.
NOTE: Applicable actions can include, for example, the provision of training to, the mentoring of, or the reassignment of currently employed persons; or the hiring or contracting of competent persons.

(Highlights of the Clause)
- (Ref to old Standards).There was a similar clause, 6.2.2 Competence, training and awareness, in the previous version of ISO9001
- The previous requirements are all retained in the new Clause.
- There are two subtle changes (a) persons under its control are also included. In other words, the onsite suppliers are included; (c) training is removed as the only means to acquire competence. It can still be used but no longer specified as the only means of acquiring competency.
- Other forms of actions can be provided in place of training e.g. mentoring, re-assigning of currently employed persons, or hiring or contracting of competent persons (see NOTE)
- Whatever actions taken, evaluation of the effectiveness of the actions taken is required

(Compliance Best Practice)

> #### 7.2 Competency
> 1. *Competency is in relations to the job expectations. To judge competencies, a basis is required. Job Description (JD) is one convenient tool for this purpose. See **Exhibit 13-1.***

2. *You need to periodically update the JD to include changes either: a) on the job, b) ISO changes, c) customer requirement changes, c) new management directives etc. Incorrect JD leads to wrong preparation of skill sets*
3. *OJT should have been developed from the JD. See **Exhibit 13-2.***
4. *As a general concept, training should be based on JD, whether OJT or annual. You should do the gap analysis to guide your training plan, for the immediate year. Do not attempt too far ahead, to avoid getting overloaded (**Exhibit 13-3**). Gap for OJT is based on the recruitment interview, and annual training based on TNA (**Exhibit 13.5**), and Organization Knowledge gap (**Exhibit 13-9**).*
5. *Gaps identified from Organizations knowledge analysis should be included, either as standard training, or ad-hoc training **(Exhibit 13-9)***
6. *Training evaluations must be done after training. Evaluations can be carried out on any appropriate formats as defined by the organization. There should be 2 evaluations, one immediately after the training, and another 1-6 months after the training See **SN-13.9** for explanation. See **Exhibit 13-4** (internal) and **Exhibit 13-6** (External).*
7. *TNA shall be conducted to detect weaknesses for improvement efforts. See **Exhibit 13-5.***
8. *TNA results shall help to decide on training for each employee for the coming year. TNA may be a survey, based on appraisal, etc**.***
9. *Despite of all efforts to be accurate, some areas may still be overlooked, especially due to changes. To respond to such possibilities, the Annual Training Plan (AMP) should be allowed to change. For isolated or individual situations, a Training Application Form may be used for supplementary budget approval. See **Exhibit 13-6.***

4) 7.2.1 Competency-supplemental (IATF16949)

(Clause Description-Paraphrase)

A documented procedures is needed for identifying training needs, including awareness and achieving competence of all personnel performing activities affecting conformity to product and process requirements. Personnel performing specific assigned tasks shall be qualified, as required, with particular attention to the satisfaction of customer requirements.

(Highlights of the Clause)
- (Ref to old Standards) This Clause was known as 6.2.2.2 Training, in the older ISO/TS 16949 Standard.
- The new requirement is almost word-for-word reproduction of the old clause, except process is added besides products. The 2 NOTES of the older version have been removed.
- A documented procedure is needed, to cover awareness, and competency building
- All persons whose work affect quality shall be trained, qualified, with particular attention to the satisfaction of customer requirements.

(Compliance Best Practice)

7.2.1 Competency-supplemental
(Additional to Clause 7.2)
1. *Competency needs a documented information. Therefore a documented process is required. This should be already available in all organizations, as it had been a mandatory procedure in the previous version of IATF. .*
2. *All persons doing work that impact quality shall be qualified as per JD*
3. *Customer specified training shall be complied. **SN-13.8***

5) 7.2.2 Competency-on-the-job training (IATF16949)

(Clause Description-Paraphrase)

The organization shall provide on-the-job training (which shall include customer requirement training) for personnel whose work can affect for personnel in any new or modified job affecting conformity to quality requirements, internal requirements, regulatory or legislative requirements; and this shall include contract or agency personnel.

The level of detail required shall be commensurate with the education level and also the complexities of the job. Persons whose work can affect quality shall be informed about the consequences of nonconformity to customer requirements.

(Highlights of the Clause)

- (Ref to old Standards). There was a similar clause, 6.2.2.3, Training on the job, in the previous standard. Contents are quite similar, except customer and regulatory requirements are now added.
- Customer requirement training shall be included for a) personnel whose work can affect quality, and b) for personnel in any new or modified job affecting conformity to quality requirements, internal requirements, regulatory or legislative requirements;
- Contract or agency personnel shall be included in the training program
- The level of detail required shall be commensurate with the education level and also the complexities of the job.

(Compliance Best Practice)

> ### 7.2.2 Competency-on-the-job training
> *(Additional to Clause 7.2 & 7.2.2)*
> 1. *Contract or agency personnel shall be included for training. Records shall be kept as evidence.*
> 2. *For this type of personnel, WI training is the minimum to be provided.*

6) 7.3 Awareness

(Clause Description-Paraphrase)

The organization shall maintain documented information that demonstrates that all employees are aware of their impact on product quality and the importance of their activities in achieving, maintaining, and improving quality, including customer requirements and the risks involved for the customer with non-conforming product.

(Highlights of the Clause)

- This requirement was also found in the older standard under Clause 6.2.2. The awareness part has been taken out to become a clause by itself.
- For awareness, the organization shall ensure persons doing work under organization's control are aware of
- The quality policy, b) Relevant quality objectives, c) Their contribution to the effectiveness of the QMS, including the benefits of improved performance, d) The implications of not conforming with the QMS requirement

(Compliance Best Practice)

> ### 7.3 Awareness

7) 7.3.1 Awareness-supplemental (IATF16949)

(Clause Description-Paraphrase)

The organization shall maintain documented information that employees are aware of their impact on product quality and the important of their activities in achieving, maintaining and improving quality, including customer requirements and the risks involved for the customer with non-conforming product.

(Highlights of the Clause)
- This is totally new, but content is about the same as 7.3 above, except it emphasises on customer requirements and the risk to customers with non-conforming product.
- And documented info (records) are needed as evidence.

(Compliance Best Practice)

8) 7.1.6 Organization Knowledge (ISO9001)

(Clause Description-Paraphrase) 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. There are 2 NOTES provided to clarify organization knowledge.

NOTE 1 Organizational knowledge is knowledge specific to the organization

NOTE 2 Organizational knowledge can be gained via many sources e.g. (a) internal sources (e.g. intellectual property; experience; lessons learned; undocumented knowledge and experience; improvements); (b) external sources (e.g. standards; academia; conferences; knowledge and experiences from customers or external providers).

(Highlights of the Clause)

- This is a totally new requirement. In the past, HR and training are assumed to handle this requirement.
- The Clause requires the organization to determine knowledge needed for the operations of its processes and to achieve conformity of products and services.
- The knowledge shall be maintained and be made available to employees to the extend 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.
- This is similar to the Knowledge Management popular in the 80s and 90s. It is about compiling, updating, improving, sharing and retaining knowledge and to build up new knowledge

(Compliance Best Practice)

> ### 7.1.6 Organization Knowledge
> *This is a totally new subject, and it is a little confusing in some parts of the clause. The following method is proposed.*
> 1. *First determine the knowledge necessary for the operation of the processes and to achieve conformity of products and services. Use the processes to help to decide the knowledge required.*
> 2. *A word of caution on point 1) above, is to focus on the a few key tasks, activities and the relevant knowledge. **Exhibit 13-8** is an example of key knowledge.*
> 3. *After the initial knowledge determination, each process/department shall then be assessed for competency.*
> 4. *Use a 'team perspective' to determine competency. **See Exhibit 13-9**. Weaknesses and gaps detected can be bridged, by acquiring the additional knowledge. You can pursue the training route or other means. The clause allows augmentation by external resources, including assistance from suppliers and customers.*
> 5. *The list is re-evaluated every year due to changes and turnover of staff. This list is also useful to assess if it is adequate to deal with changes and trends.*
> 6. *Sharing of information although is listed in NOTES, has important benefits, particularly in sharing of lessons learned and suggestions. A public folder can be used for this dissemination and exchange. See **Exhibit 13-10***
> 7. *The NOTES of this clause are causing a lot of confusion. This Chapter hopes to throw some light on this confusion. **SN-13.12.***

9) 7.3.2 Employee Motivation and Empowerment (IATF16949)

(Clause Description-Paraphrase)

The organization shall maintain a documented process to motivate employees to achieve quality objectives, to make continual improvements, and to create an environment to promote innovation. The process shall include the promotion of quality and technological awareness throughout the whole organization.

Author's note: For exact wordings, please refer to standard indicated after the clause title.

(Highlights of the clause)

- There had been a similar clause, 6.2.2.4 of the same title in the previous version of TS16949. In fact, They are almost a word-for-word equivalents.

- Most organizations interpret this clause as a welfare clause, providing more incentives, perks etc. There are many organization focussing on welfare and good work environment, with annual employee satisfaction survey. This is incorrect.
- The emphasis is to motivate employees toward productivity, quality and innovation, achieving targets etc. Incentives and reward program in this direction is then correct. IATF is not against improving on welfare, but that's is not the intent clause.

(Compliance best practice)

> **7.3.2 Employee Motivation and Empowerment**
> - *To comply, there should be evidence of promoting the achievement of quality objectives, continual improvement, innovation, and quality and technological awareness.*
> - *This can be achieved via programs of Employee Suggestion Scheme, regular meetings, Small Group Activities, improvement project activities, attendance incentives etc.*
> - *What is commonly misunderstood by organizations is that IATF is asking for improvement on welfare and incentives, and employee satisfaction. This is not the intent, although a good deed.*

10) SIs & FAQs

No SIs & FAQs for this Chapter

11) Supplementary Notes

Legend: HOC= Highlights of Clause, CBP= Compliance Best Practice, S&Q= SIs & FAQ, EXH= Exhibits

Clause	Section	Clarification Subjects
7.1.1, 7.1.2	CBP	**SN13.1. How would an auditor know we are short of manpower?**
7.1.2	CBP	**SN13.2. Are we allowed multi-tasking to save manpower?**
7.1.6	CBP	**SN13.3. How best we measure Organization knowledge?**
7.2	CBP	**SN13.4. How do we decide on training subjects, when there are far too many request? Can training plan be changed once set?**
7.2	CBP	**SN13.5. Where would a HOD get his/her suggestions for training for a particular employee?**
	CBP	**SN13.6. Is it OK to used Standard list for annual training, instead of the hassles of running a TNA survey?**
7.3	CBP	**SN13.7 OJT only for technical departments? Do we have to do for non-technical. What are the training materials to use for non-technical departments?**
7.2.2	CBP	**SN13.8. Can give examples of customer-specified training?**
7.2.2	CBP	**SN13.9 Why should we have a stages of evaluation on training effectiveness?**
7.3.2	CBP	**SN13.10 How to prove motivation?**
7.2.2	CBP	**SN13.11. A lot transferring of data e.g. for training. Anyway to solve this problem?**

7.1.6	CBP	**SN13-12. Organization knowledge described about intellectual properties, patents etc. Do we have to aim for those things to be really in compliance?**

SN13.1. How would an auditor know we are short of manpower?

IATF auditor will not deliberately check on this point. There are a few indications that may lead him/her to this point. First, for every audit, he or she will ask for your manpower data. A rubber product plant with assembly reporting only 15 employees is a big tell-tale sign. Another indication is the same person seems to be in charge everywhere. The third indicator is documentation work not updated, or slip shot work performed. With the above indications, an IATF auditor will look into manpower issues.

SN13.2. Are we allowed multi-tasking to save manpower?

Definitely so. First you have to make sure the person is competent for all the assignments. Second, there is a limit as to how far you can stretch a person. When you cross the point, fatigue sets in and work quality deteriorates. That's where ISO/IATF will intervene.

SN13.3 How best we measure Organization knowledge?

There is no right or wrong, when the standards do not prescribe a method. Prioritizing the assessment areas is Pareto is not only preferred, and encouraged by ISO/IATF. The main focus of this clause is retention of knowledge. Retention is by either document or via personal learning and retention. We set a standard what is needed for each department and then evaluate actual situations against these standards. To ensure integrity, the evaluation is repeated every year, or when there are major changes.

SN13.4. How do we decide on training subjects, when there are far too many request? Can training plan be changed once set?

In a good TNA exercise, the feedback should be a lot and naturally you cannot afford to adopt all, due to budget and time constraints. You should go through a process of elimination by filtering through 3 criteria: a) relevance, b) urgency, and c) budget. Once decided, the list is then sent for Management approval, where some more axing may happen. Yes, you can change training plans as needed. However, reasons must be given and the replacements, if applicable, are pre-approved.

SN13.5. Where would a HOD get inputs for training for a particular employee?

2 main area: Job description and annual appraisals. Job description is the most useful document, as it is the reason why a job existed in the first place. In order the person can continue to exist in an organization, the job holder must perform the required tasks and responsibilities competently. By referring to this document during TNA, gaps can be easily detected. An important point to note is the Job Description must be updated.

Annual appraisals are scorecards of the employee's performance, where strength and weaknesses are analysed and determined. However, some appraisal forms used are not useful. They have standard criteria for all categories of employees, And the assessment criteria are mainly on attributes, rather than skill or performance.

SN13.6. Is it OK to use Standard, repeating list for annual training, instead of the hassles of running a TNA survey?

A good 20-30% of the organizations I have audited used this method. The same subjects are carried out year after year. Yes, it saves a lot of time, but that is not the intent of ISO/IATF. Training is for the purpose of supporting the operations. To be effective it should aim at filling needs on knowledge and skill. In other words, training should be targeted. Going by a standard list is not a targeted approach,

and is not TNA. The previous lists can very well be used as a reference, TNA cannot be omitted as it is a requirement.

SN13.7. OJT is commonly carried out for technical departments? Do we need OJT for non-technical staff? What are the training materials to use for non-technical departments?

OJT for technical employees such as operators and QC insepctors make good sense, as these people are involved directly on product quality. Nowadays, when we talk quality in ISO/IATF etc, we refer to total quality or TQM. Both direct and indirect quality are to be taken care of.

Non-technical staff are indirect quality contributors and OJT should be provided, although not spelt out clearly in the standard. Training materials for these categories of employees are more flexible as the tasks are more forgiving. Therefore different methods can be used. Flowcharts can be develop for internal use. The quality procedure for the department shall be part of the OJT, to fit into the companywide QMS.

SN-13.8. Can give examples of customer-specified training?

A car plant in Malaysia dictates a 6-month frequency for refresher training for operators on work instructions. Another car plant in Malaysia requires a metal fabrication plant to run refresher training with evaluations on new parts, for 6 months. A Japanese owned, tier-one organization in China, requires its suppliers to conduct annual refresher training on critical areas.

SN13.9 Why should we have 2 stages of evaluation on training effectiveness?

The first evaluation is immediately after the training. The trainer may conduct quiz, interview or observation comprehension during the course of the training, to gauge understanding. The second evaluation is normally done 1-6 months after the training. This second evaluation is on how well the training has been adopted by the trainee or on the job, as required. The results can be very different.

SN-13.10 How to prove motivation?

First, the notion that motivation is about incentives and employee satisfaction, need to be corrected. These things while being encouraged are not the motivation intended in clause 7.3.2. The motivation is only the means, the intended outcome is improvement in meeting targets, quality, innovation etc. Your means should be able to link to the intended outcome. They may be: incentives for full attendance, incentives for hitting targets, sharing forums on innovation, QCC/SGA to promote quality, improvement projects for continual improvement, visits to trade fairs etc to broaden thinking horizons.

SN-13.11. A lot of transferring of data e.g. for training records. Anyway to solve this problem?

Unfortunately this is the evidence needed to prove training activities. There are some annoying transfer and repeat of recordings. There are application software available in the market, but you really need to study if it fits your circumstances. Or you can attempt to write one for yourself. I have seen in the Middle East, where the HR manager wrote a program that her staff only need to enter some fields once, and the data is automatically posted to the relevant files.

SN-13-12. Organization knowledge described about intellectual properties, patents etc. Do we have to aim for those things to be really in compliance?

No. There is not the intent of ISO/IATF. These are only examples, but can be misleading**:**

- Note 1 tends to take some organization astray to look for some earth-shaking specific knowledge. This is not the intent. The knowledge is just the knowledge and skills required to do the job and they may be very basic.
- Note 2 contains big words of intellectual property, standards, academia etc. All these are nice to have, but most likely unavailable for the common organizations.

How organization knowledge comes about could be very simple. Example, the founder or the pioneer management could have started with a set of knowledge and skill. They consists of tested procedures

and knowledge learnt from others or own experiences. They are improved gradually based on further experiences, complaints, field failures, and interactions with customers, suppliers and other training and exposure. This is perfectly acceptable and no drastic changes are required.

12) Exhibits

Exhibit 13-1. Job Description

Job Title: Purchaser	Reporting to: Director

Minimum Qualification:

- SPM or Diploma in any field

Experience Required:

- Minimum 3 years in purchasing experience.

Special Expertise / Requirements:

- Strong negotiation skill.
- Strong interpersonal skills with written and verbal communication skill.

Scope of Duties:

a. Oversee Purchasing and function.

b. Review Purchasing and processes and ensure effectively.

c. Provide resources for implementing & maintaining the quality management system.

d. Inventory Control.

e. Update Purchase Order information.

f. Update the Approved Vendor List for timely basic.

g. Supplier selection / re-evaluation processes.

On-the-job competencies:

a. Quality Policy & Objectives

b. Purchasing Procedures.

c. Vendor Evaluation Procedure

d. Vendor Pre-qualification Procedure

Exhibit 13-2. On-job Training

On-the-Job Training Subjects

Job Category	On Job Knowledge and Skill
Incoming QC Inspector	1. Materials and methods of checking , WI 2. Evaluating Accompanying document e.g. Mil spec, COA etc 3. Use of relevant measuring equipment 4. Recording forms usage 5. QC Pass labelling
Final QC Inspector	1. Products and methods of checking , WI 2. Use of relevant measuring equipment 3. Recording forms usage 4. Reading Drawings 5. QC Pass labelling 6. preservation: FIFO, shelf-life and re-inspection

Exhibit 13-3. JD-based Training

JD-based Training

(2019)

Job Category	Knowledge & Skill Requirement Stated in JD/ or other document	Training for 2019	Reason	Training Type
Incoming Quality Control Inspector (IQC)	1. Materials and methods of checking , WI	Yes	IQC on raw part from customer XYZ Reason: new requirement to check	By customer
	2. Evaluating Accompanying document e.g. Mil spec, COA etc	No	Competent	NA
	3. Use of relevant measuring equipment	No	Competent	NA
	4. Recording forms usage	No	Competent	NA
	5. QC Pass labelling	No	Competent	NA

Remarks given in this section explain on the Exhibit. Do not include them as part of the document

- The above knowledge of skill is the most important things for training. You can also add another section for soft skill, leadership etc.
- The skill is not only important for OJT, but the ensuing years. Annual TNA should assess employees' competency based on this top priority knowledge and skill. Refresher training can be arranged for weak cases.

Exhibit 13-4. Personal Training Records

Personal Training Record

Name Yasmin	Employee No 10078	Position/Dept QC	Joined Date 15 Jul 2018

No.	Training Subjects	Training Dates	Trainer's Name	Trainee's Initial	Trainer's Evaluation Pass/Fail	Supervisor's Evaluation Pass /Fail	Initial/	Date
1	Materials and methods of checking , WI	16-17 Jul 2018	Joanne	J.J.	P	P	LCN	16/10/18
2	Evaluating Accompanying document e.g. Millspec, COA etc	18 Jul 2018	Joanne	J.J.	P	P	LCN	16/10/18
3	Use of relevant measuring equipment	19-23 Jul 2018	Swazi	SZM	P	P	LCN	16/10/18
4	Recording forms usage	23 Jul 2018	Swazi	SZM	P	P	LCN	16/10/18
5	QC Pass labelling	24 Jul 2018	Swazi	SZM	P	P	LCN	16/10/18

Remarks given in this section explain on the Exhibit. Do not include them as part of the document

- The recording form will begin with OJT. Some organizations will record from Orientation
- Recording will go on until the person leaves the organization, to form a continuous record for training
- Unfortunately, there are quite some recording and transferring of data required.

Exhibit 13-5. TNA

Type 1: TNA on Department

Department		Training Year	Submitted by				Date	
QAQC		2018	Netto QA Manager					

	/Subject/ Employee	Mr. A	Ms B	Mr. C	Mr. D	Mr. E	Ms. F	Ms. G	Remarks
1	5S				x	x	x	x	
2	SOP-QA01. QAQC Procedure			x	x	x	x	x	
2	IATF internal audit course	x	x		x				For roles as internal auditors
3	Leadership	x							As QA Senior Supervisor
4									
5									

Type 2: TNA to improve Skill Matrix

No	Critical Knowledge and Skill		Model 113	Model 238	Model 239	Model 420	5S	Start-up checking	Others
1	Ahmad	Current score	100	75	75	75	75	75	Int Audit 75%
		Improve target	NA	NA	NA	NA	NA	NA	
2	Bahadur	Current score	75%	75%	50	50	50	50	
		Improve target	NA	NA	75 ⬆	NA	NA	NA	
3	Ngu Yin	Current score	75%	50	50	25	25	25	
		Improve target	NA	75 ⬆	NA	NA	NA	NA	

Type 3: TNA by individual

Year	Name	Key Dept/Position	Other responsibilities	Date Compile
2017	Janet Lewis	IQC Inspector	Dept trainer, internal auditor (QMS), second party auditor, EMS roles	21 Jan 2017

Competence Rating: 1 = Low, Appreciation Level only, 2=Medium, Competent, 3=High, Can Teach. Gap of ≥2 needs action

Activity	Critical knowledge and Skill	Competence				Notes on high gap	Improvement Action	Int/Ext	Approval
		Target	Actual	Gap	Action?				
Job	Use of all measuring equipment in IQC	3	1	2	Yes	Need to learn use of hardness meter	QC supervisor to train	INT	
Job	QC procedure for IQC	3	3	0	No	NA			
QMS	QMS system auditor	3	2	1	No	NA			
SQE	2nd Party Auditor	3	1	2	Yes	Need process of knowledge of alum. casting	QA Engineer to provide training	INT	
EMS	Aspect-Impact	3	1	2	Yes	General weak in this area	EMR to provide training	INT	

Remarks given in this section explain on the Exhibit. Do not include them as part of the document

- Type 1 is most common and most HR officers know how to use this to compile a companywide training program. The survey should include assessment findings from Exhibit 13-9.
- Type 2 is more for skill matrix improvement. It is getting important because head count is tight nowadays, and employees are needed to be multi-skilled. This analysis is generally not required to take into the annual training plan, but managed by department HOD
- Type 3 is a little ahead of time for most companies. It is based on individual where the various roles are considered for improvement. This is actually the best method, where a person's total competency is assessed against a target level.

Exhibit 13-6 Supplementary Training Request.

Applicant		Department		Date

Training Course/Topic	Training Provider (preferred)
	Period Preferred:

Training Cost		☐ Master Training Plan	☐ Ad-hoc

Purpose
☐ Basic Job Requirement ☐ New Job Requirement ☐ Info/Tech Updating ☐ For Improvement

Evaluation I -by Trainee (Circle)

Suitable to Purpose	Training Material	Trainer competence	F&B	Recommended
Yes/Borderline/No	Good/Fair/Poor	Good/Fair/Poor	Good/Fair/Poor	Yes/OK/No

Evaluation II- by Immediate Supervisor (direct report)

S/No.	Area of review	Score
1	Is the training relevant to the employee's job scope?	
2	Is the employee able to apply what is learnt from the training attended effectively?	
3	Is there a difference in work performance after the training?	
4	Is the cost of the training worth the improvement in the work performance?	
5	Would there be opportunity for the employee to regularly apply the knowledge learnt?	
6	Would this training be recommended to other employees?	
	Score: 5-Excellent 4-Good 3-Average 2-Fair 1-Poor	**Total score** %

Application and Approval Record

Applicant Signature	HOD Support	Top Management Approval

HR Records

Date Attended	Course:		Training Provider
Cost if Applicable	Trainee Evaluation of Program Excellent/Good/Fair/Poor/Bad		General Evaluation by HOD Excellent/Good/Fair/Poor/Bad
	Sign/Date		Sign/Date

Remarks given here explain on the exhibit. Do not include them as part of the form

- This Exhibit is shown here for 3 purposes: a) it is used for ad-hoc training request, b) the evaluation of external training effectiveness, c) evaluation of the external training program
- (a) sometimes a new training is required, in addition to the TNA exercise. The form can be used to apply for additional training and budget
- (b) Evaluation II is by supervisor after 1-3 months. A additional evaluation by HOD can be done at 'HR Records". It does not need to be elaborated because the supervisor has done earlier. Sometimes I still public trainers are requested to evaluate the trainee, besides the certificates. For goodwill they obliged, but the effectiveness is serious doubtful.
- (c) this part is seldom done on external training, except those conducted inhouse. The only way to do it meaningfully is by the trainee, using the space in 'Evaluation I'.

Exhibit 13-7 Orientation Program

Orientation Program

Name		Position		Department		Date Joined

No.	Training Subjects	Training Materials	Actual Training Dates	Trainer's Name	Trainee's Initial	Pass/ Repeat
1	Company introduction	Company Profile				
2	Products/Services	Samples, pictures, brochures, catalogue etc				
3	Organization chart & Direct Superior	Organization Chart				
4	Basic Responsibilities or Job Specifications (if available)	Job Description				
5	Work /time, Lunch, Tea-time, Overtime System	Company Rules, Regulations and Code of Conduct				
6	Other Rules and Regulations	Company Rules, Regulations and Code of Conduct				
7	Safety	Company Rules				
8	QMS-Basic Briefing	ISO 9001:2015 M&P, Policy and Objectives				
9	How to contribute to the effectiveness of the department and the QMS, and what benefits will there be to the company	PowerPoints Picture				
10	Implication of not conforming with the QMS and consequences to the company Slide Show/ Briefing	PowerPoints Picture				

Normally neglected topics (referring to items 9 and 10)

Remarks given in this section explain on the exhibit. Do not include them as part of the document
- Orientation program's primary purpose is to provide background information to a new recruit. It is really not a training. Evaluating is not necessary. Judging the person's general understanding, however, is still needed. Written information should be given, or readily accessible to the new employee
- Different trainers may be used. For example, QMS part is best done a by QMS team member. Objectives are generally a departmental affair, and best conducted by a department senior or HOD

Exhibit 13-8. Critical Knowledge by Process

Process: Business Planning

No	Knowledge/ Skill Needed
a	Understand the economy especially the automotive market outlook
b	Understand Strategic Planning & business management
c	Knowledge to prepare business plan as corporate requirment
d	Knowledge to approve KPI proposals

Process: Management Review

No	Knowledge/ Skill Needed
a	Fully understand the Management Review agenda and the intent of each item
b	Meeting chairing skill
c	Skill in preparing Review minutes
d	Coordination skill to ensure action items are bing followed up to completion

Process: Internal Management

No	Knowledge/ Skill Needed
a	Internal auditing skill and knowledge
b	Skill in weakness and noncompliance identification
c	Problem solving skill
d	Project managment skill to ensure action items are implemented effectively

Template 4: Continual Improvement

No	Knowledge/ Skill Needed
a	Project identification and management skill
b	Project managment skill to ensure action items are implemented effectively
c	

Template 5: RFQ Handling

No	Knowledge/ Skill Needed
a	Skill in quotation preparation
b	Coordination skill to get information and data for feasibility study
c	Quotation preparation knowledge

Template 8: Order Processing

No	Knowledge/ Skill Needed
a	Understand how to access customer order from customer server
b	Understand the flow /process to execute the orders
c	Kowledge to resolve with customer if there are issues on the order

Template 9: Production Planning

No	Knowledge/ Skill Needed
a	Knowledge to translate customer orders into organization's parts equivalent
b	Knowledge to plan production in relations to capacity utilization
c	Skill to coordinate with relevant departments to ensure Ontime Delivery

Template 6: Customer Feedback & Complaints

No	Knowledge/ Skill Needed
a	Knowledge to conduct customer satisfaction and skill to encourage participation
b	Knowledge to interpret feeback and skill to get internal cooperation to handle points of dissatisfaction.
c	Skill to interact with customers and inform remedial actions taken
d	Skill to interface with customer to resolve the complaints or warranty
e	Understand customer's requirement e.g. response time, reporting formats,

Template 10: Purchasing

No	Knowledge/ Skill Needed
a	Understand the IATF requirement on Purchasing
b	Knowledge for selection of new suppliers
c	Management skill on supplier to ensure top performance
d	Knowledge on establishing second party audit

Remarks given in this section explain on the exhibit. Do not include them as part of the document

- Organizational knowledge concerns with the core knowledge. To enable a process to operate to keep pace with the rest even under unforeseen interruptions
- It is not meant to record every little bit of knowledge and skill, otherwise we are repeating what the training dept is doing. That will be redundant.
- The method used here is to focus on 3-5 critical knowledge per process initially, but make sure the function/process is able to maintain a high operational standard. You can built up the list gradually.
- Note that the list only show some processes due to space constraints

Exhibit 13-9. Organization Knowledge Evaluation

Organization Knowledge Analysis
2018

(Process: Internal Audit)

No	Knowledge/ Skill Needed	Knowledge Retention Strategy	Actual	Judgement
1	Internal auditing skill and knowledge	• Doc Info • Min2 trained auditors for QMS, 1 for MPA, 1 for PDA	QP4-1 Internal Audit Procedure Training materials from external trainer. QMS auditor (5), MPA Auditor (2), PDA Auditor (2). Training certs available	OK
2	Skill in detection of weakness and noncompliances.	• Training materials from external training • Min 2 trained auditors for QMS, 1 for MPA, 1 for PDA	Training material from Apex Skill. A copy maintained by HR QMS auditor (5), MPA Auditor (2), PDA Auditor (2). Training certs available	OK
3	Problem solving skill (NC closing method)	• Training materials from external training • Min 2 trained auditors for QMS, 1 for MPA, 1 for PDA	Training material from Apex Skill. A copy maintained by HR QMS auditor (5), MPA Auditor (2), PDA Auditor (2). Training certs available	OK
4	Project managment skill to ensure action items are implemented effectively	• Training materials from external training • Min 2 auditors competent	Training material from Apex Skill. A copy maintained by HR Only 1 auditor trained with cert. 2 others learned from experience	OFI

(Process : HR & Training)

No	Knowledge/ Skill Needed	Knowledge Retention Strategy	Actual	Judgement
1	Knowledge of Training process and evaluation, and where records are kept	• Doc Info • Min 2 trained persons	QP6-1. HR Officer with Internal training evidence Back up by Adm Director, with Internal training evidence	OK
2	Knowledge to initiate TNA and use the output to prepare Annual Training Plan	• Doc Info • Min 2 trained persons	QP6-1. HR Officer with Internal training evidence Back up by Adm Director, with Internal training evidence	OK
3	Internal trainers must also be competent	• 3 years experience in the subject • Min 1 person	1 trainer, Johan only for production 5 years experience, TTT cert	OK

Exhibit 13-10 Org Knowledge sharing specimen

Public Folder Sharing Specimen

Date	Proprietary Knowledge gained	Source/Type	Suggestion for Other Application	Contributor	File & Location
11.5.17	Use of spraybooth to capture dust in the sandblasting area. Very effective (Usually dust collector system is used and dust collected by air filters)	Innovation	Deburring section can consider this concept	Lee CM (Production)	SGA Project 1 Drawing at Maintenance
18.6.17	Supplied incoming part XX to be measured by USB calliper and automatically feed to computer. Save time, error free, and prevent 'short-cut' by errand inspectors	NCR by Customer	Can extend concept to FQC	Shah Amin (IQC)	QA Files

Remarks given in this section explain on the Exhibit. Do not include them as part of the Exhibit

- This is not a requirement as it appears in a NOTE. However, I think it is a good practice to improve the strength of the organization to adopt this. I have seen many auditors asking this question, making it more advisable to do so
- This kind of sharing via public folder is quite easy to do. There are also companies that organized networking sessions to share such information
- A public folder is better, as it is documented and available at any time of the day

>> End of Chapter 13 <<