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## Quality Management Approach on Reducing the Trainer Turnover Ratio in the Indian Training Institute - A Case Study

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### Abstract

*The present case narrow down on reducing the trainer turnover ratio in the Indian Training Institute (ITI) that lacks on trainer engagement, de-motivation and no interpersonal trust. To identify the root cause for increase in trainer turnover ratio the cross functional team (CFT) have been form who on first hand discuss with Human Resource (HR) team and Trainers to identify the vital few reason as no employee engagement / involvement, Ineffective trade-off between the performance and appraisal system in the ITI. The CFT after data collection and analysis identify and implement the various improvement measures such as design, development of trainer index card, Kaizen / Suggestion template and Key Result Area (KRA) in the ITI. The CFT validate the continuous adherence, sustaince on aforesaid improvements during the pilot period through surprise audit to validate the involvement and engagement of trainers, results from audit conducted at end of three months were stratify through assessment metric namely productivity (P), Quality (Q), Cost (C), Delivery (D), Safety (S) and Morale (M). The improvement also create an work place career growth for trainer that subsequently resulted in reduction of trainer turnover ratio to 5%, reduce overhead cost to 0.5 million along with improve trainer morale.*

**Keywords:** Employee Engagement, KRA, Productivity, Quality, TQM

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### 1. Introduction

In twenty - first century the top management in organization were facing the ever changing marketing condition to pacify the versatile market need for attaining a competitive advantage that lead to perform validation on core area (Khanna and Gupta 2014). The organization competitiveness sustaince in market condition can be done through incorporating “continuous quality improvement” (Srinivasan *et al.*, 2016; Srinivasan *et al.*, 2016) in their gemba. The competitiveness in domestic and global market can be sustain, achieve through a competitive strategy known as Total Quality Management (TQM) (Shaukat *et al.*, 2002; Khanna and Gupta 2014; Srinivasan *et al.*, 2016). The TQM is an integrated management philosophy that narrowly tailor on bottom line operator who are thrive to enhance the customer perception with economic of cost (Tang *et al.*, 2010). As define by (Mohanakrishnan 2014) “TQM is the organizational effort on continuous improvement of all process, product and service through overall involvement

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which result in increased customer satisfaction and loyalty and improved business bottom line". The seven pinnacle enabler for incorporating TQM in organization were top management involvement, quality validation and yardstick, process control, product design, employee learning and development, supplier quality management, customer involvement and satisfaction (Motwani 2001). The TQM in present era had set a path for attaining a customer delight in upstream by starting with employee involvement and accountability in downstream to create a knowledge workforce with high qualification and performance in the gemba (Soltani *et al.*, 2005; Matzler and Renzl 2006). The employee engagement in the organization workplace can be attain through employee learning, employee accountability, teamwork, top management leadership, employee reward and recognition that lead to employee satisfaction and loyalty (Chang *et al.*, 2010). The total employee involvement (TEI) in TQM provide opportunity for operator to involve in teams for solving the recurrence problem using a problem solving seven Quality Control (7QC) tools such as check sheet, Pareto diagram, cause and effect diagram, scatter diagram, graph and control chart, histogram and stratification (Ishikawa 1982). The employee in organization apply the 7QC tools through forming a group of capable work teams such as Quality control circle (QCC), Supervisor Improvement Teams (SIT), Cross Functional Teams (CFT) and Task Force Teams (TFT) to provide solution for problem through application of 7 Quality Control (QC) story steps (Mohanakrishnan 2014).

The present article narrow down on implementing the QC story approach on reducing the trainer turnover ratio in the Indian Training Institute (ITI).The article have been structure by covering the Case Study in Level 2 and Conclusion with Future Scope in Level 3 in the ITI.

## 2. Case Study

The case reported in the present article is successfully derive from the Indian Training Institute (ITI) located in south India. The ITI is a doyen in the field of training by providing the need base training for the incoming trainee from three various verticals such as business to business (B2B), Business to Education (B2E), Business to Government (B2G). The training to the incoming trainee were given with the core value such as "enter to learn in ITI and exit to perform" in their respective work area aftermath training. The training department wing in ITI comprise of highly capable trainers who have hands on experience in various vertical specialization such as computer numeric control (CNC), Quality System, Industrial Engineering and many more. In past three years the ITI had continuously face customer complaint on quality of training that lead to trainee skill gap in customer end. To identify the reason for quality declination, brainstorming session was held along with top management, Human Resource (HR) people from ITI and Customers, Minutes of Meeting (MOM) reveal that there exist deviation in the trainer capability cum pedagogy with the customer end requirement during the training. The high customer exhaustion lead to decline in the bottom line of the ITI for the past three years. The top management in effectiveness on mishandling the customer pressure leads to highly dis-satisfy trainer wing who are day in and out fire by the top management official that end result in an increase in the trainer turnover ratio that also lead to increase in overhead cost such as alternate trainer recruitment cost, training cost and labour cost for the past three years in the ITI. In this context, current article narrow down to identify the core reason for reducing the trainer turnover ratio in ITI through setting up of capable cross functional team (CFT) who apply the concept of 7QC tools in the QC story problem solving approach in the ITI.

### 2.1 QC Story Problem Solving Steps

The Quality Control (QC) story is the problem solving approach most endemically used by various working teams in organization such as Quality Control Circle (QCC), Supervisor

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Improvement Team (SIT), Cross Functional Team (CFT) and Task Force Team (TFT) for solving the recurrence problem whose effect is high and the reason for occurrence is unknown. The 7 QC story steps were such as Problem Definition, Data Collection, Data Analysis, Action or Improvement Identification, Action Taken or Improvement Deployment, Effect of Action and Standardization which are illustrate briefly for reducing the trainer turnover ratio in the ITI.

### **2.1.1 Problem Definition**

To identify the decline in trainer turnover ratio the CFT consist of three members were formed in the ITI. The CFT on first hand conducted the interview with the HR team members to understand the lack of employee motivation, engagement and interpersonal trust in the ITI to frame the project charter as shown in Table 1.

**Table 1: Project Charter for Reducing Trainer Turnover Ratio**

<b>Problem:</b> Increase in Trainer Turnover ratio in the Indian Training Institute (ITI).
<b>Problem Definition:</b> The Top Management ineffectiveness on trainer involvement cum engagement lead to increase in trainer turnover ratio in the (ITI).
<b>Reasons for taking up this problem:</b> The reduce trainer turnover ratio will lead to reduction in recruitment cost, attrition rate, labour cost with improve bottom line in ITI.
<b>Target:</b> To reduce the Employee Turn Over Ratio by Half in the ITI.
<b>Limitation &amp; Boundary:</b> Technical Training Wing
<b>Team Members:</b> 3 (Authors, HR)
<b>Tools:</b> Pareto Diagram, Cause and Effect Diagram, Why- Why Analysis, Action Plan, Trainer Involvement Index Sheet, Kaizen / Suggestion Sheet, KRA template.
<b>Expected Customer Benefit:</b> Performance Improvement in the PQCDMS due to reduce trainer turnover ratio in the ITI.

From Table 1, the CFT identify due to top management ineffectiveness on creating a human value chain without insect eye view on the various trainer capability cum interpersonal relationship lead to increase in the turnover ratio in the training wing that subsequently increase the overhead cost of the ITI. To identify the various reason that end result in exit of capable trainer from the ITI were to be identify and improve by performing 360° data collection as a next course of action.

### **2.1.2 Data Collection**

The CFT conduct a brainstorming session with the HR team members of the ITI to identify the various reason that have created a state of oblivion on trainer de motivation, dis engagement and non-trustable work environment for the past three years in the ITI. The CFT on first hand mine the data through subjective discussion with HR team members follow by verification and validation of past three years trainer exit interview record in the ITI to identify and stratify the various reason that create the demoralize and dis engage workforce in ITI were list down in the attribute check sheet as shown in Table 2.

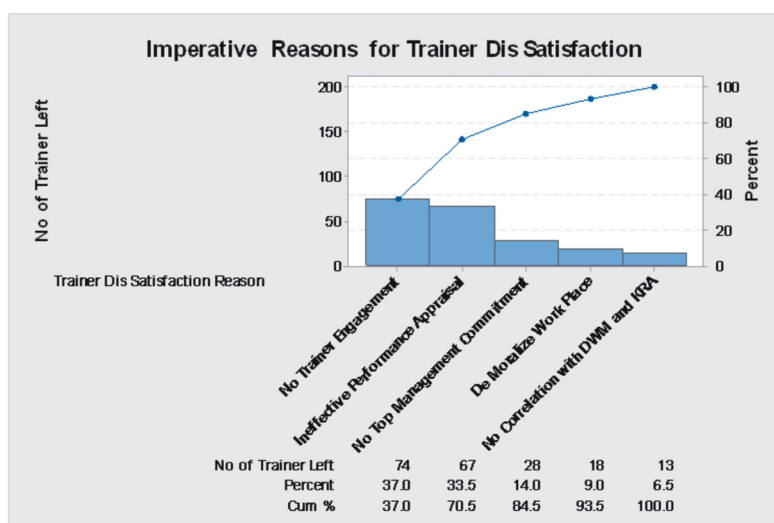
**Table 2: Attribute Check Sheet for Trainer Turnover Ratio**

S. No.	Reason For Increase in Turnover Ratio	Total	Contribution %	Cumulative %
1	No Trainer Engagement	74	37%	37%
2	In effective Trade-off Between the Performance and Appraisal	67	33.5%	70.5%
3	No Top Management Commitment / Guidance	28	14%	84.5%
4	De Moralize Work Place	18	9%	93.5%
5	Over Work Load as not a part of KRA	13	6.5%	100%
	<b>Card Total</b>	<b>200</b>		

From Table 2, the CFT identify that nearly 74 trainers had left the job over the past three years due to no trainer engagement, 67 trainers left the job because of flawed performance appraisal system, 28 trainers exit were due to in-effective top management and many other valuable reasons. The quantitative data collected made by the CFT was analyze to identify the imperative reason that highly impact the trainer turnover ratio in the ITI.

### 2.1.3 Data Analysis

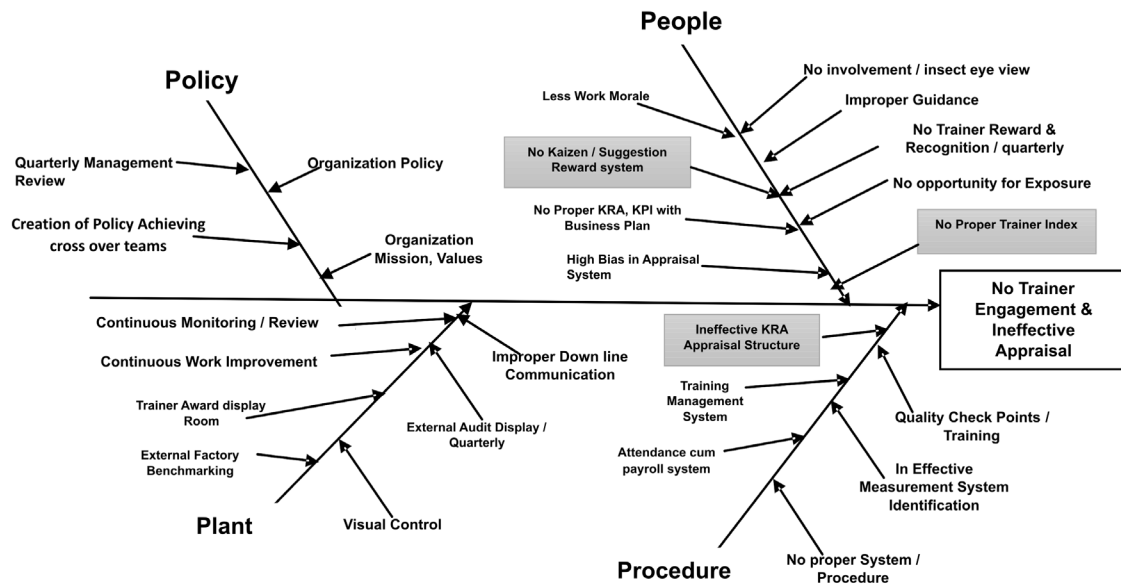
The CFT aftermath data collection from the HR team of the ITI starts analysing the data offline using the two common analysis tool such as Pareto diagram and cause and effect diagram. The Pareto diagram was first introduced by the Italian economist by the name Vilfredo Pareto for identifying the problem priority to solve and improve the process by reducing the defect occurrence and variation (Kaoru Ishikawa 1982). The Pareto diagram works under the thumb rule of 20% of causes are the reason for the 80% of defect occurrence (Vital Few) and 80% of causes are the reason for the 20% of defect occurrence (Trivial Many). The Pareto Diagram in the ITI is used to identify the priority among the reason that create high impact on trainer exit that lead to high trainer turnover ratio, Pareto chart for the current study have been plotted using the mini tab software as shown in the Figure 1.



**Figure 1: Vital Few Reason for Trainer Turnover Ratio Increase**

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From Figure 1, the CFT identify the vital few reasons that create a highly dis satisfy trainer work force were no trainer involvement / engagement that contribute nearly 37% of the total reason follow by flawed performance appraisal system that contribute nearly 33.5% in the ITI. To identify the unknown causes that create an oblivion of highly disengage, dissatisfy trainers were analyze through cause and effect diagram that was constructed after conducting the brainstorming session with the HR team, Top Management, Subject Matter Expert (SME). The MOM from the brain storming session accumulate numerous causes that were stratify with respective to key variables for creating the cause and effect diagram as shown in Figure 2.



**Figure 2: Cause and Effect Diagram for Trainer Dis Engagement and Performance Appraisal System**

The CFT after stratification of causes with respective to key variables was in a need to identify the influential causes that are having high impact or correlation with vital few effect that was earlier identify through pareto diagram. The root cause in present case was identify using endemic analysis tool such as “why- why” analysis to identify the high impact causes through asking question on “why occurrence” to the Subject Matter Expert (SME), HR team, top management of the ITI. The questions were shoot down after asking why from each answer spell down by the aforementioned questioners till the identification of root cause for improving the trainer engagement and their performance appraisal system. The subjective feedback from the root cause analysis reveal that the vital few causes that highly create a state of oblivion on demotivation, dis engagement and no trust among trainers in ITI were such as No Trainer Index Card (Year Till Date (YTD)), No Kaizen / Suggestion Scheme for Trainers and Ineffective Key Result Area (KRA) cum Key Performance Indicator (KPI) Appraisal Structure. To implement the identify improvement in pilot basis the CFT design, develop and sustain the aforesaid improvement in ITI.

**2.1.4 Improvement**

The CFT from data analysis identify the imperative cause for improvement that will create an opportunity for engaging trainer work force and creation of robust appraisal system whose implementation in the pilot basis was continuously monitor through the action plan as shown in the Table 3.

**Table 3: Action Management Plan for Improving Trainer Turnover Ratio**

S No	What	Why	When	Where	Who	How
	Root Cause		Date	Organization	Responsibility	Improvement Solution
1	No Trainer Index Score Card (YTD)	Continuous Monitoring and Recording of Trainer performance based on PQCDSM.	XXXX	Training Department in the Indian Training Institute	XXXX	Design, develop and adherence of Trainer Index Card Template.
2	No Kaizen / Suggestion Scheme	The kaizen / suggestion scheme will improve the morale and provide monetary saving to the ITI	XXXX		XXXX	Kaizen / Suggestion Template have been design along with target / year / trainer
3	In effective KRA Appraisal Structure	The trainer to obtain the performance based pay, review and identify individual performance need every quarterly	XXXX		XXXX	KRA system link with the annual business plan of ITI, quarterly Management Review Meeting (MRM)

The Action plan was developed in the format of 5W1H (What, Why, When, Where, Who and How) for implementing the how of identify root cause in the training department of the ITI. In first stage of improvement CFT after discussion with the training department, HR team design and develop the Trainer Index Card template for adherence as shown in Figure 3.

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<b>Trainer Index Card Template for FY 2016-17</b>								<b>Month</b>	<i>April</i>
Trainer Name	Trainer Id	P (10%)	Q (20%)	C (10%)	D (20%)	S (20%)	M (20%)	Total (100%)	Trainer Index (At the End of FY)
XXX	02	5%	3%	6%	6%	12%	2%	34%	-

**Figure 3: Trainer Index Card Template in ITI**

In second phase, the CFT had discussion with the HR team to conduct the contest for design, develop the template for kaizen/ suggestion scheme among trainers. The consensus on selected template from contest was shown in Figure 4. The discussion also conclude that the target for each trainer has been fixed as at least 4 kaizen / year and each trainer to provide the break through improvement of minimum 1 suggestion / year by involving the trainer through setting up various capable cross functional team in the ITI.

<b>KAIZEN NAME:</b>		
<b>PROBLEM</b>	<b>ACTION TAKEN</b>	<b>RESULTS</b>
<b>BEFORE KAIZEN</b>		<b>AFTER KAIZEN</b>

**Figure 4: Kaizen Sheet for Trainer Idea / Thinking in ITI**

In third phase, implementation on framing of appropriate Key Result Area (KRA) for each trainer was developed. To create an effective KRA the CFT on first hand understand the current year annual plan. Based on the annual plan, the daily work management (DWM) of the trainer have been stratify with respective to Productivity (P), Quality (Q), Cost (C), Delivery (D), Safety (S) and Morale (M) that gets link with the voice of customer (VOC) to stratify yearly managing point (MP) for Trainer – manager cum check point (CP) for Trainer – subordinate, review will be



done on their plan Vs actual every quarterly through Management Review Meeting (MRM). The KRA template for the sample trainer position in ITI is shown in the Figure 5.

<b>Trainer Key Result Area – ITI for FY 2016-17</b>		
Trainer Name: XXX		Designation: Executive
Department: XXXX		Grade: L2
<b>Performance Metrics</b>	<b>Action Plan</b>	<b>Target</b>
<b>Productivity( P)</b>	To learn and train new training modules	2 Training Modules / Year
<b>Quality (Q)</b>	Customer Training Feed back	3 to 4 (In Four Point Rating Scale)
<b>Cost (C)</b>	Organization Cost Saving	10-20% of department expenses
<b>Delivery (D)</b>	Internal / External Audit Score	7-10 (Average of Three Audits done Per Year)
<b>Safety (S)</b>	To identify and correct the unsafe act (UA) and unsafe condition (UC) to achieve zero accident	10 – Near Miss, 5- Minor Accident, 2- Major Accident (Per Year)
<b>Morale (M)</b>	Kaizen / Suggestion scheme	4 / 1 (Per Year)

**Figure 5: Trainer KRA in the ITI**

The effect of the adherence towards the improvement made in the pilot stage have been standardize in the successive phase.

### **2.1.5 Improvement Deployment**

The CFT after having comparative discussion with the HR team, Training Team and Management had frame the trainer index template, kaizen and KRA template for the trainer. The pilot implementation of same in the training department have been done for the period of three months. The action plan status through conduction of 360° feedback from external peer team, trainer and top management review on continuous adherence, sustenance of previous mention improvement have been continuously recorded as shown in the Figure 6.

<b>Improvement Deployment cum Adherence Action Plan</b>			
<b>Questionnaire</b>	<b>External Audit Rating</b>	<b>Trainer Rating</b>	<b>Top Management Rating</b>
Is Suggestion / Kaizen Scheme Implemented	Good	Good	Good
Does Employee are motivated regularly	Medium	Below Medium	Good
Employee knows annual plan / policy	Good	Medium	Good
Is Training Index Card Maintain Regularly	Medium	Medium	Good
Is KRA review every quarterly	Medium	Medium	Medium
<b>Note: The linguistic score are obtain through feedback from External audit team, trainer and top management.</b>			

**Figure 6: Improvement Adherence Action Plan**



### 2.1.6 Effect of Action

The improvement deployment in training department was tangibly realize by the trainers, organization performance to improvement stage from current stage was stratify through common performance metric such as Productivity (P), Quality (Q), Cost (C), Delivery (D), Safety (S) and Morale as shown in the Table 4.

**Table 4: PQCDM Improvement in ITI**

S No	Performance Metric	Performance Measure	Actual	Proposed	Remarks
1	<b>Productivity (P)</b>	Trainer Turn Over Ratio	20%	4%	Organization will have 4-5% attrition / year
		Employee Involvement Index Score	2	8	Score of 10
2	<b>Quality (Q)</b>	Customer Feed back Score Max of 4	1	3	Program Quality
		Peer Audit Feedback	1	3	
3	<b>Cost (C)</b>	Overhead Cost	4 Million	0.5 Million	Reduction in Training, Recruitment cost
4	<b>Delivery (D)</b>	New Customer / Module Trained per year	1	2	New program / New Customer
5	<b>Morale (M)</b>	Kaizen / Suggestion	-	4/ 1	Employee Involvement

### 2.1.7 Standardization

The CFT standardize the effective improvement implementation as Daily Routine Management (DRM) for trainers they are such as:

- Review system starts with individual trainer who will do self-appraisal on their KPI follow by sub ordinate boss appraisal and skip level boss appraisal with respective to KRA in the ITI.
- The improvement incorporated in pilot basis have been validate through surprise check by the peer review team who will be interacting with trainers by obtaining 360° feedback to submit the report to the board of directors (BOD) every quarterly.

### 3. Conclusion and Future Scope

To reduce the turnover ratio the CFT conducted discussion with the HR team to plan, implement and adhere various process level kaizen such as Trainer Index, Kaizen / Suggestion scheme and robust KRA / KPI appraisal system. In future, same can be horizontally deployed to other department for creating a total employee involvement (TEI) that will lead a training institute towards world class training institute.

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