The Influential Factors of Training Needs Assessment:
A Case Study of HÜCO Company (Maharashtra), India

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Abstract

A Training Needs Assessment is a process of confirming the knowledge and technology necessary for achieving organizational goals. Inside an organization, a TNA is a process to decide if it is necessary to provide the employees with training and which training should be provided. TNA is a basic skill that a training practitioner should possess. The so-called training needs analysis is a process of continuously collecting data in order to decide if training needs exist and help achieve organizational development goals .The study focuses on Influential Factors of Training Needs Assessment (TNA) of HÜCO Company (Maharashtra), using the dimensions of Techniques in Conducting TNA which is related to O-T-P analysis. This paper investigates explore analysis and questionnaires factor analysis found The Influential four factors that affect on Training Needs Assessment (TNA) namely Dominance on Problems And Analyses, Dominance on Organizational Development, Dominance on Resource Applications, and Capability for Implementation of TNA. In this paper, employees' as the research samples to analyse the influential factors of Training Needs Assessment (TNA), and it was found that "Capability for Implementation of TNA" was significantly related to training performance.

Keywords: Training needs assessment (TNA), Training Performance, and Organizational Performance

Introduction

HUCO Company was founded in 1965, **1980** HÜCO was founded as supplier for the automotive market,**1980-1998** Development and expansion of product range and worldwide sales network for IAM and OES, **1998** Entrance in the automotive OEM business (Audi etc.), **2000** Foundation of LHE – Lemförder HÜCO Electronic as an OES, **2001** Sale of shares of LHE – Lemförder HÜCO Electronic, **2003** OES for a large European motorbike manufacturer, **2004** Foundation of HUECO electronic (India) Pvt. Ltd, **2005** Start of production in India, **2007 – 2008** Start of supplies to large national & international wholesale organizations HUECO electronic (India) Pvt. Ltd is certified according to DIN ISO TS 16949:2009, **2010** Membership in VREI HUECO electronic (India) Pvt. Ltd starts OES supply in India, **2012** HÜCO Automotive GmbH acquired by HITACHI Range extension of Asian applications and was the first manufacturer to successfully adapt properties of engineering plastics in combination with metals, to create and market a range of innovative misalignment couplings. In a lot of enterprises, training is considered employee welfare, but their employees tend to think that participating in training is a burden or waste for them, so the effectiveness of training is always doubtful. Furthermore, too much training will result in degeneracy instead of benefit (Wilson, 1999). Training needs analysis is the first step of training. When suitable training courses are provided according to needs, demand and supply are balanced, and training thus becomes effective. Practical and pragmatic needs assessments provide a process for identifying and prioritizing gaps between current and desired results (Kaufman, 1998, Kaufman et al, 1993; Watkins and Kaufman, 1996).Need Assessment is defined as an investigation, undertaken to determine the nature of performance problems in order to establish the underlying causes and the way in training can address this (Erasmus et al, 2000) Goldstein(1993) describes need assessment as the phase of the instructional process that provides the information necessary to design the entire programme. Need identification or assessment is not a routine function, because it should conduct carefully and in a diagnostic manner (AlKhayyat & Elgamal, 1997). In recent three decades, training theorists or researchers addressed that training needs analyses are not trusted by organizations and lack systematic applications (Tylor, O' Driscoll, & Bining, 1998). Even until the recent, survey is still the main approach used to understand training needs (Tylor, & O' Driscoll, 1992). If TNA are not applied to the training of an organization, there will be overtraining, insufficient training, and incomplete training in the organization (Judith, 2002). Judith also

addressed the four reasons for having TNA: (1) confirming the real problems in an organization, (2) obtaining the support of the management, (3) developing evaluation data, and (4) deciding training cost and benefit.

Training Needs Assessment and Level of TNA

A Needs Assessment is a systematic exploration of the way things are and the way they should be. These "things" are usually associated with organizational and/or individual performance (Stout, 1995). According to Rossett (1987), a training needs analysis should be conducted in order to find out the following information: (1) optimal performance or knowledge, (2) actual or current performance or knowledge, (3) necessary participants or obvious objects, (4) the causes of problems, and (5) solving problems. Training objectives should focus on the behaviour component, which describes in clear terms what a learner has to do to demonstrate that he or she has in fact learned. Behavioural training objectives state what the person will be able to do, under what conditions and how well he or she will be able to do it.(Erasmus et al, 2000; Van Dyk et al, 1997; Molenda et al 1996).McGehee and Thayer (1961) brought up a three-fold approach to analyze training needs. The approach, which is called the O-TP model in short, is the most common framework applied to TNA. Need assessments offer performance improvement initiatives as unique opportunities to approach performance improvement from a variety of assessment level: individual, organizational and societal levels. Conventional "business wisdom" usually only defines two levels or organizational planning and decision-making: organizational (macro) and individual/ small group (micro). Kaufman (1997) suggests that this limited frame-of-reference has kept business focused on a "conventional bottom line". But a new paradigm of societal value-added has emerged (Popcorn, 1991; Drucker, 1973; Kaufman, 1998) and with it a "societal bottom line" as well as societal (mega) level of planning and decision making.

Methodology

The samples of this survey were employees, and purposive sampling was adopted. They participating in relevant occupational training courses were sampled and filled in the questionnaires. The samples were obtained from respectively different regions and different training courses to avoid too centralized samples and biases and in total, 31 samples were obtained. There were totally 25 valid questionnaires after 6 invalid questionnaires were deducted. The questionnaire content included: whether your organization had TNA or not; whether or not the organizational problems are mastered, and the causes are confirmed before the training is designed; whether or not the performance and behavior that one should have are evaluated according to the job descriptions; whether or not the needs for the ability cultivation necessary in the future development of the organization are considered; the methods employed to analyze needs; whether or not the time is limited when a needs assessment is performed; whether or not the departments of the organization cooperates one another in needs assessments and provides assistance; whether or not training employees' are capable of needs assessments, etc. The training practitioners' perception of TNA was understood, and the influential factors were analyzed through the investigations. Systematic needs assessment dimensions were applied to the disciplinary requirements of needs assessments.

Objective of the Study

The objectives of the study were as following:
1. To identify the role of Training Needs Assessment for improvement of organizational development, Involvement Organization Future, Organization Goals in HUCO company.
2. To analysis of Training needs and methods to find out the effectiveness as well as drawback in the existing training system.
3. To develop a module for training the trainers and increasing their effectiveness in achieving the end result of effective training of employees in an organization.
4. To understand the influence problems analyses on Training Needs Assessment towards   finding Problems and Performance Problems in HUCO Company.

Findings and Discussions

The Influential Factor Analysis of TNA

Totally, there were 17 variables in the questionnaire of this study. To understand their relation, exploratory factors analysis (EFA) was employed to reduce the variable dimensions. There were four items whose eigenvalue was greater than 1, so the 17 variables were condensed into 4 factors. The first factor explained 34.56% of the variables, the 2nd factor explained 14.63% of them, the 3rd factor explained 9.47% of them, and the 4th factor explained 6.89% of them. In total, the four factors explained 65.43% of the variables. The influential factor of TNA consisted of highly correlated variables, respectively "finding problems," "analyzing problems," "job performance," "organizational problems," "analyzing organizational problems," "promoting involvement," and "performance problems." The factor loadings were between 0.615 and 0.804, the eigenvalue was 3.706, and the cumulative variance was 34.56%. The factor was named "Dominance on problems and analyses." The second factor consisted of four highly correlated variables, namely "involvement in the organizational future," "mastering the organizational future," "mastering organizational goals," and "mastering organizational changes." The factor loadings were between 0.752 and 0.861, the eigenvalue was 3.011, and the cumulative variance was 14.63%. Since these variables were related to organizational development, they were named "Dominance on organizational development." The third factor consisted of three highly correlated variables, including "sufficient time," "sufficient information," and "personnel cooperation." The factor loadings were between 0.851 and

0.907, the Eigenvalue was 2.467, and the cumulative variance was 9.47%. It was related to the resources invested in needs analyses, so it was named "Dominance on resource applications."

The fourth factor consisted of three highly correlated variables, respectively "TNA procedures," "TNA methods," and "TNA implementation." The factor loadings were between 0.412 and 0.879, the Eigenvalue was 1.939, and the cumulative variance was 6.89%. Since the factor was related to needs analysis methods, it was named "Capability for Implementation of TNA".

Table 1: The Result of the Principal Component Analysis of the Factors Influencing TNA

Factor	Item	Factor Loading	Eigenvalue	Cumulative Variance
Dominance on Problems And Analyses	Finding Problems Analyzing Problems Job Performance Org. Problems Analyzing Org. Problems Promoting Participation Performance Problems	.804 .656 .630 .688 .735 .651 .615	3.706	34.56%
Dominance on Organizational Development	Involvement Org. Future Mastering Org. Future Mastering Org. Goals Mastering Org. Changes	.752 .780 .861 .800	3.011	14.63%
Dominance on Resource Applications	Sufficient Time Sufficient Information Personnel Cooperation	.866 .907 .851	2.467	9.47%
Capability for Implementation of TNA	TNA Procedures TNA Methods TNA Implementation	.823 .879 .412	1.939	6.89%

The Influence of TNA Influential Factors on Training Performance

About the measure of training performance, a lot of scholars brought up different evaluation models. Training practitioners commonly use Kirkpatrick's four-level evaluation model and Phillips' ROI model (Griffin, 2010) and integrate the two models into a five-level evaluation model. To understand the influence of TNA influential factors on training performance, one-way MANOVA was managers to analyze the influence of the four TNA influential factors, respectively "Dominance on problems and analyses," "Dominance on organizational development," "Dominance on resource applications," and "Capability for Implementation of TNA," on training performance. The analysis result is shown in Table 2. The test statistics of TNA Factor 1- Dominance on problems and analyses: $F=1.971$; $p>0.05$.

The test statistics of Factor 2 – Dominance on organizational development: $F=1.525$; $p>0.05$. The test statistics of Factor 3 – Dominance on resource applications: $F=1.678$; $p>0.05$. The test statistics of Factor 4 - Capability for Implementation of TNA: $F=2.823$; $p<0.05$. Among the four variables, "Capability for Implementation of TNA" reached significance. The training practitioners thought that their needs assessments and analysis ability will significantly influence training performance.   Consequently, the employees should be capable of TNA and training program design. Otherwise, the training interventions designed by them will influence the training performance.

Table 2: The influence of TNA factors on Training Performance

Influential Factor	Training Performance					F Value	Sig
	1	2	3	4	5		
Dominance on Problems and Analyses	-0.30	0.09	0.28	-0.19	0.20	1.97	0.10
Dominance on Organizational Development	-0.29	0.09	-0.06	0.19	0.60	1.53	0.20
Dominance on Resource Applications	0.07	0.11	-0.12	-0.42	-0.74	1.68	0.16
Capability for Implementation of TNA	-0.36	0.02	0.13	0.45	0.43	2.82*	0.03

Remark: **Performance 1** represents insignificant training performance. **Performance 2** indicates partially significant training performance. **Performance 3** represents fairly significant training performance. **Performance 4** indicates mostly significant training performance. **Performance 5** indicates significant training performance.
***p<0.05**

Conclusion

TNA are one type of management systems, and they are also the first procedure of training systems. TNA are a technique, in which analysis tools should be well applied, so employees should be capable to analyze needs. Whether starting from the establishment of needs assessment procedures or proceeding needs analysis steps, it is necessary to construct Training Needs Assessment dimensions in order for employees to conduct systematic needs analyses according to the dimensions. The Training Needs Assessment dimensions include strategy, performance, and competency. If the three dimensions correspond to (McGehee and Thayer's) three-fold analysis, Organization-level analysis indicates strategy, Task-level analysis indicates performance, and Individual-level analysis indicates competency. In this study, the necessity of Training Needs Assessment was explained, and employees were taught to master the factors influencing assessments, make good use of various analysis tools, and find out the real causes of organizational problems as well as optimal solutions in order to generate training performance and enable their organizations to obtain the investment benefit that the organizations should obtain. Among the four variables, "Capability for Implementation of TNA" reached significance. The training practitioners thought that their needs assessments and analysis ability will significantly influence training performance. Consequently, the employees should be capable of TNA and training program design. Otherwise, the training interventions designed by them will influence the training performance.

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