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TRAINING PROCESS CONTRIBUTION IN ENGINEERING FOR HUMAN CAPITAL DEVELOPMENT

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Abstract- For the company with expectation to achieve company targets based on staff ability and their desire to personal improvement of ability can be pointed out as the aspects of key element in improving company assets and employees; and to increase productive as well as sustain competitive advantage. The second segment of implementation human capital paying significant place in organizational development is to create required environment for this purpose. It is relate to training, education and other professional initiatives with purpose of increasing the levels of knowledge, skills, abilities, values, and social assets of an employee. It leads to orient of the employee's satisfaction and performance, and eventually giving significant in pact to the company performance. Training Center offered for satisfaction of needs in appropriate staff is demonstrating possibilities for successful integrating into the business system of company of a new recruited staff and requalification of experienced staff. Training is one of the most useful and important instrument of improving a personal in order to achieve of targets and aims of company. Adequate training is necessary to make investments in improvement profitable and to institutionalize improved practices. There is no doubt that training has to be planned properly for long range effectiveness in achieving of expectations in personal development. It plays a special place in personal development program for companies engaged for engineering or similar companies providing engineering services. Without an adequate training plan, funds may be wasted or improperly spent. There are many things to be considered when creating a training plan. This paper embraces development the main philosophy of guidance in preparing an organizational training process for creation of Training Center in the starting stage of development. The Training Centre provides engineering and non-engineering skills training for engineering and non-engineering employees for the company engaged for engineering or related areas in wide areas of disciplines, including process coordination and management. This very important and can be effectively operated in the regions in transit economy and social systems where education system is in the stage of reorientation and development trying to merge international requirements and standards.

Keywords: Training Center, Program for Training Courses, Management, Transformation Model.

I. INTRODUCTION

Since restoring of independence of Azerbaijan Republic an education system has undergone little structural change. There are state, municipality and private sectors providing education services. All those sectors are regulating mainly under the system adopted local lows of countries. It limits of meeting of international standards and requirements in education system of the country which faces very strong obstacles in integration process of education system.

As a result the country feels of lack in skilled specialist especially in the country industrial and cultural growing up phase. There are attempts to change and improve of existing circumstances in education. Moreover it is a low level of technical training and little innovation in the fields of science, technology and economic development creates absolutely negative impact in country improvement and development process. Therefore, it becomes very important to find out alternative ways of changing the situation in order to be able to satisfy and embrace of market demands in skilled staff for a large of areas of engineering and management disciplines [1].

II. A SEGMENTS IMPACTED TO THE COMPANY SKILLED STAFF SATISFACTION PROCESS

It can be stated that human capital is an important input for organization development particularly for personal who has ambitions for continuously improvement through enhancement of knowledge, skills, and abilities. It is the source of environment to achieve expectations in competencies and attributes which are important issue of meeting of market demands.

One more aspect in human capital is to facilitate the creation of personal challenge by permanent changing business environment dynamically developing creativity and innovativeness as an important and key point of business environment in engineering.

We are talking about two main issues of segments of organization: human impact and organization development. It makes necessary to consider relations between human capital and company development through the performance of individuals, which comes to outcomes of organization development. In my understanding, we can indicate following aspect for achievement of expectations:

- philosophy of "to be ready to be changeable";
- flexibility and adaptability;
- enhancement of individual competencies;
- the development of organizational competencies; and
- individual employability.

It clearly demonstrates attributes in turn generate add values to individual (human capital) and organizational outcomes. It is impossible to achieve aims and targets of organization without successful integration of those important attributes of human capital and organization development.

There are two main segments required to be undertaken in company skilled staff satisfaction process: a new staff recruitment and staff training. The first segment of a new staff recruitment contents following main processes:

- personal profile data collection;
- selection and analyze;
- testing;
- evaluation; and
- decision.

This segment makes available to provide initial selection of potential nominees in recruitment process of a new staff. It is an independent part of company staff satisfaction with meeting requirements of company in staff need [2].

The second segment is very important in point of view of staff performance within the framework of responsibilities and job descriptions. In this stage is necessary to identify ability and capability of staff with applying required method of evaluation and appraisal for further training process. It can be reflected and divided sections as below:

- training need identification;
- training assignment and alignment;
- training implementation;
- training process assignment;
- trainees' evaluation process; and
- decision.

All indicated elements in company staff capability development have a vital place. Figure 1 demonstrates integration of first and second segments of the process staff recruitment and training. As it seen from the process flowchart there is a strong link between two segments of staff development. They cannot existing or operating independently and have a success if it doesn't consider details of each segment of the process.

III. TRAINING CENTER DEVELOPMENT

There is no doubt that development of training process in any company covers a big aspects needed to be undertaken in any stages of creation. We will consider and pay an attention of aspects of training processes in engineering company achieving its business based on the learning organization philosophy.

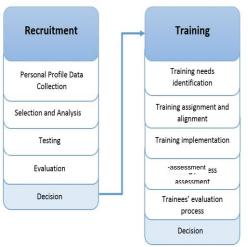


Figure 1. Process stages of recruitment/training

How and what we have to do in staff development program in order to achieve company expectation in the training process? It is especially highly important part of any company structured challenges on learning organization philosophy.

The fact is that successful function of Training Center is important to create a training plan as one of the vital element of successful operation of company training process. It has to be identify of approach of training plan development. There are number of solutions provided by different sources. It is necessary to note that importance of following model containing components:

- input data;
- selection of appropriate tasks;
- validation/assessment tasks or criteria, and;
- output.

The input data are those conditions that must be present prior to beginning the training process. The training function needs management support and adequate resources to perform its tasks; it needs to have an articulated training policy and articulated objectives, and to have a crisp definition of its role and scope of concern within the organization.

A selection of tasks are the essential and important part of activities of the process. It should be reflect all areas of functions of engineering disciplines where company has engaged. The guidelines in process of development needed to be focused on the task of creating a training plan with undertaking of spheres of engineering executions.

The training process validations insure that the output of the selected tasks for a wide areas of engineering disciplines meet required standards. In the other hand is necessary to assess the proses make sure that each steps and stages of training process within the training plan are functioning properly. At the same time is necessary to make appropriate corrective action in case of any available weaknesses in operation discovered during assessment process. The last stage gives definition of the output state the training process produces and Training Center operation as a whole.

Process Stages of Recruitment/ Training

An analyze of the local market shows necessity of creation internally Training Center in the company for satisfaction of needs in appropriate skilled staff. For this reason it has to be identify the main targets of Training Center with reflection of strategic aspects of development. In the beginning stages of development of Training Center can be considered following items of purposes we are expecting for:

• Organize the preparation system of the company, professional development and evaluation of employees in accordance with company development standards;

• Create the qualified personnel;

• Conformity with the status of self-educational company;

• Minimize expenses on the personnel trainings;

• Maximize the profit as a result of the training system effectiveness;

• Satisfying of customer's expectations of the end product's quality;

• Application of innovative technologies in the preparation of the personnel;

• Simplify the company reorganization, growth and development processes;

Reduce preparation time for trainees;

• Improve the competitiveness of the company by creating a tool of corporate accumulation and transfer of knowledge and technology;

• Identify internal staff potential of the company (possibility of organization of personnel reserve and rotation of employees within the company);

• Increase employee commitment to the company, develop professional relationship between employee and management thru team working and psychological trainings.

It is necessary to be assure that the system selected for training development operating successfully and meets a main demands of the training process. In this case is important to develop appropriate instrument to measure carried works within the training system. The system is needed to be divided into subsystems, which makes possible simply to control each of stages of the process. For instance based on the concept of the "System with feedback contour" can be estimate and evaluate training track execution (Figure 2).

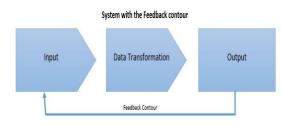


Figure 2. The system with the feedback contour

In this case, each element of subsystem is evaluating and the final data collecting for further actions. The system is creating a possibility to liaison output data with input, which is an instrument of surveying of the system efficiency [3]. This indicated above case can be successfully used in the simple systems. There is a big obstacle if the system is complicated. At first, it will take huge of time of system segmentation and application of "System with feedback contour" for each segment evaluation. It makes necessary to use some other instrument in evaluation system of training arrangement and management process. Quite effectively can be applied an approach of the transformation model (Figure 3).

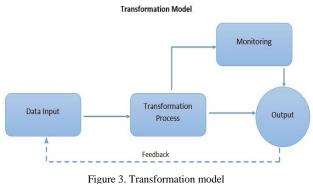


Figure 5. Transformation model

Transformation model is the number of actions accepting number of inputs transforming into the expected product and giving a value which is a very important in evaluation process during monitoring of each required stages [4]. This approach opens an opportunity to manage all the stages of the whole process of training.

For any entity operation is necessary to identify of Vision/Mission of development. In our case we are offering for the Training Center following vision and mission:

Vision of the Training Center is to satisfy company expectations in a newly recruited staff training delivery for skill improvement and requalification or staff skill increasing for experienced company staff.

Mission of the Training Center is provide and consistently improve quality of training packages during training process within Training Center implementations. We are expecting to achieve a high challenges and success through effective development of training management process and embrace a wide areas of disciplines for need of company.

Strategy of the Training Center is to provide services for company staff skill improvement and requalification internally as well as externally in local and regional scale. It is desirable of integrating of Training Center operation within the human resource management and development.

This is undertaken to be done for the following disciplines at the moment of Training Center development. It is important to mention that the selection of areas can be done very carefully. It has to be taken in mind not only the scale only within company needs. At the same time it demands to study and marketing of the market needs in training requirements in order to have a success in related business area.



Figure 4. Area of disciplines

IV. CONCLUSION

This paper dedicated training process development. It has been illustrated the way of selection for staff skill development and improvement in the area with considering staff marked condition and circumstances.

There is a limited opportunities for the countries with transit system. It is important to identify and select a right direction in staff development. In this paper has been demonstrated conceptual approach of problem solving with decision of Training Center development.

REFERENCES

[1] S.L Wakabamba, N.K. Lujara, "Effective Engineering Training: the Case of Kigali Institute of Science, Technology and Management", Global J. of Engng. Educ., Vol. 7, No. 1, pp. 71-76, 2003.

[2] "Anglo American Platinum - Engineering Skills Training Centre (ESTC)", HRD_ESTC_ADM_FRM_012, Prospectus Rev. 1, 24 October 2014. [3] "Management of Organization and personal", The open University of Business School, UK, Part 1, 2013.
[4] "Management of Organization and personal", The open University of Business School, UK, Part 2, 2013.

BIOGRAPHIES



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