

The Management of the Corporate Training Efficiency based on the Monitoring of Performance Indicators in the face of new industrialization 4.0

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Abstract— The article examines a method for managing the corporate training efficiency based on the monitoring and analysis of key performance indicators of the training specialists in the face of new industrialization. There is a practice-oriented example of setting the key performance indicators of the training specialists, such as the successful passing of the final examination, maintaining of the group stability and quality of the knowledge gained. The calculation method and target values are described in details. A demonstration calculation of indicators was carried out on the basis of the training results of a group of employees. The role of the corporate training system in preparing specialists for a modern organization in conditions new industrialization 4.0 is described. The additional positive functions, that can be implemented by means of the corporate in-house training, are identified on the basis of analysis of the Russian and foreign studies. The logic of the annual assessing the work results of the training specialists (coaches) is described.

Keywords—*corporate training, training efficiency management, staff development.*

I. INTRODUCTION

The development of information technologies and a high competitive environment in the face of new industrialization make the business act as quickly as possible and respond to appearance of new technologies, ways of customer service and creation of new products and services [1]. The speed and readiness for changes becomes a life-critical factor for organizations in new conditions. The managers and owners of the companies are always aimed at an economic outcome, which leads to an increase in demand for the specialists with the knowledge able to carry out all the necessary business transactions. The personnel preparation is implemented through a system of the corporate in-house training in the modern organizations. Being, on the one part, a the dominant tool for the in-house corporate development and training of the staff, the corporate training of employees represents an essential expenditure item of the company on the other part, which fact stimulates the search for new ways to improve efficiency of the training process.

Since the 1970s, the in-house training of employees has become the main tool for basic training and updating the knowledge and skills of employees. With wide spreading of corporate universities around the world, the issue becomes topical as regards the methods for

assessing the professional training of personnel, their applicability to the specifics of training, reliability and correlation with the key performance indicators of an organization.

The knowledge bases in the companies become more complex, the importance of an intellectual worker increases. The relationship between the company's intellectual capital and its value is increasing in the eyes of the potential investors. At the same time, the socio-economic development tends to increase the role of the human factor in the management of the in-house training systems. A significant competitive advantage in the companies is human resources, as knowledge holders that play a significant role in the business development and acquisition of competitive advantages

II. LITERATURE REVIEW

"Corporate training" concept first appeared in the United States in early 1960s. Recently, the most widely used term has been - Training and development (T & D) (Tannenbaum, 1992). As in the present paper we will consider employees' training under a strategic angle, being oriented to the long-term employee development and aligned with the key company development objectives, we will define corporate training as the set of actions to develop employees' skills, abilities and knowledge designed to achieve the best use of company's human resources and taking the company's strategy into account. Thus, we will emphasize that the system of corporate training is an instrument to implement the company's strategy.

Using a corporate training system, the companies can achieve various goals, the main goal of which is the sustainable development of the staff and the organization as a whole.

Moreover, the researchers emphasize the following goals:

- continuous improvement of the management system of the organization; retaining of high-potential employees [2];
- maintenance of the company's brand and image; increase in the employee engagement by means of continuous training and career planning; staff number replenishment with an increase in the staff/turnover ;creation and maintenance of the corporate culture[3];
- implementation of new forms of education to develop the required skills (readiness for rapid changes, psychological stability)[4];
- introduction of corporate standards[5];

- strengthening of the employer’s brand in the eyes of the customers and potential/current employees; implementation of innovations in the company[6];
- increase in the staff involvement due to the development and training opportunities[7];
- creation of a future personnel reserve through involvement of pupils and students in the training process[8];
- creation of an aggregate picture of the organization functioning among its employees[9];
- stimulation of a proactive approach to life among the employees; reduction of the financial and time costs when training the employees[10];
- theoretical knowledge and practical skills regarding data acquisition, processing, visualization and interpretation are needed to exploit the full potential of digitalization [11].

III. METHODS

The list of tasks performed in the course of corporate training measures covers a wide range of processes of the organization functioning: from rather narrow and local processes, such as learning of specific skills, up to the global ones –image formation, creation of the future human resources and implementation of innovations. In order to implement the process of training and development of the employees, the corporate universities use a large arsenal of forms and methods, constantly improving them, but there is a difficulty in identifying those ones that bring the greatest benefit to the business [12]. It is not always possible to determine the positive impact (and the feasibility of investments to the next employee development projects) of the training conducted by means of assessment of the financial results.

We have analyzed a group of key performance indicators in the field of a contact center, contributing to achievement of indicators significant for the organization, and namely:

- Stability of the trained group – this indicator is necessary for employment of the required number of employees within a specified time period. It promotes successful prediction of the staff number and substitution. The indicator minimizes the resources for staff recruitment as well as contributes to the maximum involvement of the coach in the process of retaining candidates in the company and their motivation for employment [13].
- Successful passing of the final examination – this indicator reinforces the functions of the previous one and supplements the control over the minimum required level of knowledge enabling performance of the necessary work operations by new employees.
- Quality of knowledge – this indicator demonstrates the completeness of the knowledge gained on all the learning topics. It is necessary to demonstrate the required level of knowledge and the presence of deviations in the skills that require improvement during the adaptation period of the employees.

IV. RESULTS

We have examined in practice the criteria for monitoring and management of efficiency in the field of telephone customer service developing in Russia and abroad.

TABLE I. ASSESSMENT INDICATORS OF COACHES IN THE CONTACT CENTERS

| Item No. | Indicator | Calculation Formula | Measurement Time Interval | Target Value |
|----------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------------|
| 1. | Successful passing of the final examination | $\% US = (P1/P) * 100\%$ (9); where (P1) is the number of candidates who have successfully passed the examination on the first attempt upon completion of a training course, (P) – total number of the educated candidates (who were admitted to the examination). | According to the training results of each group | 80% |
| 2. | Stability of the trained group | $\% S = N1/N * 100\%$ (10); where (N1) is the number of candidates receiving training as of the examination date; (N) – total number of the candidates who were present on the first day of training | According to the training results of each group | 80% |
| 3. | Quality of knowledge | $\%QT$ (11) where (QT) is a grade point average on the check list following the results of the final examination (the percentage of correct answers at the examination is used during the calculation) | According to the training results of each group | 85% |

Source: Prepared by the author

All the results of the training conducted in each group are registered in the records. Let us consider the results of one of the groups as an example.

We would like to make a demonstration calculation of indicators of the training group from table 2:

TABLE II. EXAM RESULTS

| Training | Name | Results (max 100 p.) | Successful passing of the examination |
|----------|---------------|----------------------|---------------------------------------|
| Base | Specialist 1 | 96 | + |
| Base | Specialist 2 | 90 | + |
| Base | Specialist 3 | 98 | + |
| Base | Specialist 4 | 53 | - |
| Base | Specialist 5 | H | - |
| Base | Specialist 6 | 88 | + |
| Base | Specialist 7 | 94 | + |
| Base | Specialist 8 | 100 | + |
| Base | Specialist 9 | 92 | + |
| Base | Specialist 10 | No | No |
| Base | Specialist 11 | 80 | + |
| Base | Specialist 12 | 100 | + |
| Base | Specialist 13 | 89 | + |
| Base | Specialist 14 | 90 | + |
| Base | Specialist 15 | 85 | + |
| Base | Specialist 16 | 81 | + |

Source: Prepared by the author

- Percentage (%) of stability of the group = $N1/N = 14/16 * 100\%$ (2 participants decided not to continue the training – they are marked with the letter “N” in the table) = 87,5%. The target value has been implemented.
- Percentage (%) of successful passing of the examination = $P1/P = 13/14 * 100\%$ (1 of the participants did not score

the required number of points – in the table in the column of successful passing “No”) = 92,8%. The target value has been implemented.

- Quality of knowledge = the amount of the results of all participants / number of those ones who passed the examination = 1236 points / 14 = 88,3 points. The target value has been implemented.

The annual value of the indicators is determined for each trainer as an average value of all the groups in terms of quality, stability and successful passing of the examination. Both the evaluation of the coach work and the determination of the required development activities are carried out on the basis of the data obtained.

Monitoring the effectiveness of the coach should be carried out on a monthly basis. As mandatory measures to monitoring and improve the effectiveness are carried out the following:

TABLE III. Methods Monitoring the effectiveness of the coach

| Skills | Method ratings | Arrangements for working with deviations | | |
|-----------------------------------------------|------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| | | Theory | Supervision | Practices |
| Learning skills | Demo version of the training | Trainings for trainers, Club trainers, Video, Books | Feedback, Experience exchange | Supervision Recording training on video (analysis) |
| | Manager /mentor support | | | |
| Knowledge of products, processes and software | Product Exam | Product training, product seminars, calibration with experts, quality monitoring regulations | Master class and exchange of experience with colleagues, meeting with related departments and productologists, | Holding a seminar on a problematic topic |
| | Errors in exam results | | | |

Source: Prepared by the author

V. CONCLUSIONS

As a result of the study pursued, we summarized the main functions of the corporate training: from direct learning of the necessary skills up to the image formation and implementation of innovations. We considered an example of the efficiency monitoring through analyzing the results of the final examination by the employees. The values of the target indicators and the logic of their calculation have been described. The obtained results can be used not only in the field of training management in the contact centers, but also in the other companies, independently from the direction of their economic activity.

In conclusion, we should note that employee development cannot be considered as one of the secondary importance for the company's performance as for the company to be successful it has to be able to continually adjust to internal and external changes and evolve, and the corporate training system help the company achieve its mission.

VI. DISCUSSION

The system of the in-house corporate training is effective when it is a tool to achieve the significant business indicators as follows: employment of the necessary staff number, presence of the required set of knowledge and skills in the staff including such as working with big data analysis, creating learning with augmented reality and other types of training related to industrialization 4.0. The goals for which the work assessment of the training specialists is carried out shall be correlated with the goals of the company (aimed at solution of a problem that is correlated to the business need). The digitized values of the training results of each group allow us to correlate the efficiency of the training specialists and to take corrective development measures for them in order to increase the indicators.

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