Human Talent Management in a Mexican Ferroelectric Company as a Strategic Factor

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Abstract: The present work realizes an analysis of the stages in the human talent management of a ferroelectric SME in the municipality of Apizaco, Tlaxcala state, Mexico, in order to create a system that allows to have adequate processes of recruitment, selection, training and development, as well as remuneration and rotation, that are adapted to the needs of the organization and that allow increasing productivity, a key element to boost economic growth; the methodology chosen for the study was quantitative, in order to know the relationship between the development of human talent and productivity, it has a correlational scope, the model was determined based on the proposal of management by competencies to the benefits that it offers, among them is to integrate the objectives of the company with those of the person, which is reflected in the improvement of productivity.

Keywords: Human talent, system, productivity, SME.

[In Spanish] …
Resumen: El presente trabajo realiza un análisis de las etapas en la gestión del talento humano de una Pyme ferroeléctrica en el municipio de Apizaco, estado de Tlaxcala, México, a fin de crear un sistema que permita contar con procesos adecuados de reclutamiento, selección, capacitación y desarrollo, así como de retribución y rotación, que se adapten a las necesidades de la organización y que permitan incrementar la productividad, elemento clave para impulsar el crecimiento económico; la metodología que se eligió para el estudio fue cuantitativa, a fin de conocer la relación que hay entre el desarrollo del talento humano y la productividad, es que tiene un alcance correlacional, el modelo se determinó con base en la propuesta de gestión por competencias debido a los beneficios que brinda, entre ellos está integrar los objetivos de la empresa con los de la persona, lo que se refleja en la mejora de la productividad.

Palabras clave: Talento humano, sistema, productividad, Pyme.

1. Introduction:

Talent development in the business field is not new; however, there are still areas of opportunity in this regard, mainly in SMEs. For any organization management of human resources is very important because collaborators are the ones, who make possible the productive processes, as well as all the activities related to them; so it is essential to focus a large part of the efforts mainly on their recruitment and selection, training and development, rotation and retribution. However, SMEs still have problems to hire the right personnel, maintain good communication between their work team and meet their employee's training needs, causing low productivity.

This article is derived from the research developed by the authors as a requirement to apply for the Master's Degree in Management Engineering at the Technological Institute of Apizaco, providing analysis of the test performed in a ferroelectric SME in order to identify patterns of behavior that allow to create a system of efficient processes in the development of human talent

2. Problem definition:

For Castillo (2012) capital or human talent is the set of knowledge, skills, and attitudes both present and potential employees in a particular organization from

which they develop their business proposal and achieve the proposed objectives.

Therefore we can say that talent is the ability that people have to solve problems intelligently, applying all their skills, knowledge, abilities and experiences, committed to the progress of the organization.

Ferroeléctrica Díaz, the SME object of study in the present investigation, lacks structure for the human talent development; the selection process is carried out by the owner, contemplating covering an immediate need rather than visualizing such hiring in the future; it does not quantitatively measure the performance of its employees, nor do they have defined activities to perform in each position, which leads to duplication of activities and downtime, in short, low productivity, which is represented in monetary losses.

Therefore, it is necessary to define a human capital management model and measure results, since people become a very valuable asset for the company to increase its productivity. Kaplan (2002) says that the productivity of employees is an indicator of the result of the global impact of having increased training and employee morale as well as innovation and improvement of internal processes and customer satisfaction.

3. Human talent by competencies:

When speaking of competence development, reference is made to a series of activities that are carried out with the purpose of improving performance in a particular competition (Alles, 2005); within the most difficult competences to develop and evaluate are the adaptability to change (flexibility), continuous learning, self-control, self-direction based on value and autonomy.

Sagi-Vela (2004) defines labor competency as the set of knowledge (knowledge), skills (know-how) and attitudes (knowing how to be and wanting to do) that, applied in the performance of a particular responsibility or professional contribution, ensure their good achievement.

The benefits of management by competencies are more evident in large corporations than in SMEs, generating higher productivity, receiving salaries above the average, partly due to factors such as more bargaining power with suppliers, lower energy costs, etc. However, there is a factor that SMEs can adapt to their normal operation and this is none other than the implementation of a management of people that relies on something as simple as an effective adaptation of the person to the job and its organizational environment.

Competency management covers the traditional areas of human talent management in the organization: selection, remuneration, training, evaluation, and promotion. The benefits that it brings are the following:

• Is an effective tool for changing management and management improvement.

• Facilitates continuous performance evaluation in a generalized manner.
• Integrates the company objectives with those of the persons.
• Introduces a new model of leadership, facilitator, and trainer.
• Links an integrating model of professional development.
• A more just equitable and efficient remuneration system is established.

It is advisable to implement in SMEs this management model by areas or departments in order to gradually adapt the change throughout the company, aiming that this is not impaired in their daily performance.

4. Methodology:

In accordance with the objective of proposing a human talent management system in order to generate actions that lead to the improvement of the results in the company's productivity indicators, a quantitative study was chosen, since this method uses data collection to test hypotheses, based on numerical measurement and statistical analysis to establish patterns of behavior and test theories (Hernández, et al., 2010).

Because it seeks to know the relationship between the development of human talent and productivity, is that the research has a correlational scope, whose purpose is to know the degree of association that exists between two or more concepts, categories or variables in a context in particular (Hernández et al., 2010). Therefore, correlation between independent variables, which in this case are, selection and recruitment, remuneration, training and career development of the staff, with the dependent variable that is productivity, will be determined.

Likewise, it is determined as a descriptive investigation since its goal is not limited to the collection of data, but to the identification of the relationships that exist between two or more variables. According to Hernández et al. (2010), the descriptive cross-sectional designs have the objective to investigate the incidence of the modalities or levels of one or more variables in a population, purely descriptive studies.

5. Population and Sample Selection:

The population in which the statistical analysis is applied to the collected data, through questionnaires, is fully identified, with the SME where the present investigation is carried out. The staff of one of the 4 branches of the company are taken as a population, which is composed of: (1) owner or manager, (1) assistant manager, (4) manager of branch, (2) administrative and (37) collaborators in operational area. Being a total of 45 employees, it should be mentioned that only one person is the one who makes decisions regarding the management of human talent, being the owner the person with transcendent decision-making power for the organization.

For Hernández et al. (2010) the non-probabilistic or directed sample is the subgroup of the population in which the choice of the elements does not depend on the probability but on the characteristics of the investigation. Therefore, the sample is equal to the total of the population, from its absolute form the total of elements of the population is relatively small, considering the following areas: management, in charge of the sales area, cashier, warehouse and operational area, corresponding to 100% of the population.

6. Instrument:

The survey was determined as a technique and as a tool. The questionnaire presented to employees for collecting information requires written answers. The questionnaire, whose purpose is to obtain information to solve the problem detected, serves as a link between the objectives of the investigation and the studied reality, To this end, two questionnaires were designed with multiple choice questions and a Likert scale, which consists of a set of items presented in the form of statements or judgments, before which the reaction of the participants is requested (Hernández et al., 2010). The first questionnaire is aimed at the management that has power in making decisions about the personnel and another for the operational part. The first is structured with 23 items and the second consists of 21.

These are of closed type with the purpose of measuring recruitment, selection, training and career development variables, obtaining clear, concise, and timely information.

A pilot test is carried out to validate the instrument, administering it to a small sample to prove its relevance and effectiveness, as well as the conditions of its application and the procedures involved (Hernández et al., 2010), for which 15 employees with analytical criteria from "Ferroelectrica Diaz" are selected. Employees who, in addition to answering the questions, formulated criticisms by the instrument, thereby improving the form and content of the instrument, and ensuring that the information collected is objective. Later it is applied to the rest of employees (30); and finally, the analysis and interpretation of results were carried out, with the aim of establishing conclusions and recommendations coming from the investigation to solve the problem.

7. Validity and Reliability:

Regarding the validity and reliability of the instrument, the Expert Judgment technique was applied to validate questionnaires, that is, its reliability in terms of content and structure.

The Instrument was examined by experts in the area of knowledge, issuing value judgments on validation for its pertinent correction and application. Reliability of a measurement instrument refers to the degree to which its repeated application to the same subject or object produces the same results. To this end, Cronbach alpha which is a crescent that helps to calculate the degree of reliability of an instrument is used, Hernández et al. (2010) determines that the minimum acceptable value for the Cronbach alpha coefficient is a scale on which 0.25 is obtained in the coefficient, this indicates low reliability; if the result is 0.50 it is average or regular. On the other hand, if it exceeds 0.75 it is acceptable, and if it is greater than 0.90 it is high.

For the calculation of Cronbach alpha, the following variants were used:

$$\alpha = \frac{K}{K-1}\left[1 - \frac{\sum Vi}{Vt}\right]$$

Where:
   α: Alfa de Crombach.
   K= Número de Items.
   Vi= Varianza de cada Item.
   Vt= Varianza del total.

Once the test is applied to the operative collaborators, a Cronbach alpha of 0.80 is obtained, concluding that there is a good relationship between the established items. Table 1 shows the variables, indicators, and objectives included in the first questionnaire applied to operational staff.

Table 1. *Variables, indicators, and objectives. Own elaboration.*
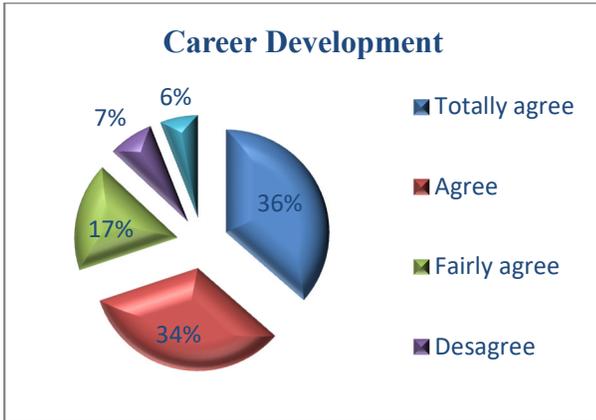
Variable	Indicator	Target
Career development	-Induction to the post.	- Importance that the company gives to the integration of the new members.
	-Specialized training.	- Quality in the employee learning.
Remuneration	- Competitive salaries in the market.	-Based Pay
	-Compensations	- Optimize variable compensation.
Rotation	-Percentage of internal rotation.	- Unplanned internal staff turnover.
	-Organizational climate	- Employee satisfaction

8. Results and Discussion:

Now, analyzing the information obtained can observe the following behavior in:
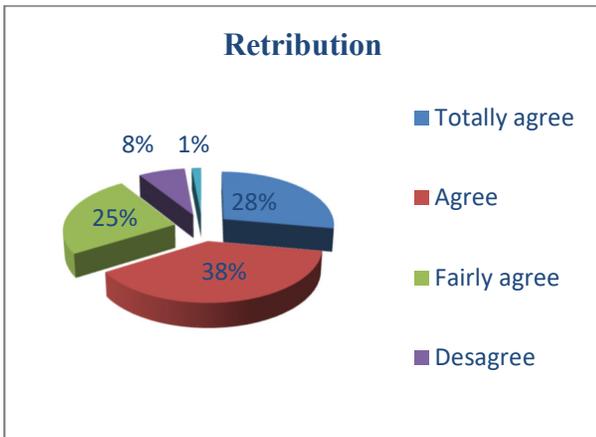8.1.Career development:

The objective is to identify the process of adaptation with which the company has for new employees to the hardware store, as well as the degree of importance it gives. In graph 1 you can see the results: 34% responded in agreement, 36% responded in full agreement, 17% fairly agree, 7% in disagreement and 6% completely disagree.

Graph 1. Carrer Development. Own elaboration.

8.2. Retribution:

In this area, the objective is to identify the perception of the compensation that the company handles for employees of the hardware store, as well as the degree of importance it gives. Graph 2 shows the results: 38% responded in agreement, 28% responded in full agreement, 25% agreed in a moderate way, 8% disagreed and 1% completely disagreed.
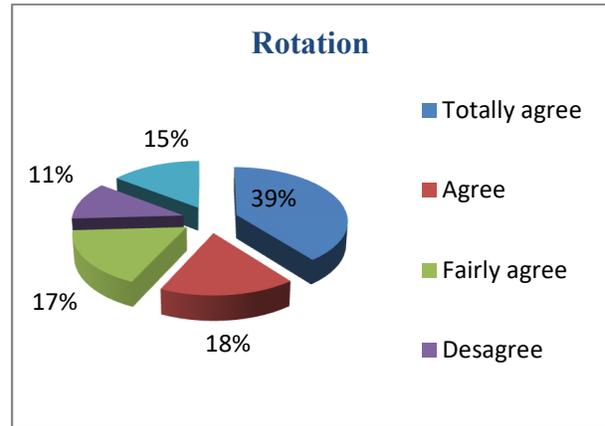

Graph 2. Retribution. Own elaboration.

8.3. Rotation:

In this area, we intend to identify the planning that the company performs with respect to the rotation of the employees of the hardware store. In graph 3 you can see the results: 19% responded in agreement, 39% responded in full agreement, 18% in agreement, 11% in disagreement and 15% completely disagree.

Graph 3. Rotation. Own elaboration.
Results point to the premise of this research that is necessary to implement a system in human resources area that is adapted to the characteristics of the SME, allowing improving its productivity, without forgetting that its consequent growth must be contemplated in the system that is implemented.

9. Recommendations:

The proposal is a human talent management model whose objective is to generate actions that lead to the improvement of the results in the company's productivity indicators; the model integrates different management processes of people with specific objectives, such as:

• Recruitment and selection. Define adequate recruitment sources to attract candidates who meet the necessary requirements to fill a position, and identify selection techniques that suit the functions of the positions.
• Career development. Propose integration and induction programs, as well as a calendar to follow to accredit training courses that go according to job profiles, and thus achieve a better use of the knowledge acquired.
• Compensation. Establish a remuneration system that allows encourage employees and reduce turnover in the workforce.
• Rotation. Propose the planning of internal rotation (of position or branch) and external rotation (separation of the company) in order to reduce the stress that this causes in employees and minimize the costs involved in hiring new personnel.

10. Conclusion:

The SME, case study, has been growing thanks to trial and error, from a micro company of 6 members (family members) to become a SME of 45 employees, however it is necessary to change its administration method, with respect to human talent, developing a model based on these findings will definitely encourage employers to implement some sort of talent management techniques, which required an analysis that demonstrated

the urgency of the change in this regard. With the test, the numerical measurement and the statistical analysis, the following behavior patterns were determined: 36% of the surveyed employees agree with their training process, 28% with their compensation and 39% with the rotation; which points to the lack of an efficient system in the aforementioned processes. Recognize the importance of creating this system led to propose the model that allows the company Ferroeléctrica Díaz to have appropriate processes to its current size and shape, where the stages of recruitment, selection, training and staff development are appropriate to be adapt to the needs of the organization, this will improve productivity and become more competitive; this assessment helped determine the research and the preparation of the article, whose purpose is to analyze the human talent management in a SME.

The study was carried out in spite of the uncertainty on the part of the collaborators, but with all the availability on the part of the owners who already resented the consequences of lacking a human talent management model.

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References:
1. Alles, M. (2007). *Desarrollo del talento humano basado en competencias*. Buenos Aires. Granica. ISBN 978-950-641-123-7
2. Castillo, R. (2012). *Desarrollo del Capital Humano en las organizaciones*. México. Red Tercer Milenio. ISBN 978-607-733-011-0
3. Hernández, R., Fernández, C., & Baptista, P. (2010). *Metodología de la investigación*. México. Mc Graw Hill. ISBN 970-10-5753-8
4. Kaplan, R. (2002). *El cuadro de mando integral*. Barcelona, España. Ediciones Gestión 2000. ISBN: 978-84-8088-504-1
5. Sagi-Vela, L. (2004) *Gestión por competencias: el reto compartido del crecimiento personal y de la organización*. Madrid, España. ESIC Editorial. ISBN13:9788473563840