

# Quantification Of Hospital Activity Through Engineering Techniques

Marvin Vladimir Dávila Perez<sup>1</sup>, Wlamyr Palacios Alvarado<sup>2</sup>, Álvaro Junior Caicedo Rolon<sup>3</sup>

<sup>1</sup> Faculty of Business Sciences, Universidad Francisco de Paula Santander Cúcuta, Colombia,  
<https://orcid.org/0000-0002-6935-2413>

<sup>2</sup> Faculty of Engineering, Universidad Francisco de Paula Santander Cúcuta, Colombia,  
<https://orcid.org/0000-0002-4292-4178>

<sup>3</sup> Faculty of Engineering, Universidad Francisco de Paula Santander Cúcuta, Colombia,  
<https://orcid.org/0000-0002-3651-3364>

---

## Abstract

The performance evaluation is a systematic assessment of the performance of each person in the position or the potential for future development. Any evaluation is a process of studying or judging the value, excellence, and qualities of an individual. The evaluation of individuals who play roles within an organization can be carried out using various approaches, which are called performance evaluation, merit evaluation, employee evaluation, progress reports, among others. The performance evaluation is a means to locate problems of personnel supervision, employee integration to the organization or to the position he/she currently occupies, disagreements, wastage of employees due to higher potential than required by the position, motivation, etc.

**Keywords:** activity, standard, method, process, process, process, variable

---

## Introduction

Nortmedic IPS S.A.S., is a company dedicated to the provision of clinical care and specialized services, through a sterilization center, I.C.U., E.C.U., diagnostic imaging, pharmacy and hemodynamics, which works allied to the IPS UP, to provide better welfare to its users. It was previously known as Prodiagnóstico Oriente S.A.S., and was in operation for four years, it underwent changes, both in its corporate name and at the administrative level and as of October 2016 it bears the name of Nortmedic Cúcuta IPS S.A.S. The current situation of Nortmedic Cúcuta IPS S.A.S. was based on the fact that its human talent did not know the functions to be performed and, therefore, the objectives in each of the positions were not met, since there was no documented manual of functions, which served as technical support to justify and give meaning to the existence of the positions in the institution, which did not contribute to the fulfillment of the institutional mission and vision.

There was no performance evaluation of the workers, which covered the actions and behaviors observed in the employees, in order for them to achieve good work performance; this should be annual, allowing them to improve their processes according to the goals set. They also lacked an induction program to adapt employees to their new job role. The aforementioned problem arose because it is an institution that has been in operation for six months, and it still did not have all the necessary processes to ensure

adequate human talent management; in addition, employees were only given a brief description of the functions related to their position at the time of induction, but there was no follow-up and evaluation of the activities performed, because there was no management and supervision of the personnel.

If this situation continued, it affected the employees in terms of knowledge when performing their activities and therefore, there were delays in the provision of services, which were inadequate due to the same lack of knowledge of the functions, where unnecessary and misleading procedures were carried out; There was a risk that the company, in terms of administrative improvement and modernization, did not have sufficient tools to undergo the respective visits by the Departmental Institute of Health, which are intended to authorize the IPS to provide health services, or did not adequately manage its processes to obtain quality certification.

According to the above, it was necessary to develop a proposal for improvement in the management of human talent for the company Nortmedic Cúcuta IPS S.A.S., through the design of the functions manual, an induction program and determination of the evaluation of job performance by competencies, so that the requirements and inherent functions of each position could be known and solve the problems that arose with users, ensuring the timely and effective management of the needs of these; in addition, to monitor the performance of the worker.

### **Importance of the research.**

Nortmedic Cúcuta IPS S.A.S., required an improvement in the management of human talent, so that its workers could perform their functions in a more organized and efficient way, focusing its processes towards continuous improvement, through a manual of functions, induction and re-induction program and performance evaluation by competencies, being these important requirements, thanks to their internal use, responsibilities were marked, work was assigned, labor supervision was framed and order was promoted in the different areas within the company, whether it was assistance or administrative. The development of this proposal allowed the company to carry out a diagnosis that detected variables that did not meet the company's requirements for the provision of its services, preventing delays or other inconveniences during the work; it also helped the IPS to be more agile and provide services in a more competitive manner. On the other hand, it was possible to monitor the personnel, seeing a permanent improvement in the results of the organization, adapting the personnel better and involving them in the functions that corresponded to them according to their job.

The present study included a diagnosis of the company, to know its management in terms of human talent; an occupational analysis of each position was carried out, to collect information; in addition, the positions were described; designing the functions manual, then an induction and re-induction program for employees was developed, in which the activities that allowed the adaptation of the new worker to his position were stipulated, and it was established how to perform the performance evaluation by competencies of the employees, in each of the positions. Romero (2006), in his book, "organization and business processes", defines it as: "The result of a research process related to the organization and operation of companies, which makes it possible to determine and evaluate the cause-effect relationships of the problems detected and provide a comprehensive solution to them" (p.87).

The business diagnosis is a simple and very useful tool to learn about the current situation of an organization and the problems that hinder its growth, survival or development. Thanks to this type of diagnosis, the main causes of the "root" problems can be detected in order to focus future efforts on finding the most effective measures and avoid wasting energy. The natural source of labor information is the person who occupies the position; for obvious reasons, it is that person who should know best how his or her job functions. Questionnaire. The basic information provided by the worker is best obtained by means of a carefully designed questionnaire. Whatever the design of the questionnaire chosen, its

completion is more effective if the worker has the opportunity to answer it in a reasonable time and with the availability of the analyst in charge of the study to clarify any doubts that may arise. If there are several people performing the same job, the one with the best work performance will be chosen, since he/she is considered to be the most knowledgeable about the job. In this way, the person responsible for the study obtains a first advance of information, to be verified in search of any inconsistencies that may arise (Castillo, 1993. p.89).

When it comes to the creation of a new position, its analysis will be carried out jointly by the immediate supervisor and the occupational analyst, who will prepare a tentative description, to be completed later with the intervention of the occupant of the position (Castillo, 1993, p.89-90). Observation. A second method for seeking the required labor information is that of direct observation, which consists of the analyst's on-site inspection of the performance of the position. This means of collecting work data is more effective if it is carried out after the analyst has read the questionnaire filled out by the worker and with the intention of clarifying what is necessary (Castillo, 1993, p.90). (Castillo, 1993, p.90).

Interview. The third method used to gather the information needed to analyze a position is the interview. Generally, this personal communication is used by the labor analyst to refine the information obtained from the employee and his or her immediate supervisor. Through an adequate interview it is possible to obtain data on critical incidents that occur during the performance of the position and which are important for a detailed study (Castillo, 1993, p.90). The analysis of the positions allows to detect and correct the duplication of functions or the crossing of responsibilities and imbalances in the workloads of the different positions of the company, thus avoiding problems of interpersonal friction and, in general, demotivation of the workforce; it also facilitates the prioritization of the functions of each position, so that its occupant can distinguish the important activities from the secondary ones and where to direct their efforts. The process of occupational analysis. "The practice of occupational analysis is facilitated if we visualize this function as a process, that is, as a set of interrelated activities or stages to produce a result, which, in this case, will be the position manual" (Castillo, 1993, p. 87).

## **Method**

The collection of information was done through direct observation and the application of a survey, where data is collected according to the different positions of the workers; in addition, a survey was used for the analysis of the position to define the responsibilities in each job position and, the components that are needed to acquire such position, when the functions manual is built. Two more surveys were used for the induction and performance evaluation programs.

According to Tamayo & Tamayo (2003), in their book, *Proceso de Investigación Científica*, descriptive research: It comprises the description, recording, analysis and interpretation of the actual nature, composition or process of phenomena. The focus is on dominant findings or on groups of persons, groups or things, conducted or operating in the present tense (p.46). Through the application and analysis of the survey, it was observed that 3% of the 40 workers surveyed had no work experience, which is equivalent to one person within the company. People with experience between six months and one year account for 8%, which is equivalent to 3 people; another 8% say that their work experience is between one year and three years, which is equivalent to 3 people.

Eighteen percent of the company's employees said that their work experience is between three and five years, giving a total of 7 people. Sixty-five percent, equivalent to 26 people working in Nortmedic, stated that their experience goes beyond five years. According to the analysis, it can be said that most of the workers have reached more than five years in the work environment, and therefore would clearly comply with the responsibilities assigned to them, leading the company to achieve high quality.

## Results

It is very important for Nortmedic Cúcuta IPS S.A.S. to have a Functions and Occupational Profiles Manual, which summarizes the functions and attributions of the different positions, as well as the profiles required to occupy these positions, as this guarantees competitive advantages over other Service Providing Institutions in the city. It is recommended that the document referring to the functions manual be reviewed by a person in charge who is trained and inspected every six months to identify where it should be modified, and that this person in charge supervises how the functions presented in this document are being performed and that they are being carried out in the best way, since this document helps to make decisions. It is recommended that employees be familiar with the job manual and that they themselves be trained so that they know how to carry out their responsibilities within the positions to which they belong in the work area.

It is also important that employees know how the company's structure works, and that they work for the benefit of the company for administrative improvement, in this case in the area of human talent. It should be noted that it is advisable to nominate coordinators or leaders in the different areas of the company so that there is better communication. It is important for the company's induction and re-induction program to emphasize all areas of work, and at the same time to make each employee aware of the importance of induction, since it helps them to be incorporated in a better way with the company.

It is recommended to provide general information about the company, specifying its strategic purpose and the operation under which both the company and the employee are governed, as well as general information about the position to new personnel or those who are being inducted to a new position. It is necessary to generate evaluations to identify the skills or possible failures that occur at the time of induction and re-induction and improvements can be generated. It is recommended to train all employees and especially a person in charge of the application of this program and to hold a type of meeting to provide feedback on the evaluation in order to establish corrections.

It is essential to establish a procedure to carry out a Performance Evaluation, since it generates a step-by-step procedure to follow to carry out such evaluation and make it more effective and agile. It is recommended that employees know the skills they should have and develop in their specific area of work, as this helps to improve their performance and therefore to get closer to the purpose of the company's corporate purpose. It is necessary to have a person or personnel in charge, as in the induction and re-induction program, who is trained to apply this evaluation. It should be noted that according to the methodology used, which is essential to define before the evaluation procedure, employees should be trained so that they are aware of the development of their activities and the performance they must achieve in the development of the same. It is very important to recognize the performance achieved by an employee, as this motivates them even more and makes them love their work, which creates a good and harmonious work environment.

For the performance evaluation program, it is recommended to carry out evaluation tests in which the employee makes his or her performance known and in turn makes known how satisfied or dissatisfied he or she is in his or her workplace and allows establishing where measures should be taken.

**Table 1. Recruitment profile**

<b>RECRUITMENT PROFILE-ELEMENTS OF COMPETENCE</b>	
<b>Verification Method</b>	<b>Level of Importance</b>
<b>A. Resume</b>	<b>A. Required</b>
<b>B. Human talent interview</b>	
<b>C. Interview Immediate supervisor</b>	
<b>D. Standard test</b>	

<b>E. Certificates and diplomas</b>	<b>B. Preferable</b>
<b>F. Reference Checks</b>	
<b>G. Personality test</b>	
<b>H. Legal documents (as established by the institution)</b>	

It is recommended that Nortmedic Cúcuta IPS S.A.S. carry out a general socialization for the workers of the assistance and administrative area where each of the documents prepared is made known and their content is specifically explained to them, since the company currently sends these documents indirectly through institutional mail. The performance evaluation in an organization is a process that must be carried out with certain constancy, since it facilitates the growth of the entity through the knowledge and valuation of its personnel. It consists of a process of setting objectives and evaluating individual and group behavior and achievements during a certain period of time. In addition, advice and feedback should be given on how to improve employee and group performance, as well as working relationships. Good performance is achieved when workers have clear priorities and objectives, and when they establish what improvements should be made and communicate among coordinators, leaders and assistants, to determine what is the approach to do a better job.

The observation and evaluation of personnel is important and is part of the responsibility of superiors, not only to qualify their performance but to generate positive changes in this, and for making decisions that have to do with promotions, transfers, training, incentives or dismissals. The use of performance evaluation is important in every company, because it not only provides information about the employee but also about the company's performance. A proper evaluation requires objectivity in order to strengthen labor relations, thus avoiding the generation of conflicts within the company. In Nortmedic Cúcuta IPS S.A.S., according to the analysis obtained from the application of the diagnostic survey for the performance evaluation program it was observed that this process has never been carried out in the entity, therefore, it was necessary to design a physical document where the steps to perform a competency-based performance evaluation are clearly explained.

The performance evaluation program of Nortmedic Cúcuta IPS S.A.S., has a structure that begins with an introduction to the program and the benefits that the application brings to the entity and its workers, among which we can highlight the improvement in the provision of high complexity services in the department. The general objective is to establish this program in the company, and the three specific objectives describe the three important aspects that must be carried out to implement this program in the IPS, which are: first describe the methodology to be used, second design the evaluation tests to be applied to employees and finally the actions to be taken according to the results obtained in the evaluations.

In the scope of the program, it is clarified that it is aimed at workers in both the assistance and administrative areas, the legal framework that applies to it and those responsible for conducting the performance evaluation by competencies who are: the quality coordinator, the human talent coordinator who is the same administrative coordinator and finally the leader of occupational safety and health. Next, the methodology to be used is defined, which is the 360° evaluation of Marta Alicia Alles in her book Performance by Competencies, which allows measuring the employees, with this the strengths and weaknesses of these are known and with the information corrective measures could be taken.

The 360° evaluation consists of each employee evaluating more than one person, which provides a better vision, as opposed to if only the immediate boss or superior were to do it. The way to perform this procedure according to the methodology to follow is that each employee must evaluate a colleague of the same position or who is in the same hierarchical level, must also evaluate his superior and a subordinate for the cases of the manager, coordinators and leaders, but not for assistants since they do not have subordinates. This type of program is used to measure the performance of human talent, evaluate competencies and serves as a basis for implementing action plans, it is also a tool that provides

information on all the perspectives that a worker may have from his job, it also generates a better working environment because at the time of the evaluation teamwork is encouraged and constructive criticism is made.

It is proposed to follow a procedure, which proposes to train the workers, this is a very important aspect for both the evaluators and the evaluated since with this they will know which competencies are going to be evaluated and the procedure to follow, they must be informed about the format under which the evaluation is going to be performed, then it establishes that the objectives to be achieved according to the positions must be known, these must be achieved by complying with the responsibilities, functions of the position, competencies and behaviors, then it mentions that it is intended to inform the worker about general aspects of his job such as contracts, dates of entry, change of position, leaves of absence due to incapacity, calls for attention among others, dates of entry, change of position, leaves of absence due to incapacity, calls for attention, among others, and the competencies that must be had for each position that are established in the manual of functions in the profiles of each job position must be identified, in addition, the evaluated is available to perform the evaluation according to the methodology that is proposed, This must be notified in writing, it is decided to fill out the form and then go through a process of tabulation and analysis of the information and thus generate an analysis of what was the performance evaluation by competencies and take corrective actions according to the results.

The competencies that each employee in the assistance and administrative area must have are clarified, where these competencies are the skills they must have to be able to perform their duties and thus have a better performance regardless of the complexity of their tasks. For the elaboration of the evaluative tests of the performance evaluation program, the most important skills are taken into account according to the tasks that the worker performs with respect to his position, for this purpose, skills are taken for the administrative area, which will be established at the management level depending on the administrative activity that is performed. Such management can be identified as technical, human resources administrative, among others.

The development of the induction and re-induction program was based on the results obtained in the diagnosis, since with this I can analyze what information should be provided to the worker that is fair and necessary to be able to develop their functions and responsibilities, where this is given general information about the company and also specific data of their job. It was found that employees have not been evaluated in terms of their job performance. Therefore, a competency-based performance evaluation program was established based on the 360° evaluation methodology. This process seeks to determine the attitudes, performance, work behavior and competencies of the employee in the performance of his position.

The performance evaluation established for Nortmedic Cúcuta IPS S.A.S., is based on the 360° evaluation methodology of Marta Alles and this will serve to direct and control the personnel in a fairer way, and to check the effectiveness of the personnel selection processes. Furthermore, with the results obtained from this process, corrective actions can be taken with the objective of improving the competencies that do not have the necessary level and on the other hand, the incentives that can be granted to the worker who obtains a superior performance in the evaluation tests.

## **Conclusions**

This scale establishes the types of misconduct that can be generated within the company, which are divided into minor and serious misconduct, each of which leads to some type of sanction through verbal warning, memorandum, written warning and suspension from work, in addition to the procedures for verifying misconduct and forms of application of disciplinary sanctions. It also includes the social security to which the worker is subscribed, the work schedule he must comply with, the leaves he may

request and how he must do it, the equipment provided by the employer, the salary to be earned, and it is explained what a temporary worker is entitled to, who must not last longer than one month in the company in order to comply with these conditions.

In addition, overtime and night work, the legally mandatory rest days for the employee that the company must grant, the paid vacations to which the employee is entitled, the prescriptions of order that are the duties that must be fulfilled, the prohibited work for women and minors under 18 years of age who are working or doing internships in the entity, Nortmedic's obligations to the employee and the employee's obligations to the company, the special prohibitions for the IPS, the causes for which the contract can be terminated unilaterally between the two parties and the mechanisms for the prevention of labor harassment and the internal procedure to be carried out for its solution.

The last point within the structure of the induction program for Nortmedic Cúcuta IPS S.A.S., are the evaluative tests that were taken from ARL SURA, which serve to verify whether the induction mode provided is optimal or not, these are composed of dichotomous questions which have two answer options which are; is the information clear? or would you like more information? these are marked with an X, 13 questions are about the presentation of the company and 8 about the generalities of the worker. 50.45% of employees are aware of the risks to which they are exposed while performing their work, while 49.55% are not aware of the risks. 63.06% were familiar with the canteen services that the IPS used to have but are currently out of service and finally, 69.37% of the employees were not aware of the company's facilities plan.

According to the results, most of the aspects of an induction program were fulfilled, but at present there is no physical document on what information should be provided to the worker, nor those responsible for this procedure and the means by which it should be carried out at the time of entering the job, the induction that was performed to workers was general and was carried out on the day the IPS began to provide its services.

A very important aspect for the administrative area of the company is the technological platform with which each of the employees work. This is known as GHIPS, which manages the medical records of patients through the implementation of a hospital management model, which has assistance, financial and accounting modules.

The second numeral refers to the generalities of the worker where all the responsibilities that they have for the company are specified, the specific functions in the respective job position which must be provided by the immediate boss and these are compiled in the manual of functions of Nortmedic Cúcuta IPS S.A.S.

## References

- Acosta, J., Fernández, R. & Mogollón, A. (2002). Definition of interview. from: [http://catarina.udlap.mx/u\\_dl\\_a/tales/documentos/lhr/escamilla\\_a\\_m/capitulo2.pdf](http://catarina.udlap.mx/u_dl_a/tales/documentos/lhr/escamilla_a_m/capitulo2.pdf)
- Alavi, M. & Leidner, D. (2003). Definition of knowledge. Retrieved June 2, 2017 from: <http://www.revistaespacios.com/a05v26n02/05260242.html>
- Alba, A. (1996). Definition of experience. Retrieved from: [http://sifp1.psico.edu.uy/sites/default/files/Trabajos%20finales/%20Archivos/trabajo\\_final\\_de\\_grado\\_valentina\\_da\\_luz\\_0.pdf](http://sifp1.psico.edu.uy/sites/default/files/Trabajos%20finales/%20Archivos/trabajo_final_de_grado_valentina_da_luz_0.pdf)
- Office of the Mayor of Bogotá (1998). Decree 1567 of 1998 national level, regulated by National Decree 1572 of 1998, partially regulated by National Decree 1227 of 2005. Bogotá: La Alcaldía. Retrieved from: <http://www.alcaldiabogota.gov.co/sisjur/normas/Norma1.jsp?i=1246>
- Office of the Mayor of Bogotá (2004). Law 909 of 2004 national level, partially regulated by National

- Decree 4500 of 2005, Regulated by National Decree 3905 of 2009, Partially regulated by National Decree 4567 of 2011. Bogotá: The Mayor's Office. Retrieved from: <http://www.alcaldiabogota.gov.co/sisjur/normas/Normal.jsp?i=14861>
- Office of the Mayor of Bogotá (2005). Decree 785 of 2005 at the national level, By which the system of nomenclature and classification and general functions and requirements of the jobs of the territorial entities that are regulated by the provisions of Law 909 of 2004 is established. Bogotá: The Mayor's Office. Retrieved from: <http://www.alcaldiabogota.gov.co/sisjur/normas/Normal.jsp?i=16127>
- Alles, M. (2005). Design by Competencies: 360° assessment. Retrieved July 1, 2017 from: <https://isabelportoperez.files.wordpress.com/2012/02/alles-martha-desempec3b1o-por-competencias-from-360c2ba-complete.pdf>.
- Arévalo, Y. & Leguizamon, C. (2009). Design and implementation of the functions manual of the company annar diagnostica IMPORT LTDA. Degree work. National Open and Distance University. Bogotá, Colombia. Recuperado de: <http://repository.unad.edu.co/bitstream/10596/1147/1/2009-02-01P-0027.pdf>
- Arroyabe, G. (2014). Induction and reinduction primer. Retrieved from: [http://energuaviare.com/sites/default/files/MANUAL%20DE%20INDUCCIO%CC%81N%20Y%20REINDUCCIO%CC%81N\\_0.pdf](http://energuaviare.com/sites/default/files/MANUAL%20DE%20INDUCCIO%CC%81N%20Y%20REINDUCCIO%CC%81N_0.pdf)
- Benalcázar, D. & Herrera, J. (2010). "Manual of administrative procedures, for the National School Ibarra, in the city of Ibarra, province of Imbabura". Degree work. Technical University of the North. Ibarra, Ecuador. Retrieved from: <http://repositorio.utn.edu.ec/bitstream/123456789/369/1/02%20ICO%20186%20TESIS.pdf>
- Bustamante, C. (2016), Proposal of the functions manual, processes manual and procedures manual of the footwear company Start Chic S.A.S of San José de Cúcuta. Degree work. Technologist in Industrial Processes. Francisco de Paula Santander University. Cúcuta, Colombia.
- Carvajal, A Guzmán, N. & Mota, F. (2011). Design of an Induction Program for New Personnel at Compañía Anónima Nacional Teléfonos de Venezuela (CANTV). Graduate Work. Bachelor's Degree in Human Resources Management. University of Oriente. Maturín, Venezuela.
- Castellanos, V. Cruz, N. Frago, L. & Muñoz, J. (2012). Characterization of the Model of Induction, Reinduction, Training and Staff Training in a Health Service Provider Institution and Identification of Adherence to Institutional Strategic Guidelines. Specialization. Health Administration. Catholic University of Manizales. Manizales, Colombia.
- Castellanos, V., Cruz, N., Frago, L. & Muñoz, J. (2012). Characterization of the induction, re-induction, training and staff training model in a health service provider institution and identification of adherence to institutional strategic guidelines. Graduate work. Catholic University of Manizales. Manizales, Colombia. Retrieved from: <http://repositorio.ucm.edu.co:8080/jspui/bitstream/handle/10839/232/Viviana%20Patricia%20castellanos.pdf?sequence=1&isAllowed=y>
- Castillo, J. (1993). Personnel Administration. Bogotá: ECOE.
- Chiavenato, I. (2007). Administración de recursos humanos. Bogota: McGraw-Hill.
- Chiavenato, I. (2008). Human Talent Management. Bogotá: McGraw-Hill
- National Civil Service Commission (2011). Agreement 0,00137, January 14, 2011, by which the standard system of job performance evaluation of administrative career services and probationary period is established. Bogotá: CNSC. Retrieved from: <https://www.cnsc.gov.co/index.php/normatividad/acuerdos?download=1074:acuerdo-137-2010-01-14-establece-el-sistema-tipo-de-evaluacion-de-desempeno-laboral-de-los-empleados-de-carrera-administrativa-y-en-periodo-de-prueba>
- Continolo (1984). Manual definition of functions. Management and organization of administrative work. Retrieved from: [https://issuu.com/cengelatam/docs/como\\_elaborar\\_manuales\\_administrativos\\_rodriguez\\_v](https://issuu.com/cengelatam/docs/como_elaborar_manuales_administrativos_rodriguez_v)
- Corral, C. Gil, M. Velasco, R. & Serrano, M. (2011). The Importance of the Induction Program, in Private Sector Companies. Retrieved from:



- [http://www.itson.mx/publicaciones/pacioli/documents/no74/28.-\\_ponencia\\_9\\_\\_1\\_.pdf](http://www.itson.mx/publicaciones/pacioli/documents/no74/28.-_ponencia_9__1_.pdf)
- Cumbe, M. (2014). Elaboration of the functions manuals for the Kennedy Educational Unit in the period November 2013-May 2014. Degree work. Bachelor's degree in work psychology. Salesian Polytechnic University. Cuenca. Cuenca. Ecuador.
- Davis, K. & Newtrom, J. (1991). Definition of worker satisfaction. Retrieved from: <https://www.google.com.co/url?sa=t&rct=j&q=&esrc=s&source=web&cd=14&cad=rja&uact=8&ved=0ahUKEwiA4KimqKPWAhXH6iYKHTpMA1MQFghqMA0&url=http%3A%2F%2Fwww.cervantesvirtual.com%2FdownloadPdf%2Fel-climate-and-worker-satisfaction-in-teachers-at-the-instituto-tecnologico-de-administracion-de-empresas-intae-de-ciudad-de-san-pedro-sula-cortes%2F&usg=AFQjCNFVTAZrq7BtifKsTdgAXLa8FC9YWA>
- Dessler, G. & Varela, R. (2011). Human Resource Management: Latin American Approach. Retrieved from: [http://www.frenteestudiantil.com/upload/material\\_digital/libros\\_varios/RRHH/Administraci%F3n%20de%20recursos%20humanos%20-%20Dessler%20-%205ta.pdf](http://www.frenteestudiantil.com/upload/material_digital/libros_varios/RRHH/Administraci%F3n%20de%20recursos%20humanos%20-%20Dessler%20-%205ta.pdf)
- Drovett (1992). Definition of worker training. Retrieved June 9, 2017 from: <https://www.google.com.co/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0ahUKEwihkM7Rn6PWAhUHNiYKHfBAC8IQFggzMAI&url=https%3A%2F%2Fdialnet.unirioja.es%2Fdownload%2Farticulo%2F2573481.pdf&usg=AFQjCNEEprUxXAQoyxYPg5xKzvx6ZoYJSQ>
- Flor, M. (2006). Organization and Business Processes. Definition of diagnosis. Retrieved from: [http://www.eumed.net/tesis-doctorales/2013/erv/diagnostico.html#\\_ftn2](http://www.eumed.net/tesis-doctorales/2013/erv/diagnostico.html#_ftn2)
- Garcia, G. (2014). "Importance of induction for the performance of personnel in medium-sized industrial companies". Degree work. Rafael Landívar University. Quetzaltenango. Retrieved from: <http://biblio3.url.edu.gt/Tesario/2014/01/01/Garcia-Gladys.pdf>
- Giraldo, C. (2004). Creation of a performance evaluation model under the theory of competencies. Degree work. University of Antioquia. Medellín, Colombia. Retrieved from: <http://bibliotecadigital.udea.edu.co/bitstream/10495/258/1/CreacionModeloEvaluacionDesempe%20C3%B1oTeoriaCompetencias.pdf>
- Granes, G. (2007). Design of a performance evaluation system based on a competency model. Graduate work. Andrés Bello Catholic University. Caracas, Venezuela. Retrieved from: <http://biblioteca2.ucab.edu.ve/anexos/biblioteca/marc/texto/AAR1793.pdf>
- Iturralde, J. (2011). The evaluation of job performance and its impact on the performance results of the workers of the savings and credit cooperative OSCUS LTDA of the city of Ambato in the year 2010. Degree work. Technical University of Ambato. Ambato, Ecuador. Retrieved from: <http://repositorio.uta.edu.ec/bitstream/123456789/1786/1/TA0097.pdf>
- Jiménez, M. & Puerto, L. (2014). Design of a Function Manual for the company Fundación Ser as a strategy for the improvement of administrative processes and procedures. Graduate work. Public Accountant. University of Cartagena. Cartagena, Colombia.
- Mejía, Y. (2012) "Evaluación del Desempeño con Enfoque en las Competencias Laborales" Estudio Realizado con Agentes de Servicio Telefónico en la Ciudad de Quetzaltenango. Thesis Industrial/Organizational Psychologist. Rafael Landívar University. Quezaltenango, Guatemala.
- Mejía, Y. (2012). "Performance evaluation with a focus on labor competencies" (study conducted with telephone service agents in the city of Quetzaltenango. Graduate thesis. Rafael Landívar University. Quetzaltenango. Retrieved from: <http://biblio3.url.edu.gt/Tesario/2012/05/43/Mejia-Yessika.pdf>
- International Labour Organization.(2017) What is occupational analysis? Retrieved from: <http://www.oitcenterfor.org/p%C3%A1gina-libro/7-%20BFqu%C3%A9-an%C3%A1lisis-occupational>
- Presidency of Colombia (2015). Guide for the evaluation of job performance. Bogotá: La Presidencia. Retrieved from: <http://es.presidencia.gov.co/dapre/DocumentosSIGEPRE/G-TH-03-evaluacion-desempeno-laboral.pdf>
- Ramirez, G. (2004). Induction and training processes. Retrieved from: <http://www.webology.org>

- [https://www.arlsura.com/pag\\_serlinea/distribuidores/doc/documentacion/induccion.pdf](https://www.arlsura.com/pag_serlinea/distribuidores/doc/documentacion/induccion.pdf)
- Robbins, S. (2004). Definition of organizational behavior. Retrieved from: [https://books.google.com.co/books?id=OWBokj2RqBYC&printsec=frontcover&hl=es&redir\\_esc=y#v=onepage&q&f=false](https://books.google.com.co/books?id=OWBokj2RqBYC&printsec=frontcover&hl=es&redir_esc=y#v=onepage&q&f=false)
- Rodriguez, J. (2012). How to develop and use Administrative Manuals. Retrieved June 16, 2017 from: [https://issuu.com/cengagelatam/docs/como\\_elaborar\\_manuales\\_administrativos\\_rodriguez\\_v](https://issuu.com/cengagelatam/docs/como_elaborar_manuales_administrativos_rodriguez_v)
- Rodriguez, V. (2003). Design of an induction program for the personnel of a manufacturing company dedicated to the production and commercialization of personal care products. Degree work. Andrés Bello Catholic University. Caracas, Venezuela. Retrieved from: <http://biblioteca2.ucab.edu.ve/anexos/biblioteca/marc/texto/AAQ2739.pdf>
- Rojas, W. (2015). Competency-based performance evaluation. Retrieved from: <https://www.esan.edu.pe/conexion/actualidad/2015/05/08/evaluacion-desempeno-basada-competencias/>
- Romero, M. (2017). Performance evaluation by competencies. Retrieved from: <https://es.slideshare.net/MelRo23/evaluacin-de-desempeo-por-competencias>
- Tamayo, M. & Tamayo, M. (2003). The Process of Scientific Research. Definition of descriptive research. Retrieved from: <https://es.scribd.com/doc/12235974/Tamayo-y-Tamayo-Mario-El-Proceso-de-la-Scientific-Research>.
- Turro, M. (2011). Programa de Inducción de Personal. from: <http://crc.fecoprod.com.py/docmanager/docs/Programa%20de%20Induccion%20de%20Personal.pdf>
- Villa, A. (2013) Manual of functions for the company montajes Tecnicometalmecánico S.A.S in the city of Cartagena, Bolivar. Degree project. Industrial Management Technologist. National Open and Distance University. Cartagena, Colombia.
- Zúñiga, A. & Guzmán, P & Ortega, O. (2013) Manual De Funciones Y Manual De Procedimientos Empresa: Comercial Nutresa S.A.S. Trabajo de Grado. Industrial Engineer. Francisco de Paula Santander University. Cúcuta, Colombia.