

Evaluating The Impact Of Staff Training Programs On Improving Organizational Productivity

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ABSTRACT

Modern organizations face challenges related to their production capacity and competitiveness. To address these challenges, both public and private companies must optimize and make the most of their skills and assets. The human element is considered the most valuable, because it can manage all the key points of business management. Training is an effective response to improve organizational performance. The objective of this research is to analyze the influence of training on the productivity of organizations in the state of Tabasco. The methodology used with a quantitative, cross-sectional approach, 77 companies in the city of Villahermosa, Tabasco, were applied on a Likert scale, the relationship between training and productivity is analyzed. In an environment of rapid technological innovation, keeping team competencies up to date becomes crucial to maintain competitive advantage, investing in staff training is shown to generate significant increases in productivity and reduce work incidents. Training should be a priority strategy, both at the business and government levels, to align the needs of the production model with the characteristics of each sector. In the current organizational context, it is essential to increase productive efficiency through the development of human capital. Training is crucial to optimize quality, manage costs and ensure proper management of business resources, becoming a competitive differentiator.

Keywords: Training, Productivity, competitiveness, Companies.

Introduction

Contemporary organizations face challenges closely linked to their production potential and competition. These challenges push both public and private entities to optimize and fully utilize their skills and assets to improve their performance.

From an organizational perspective, five crucial components in business administration are identified: objective, financial means, physical structure, technological innovation, and the human element. The latter stands out greatly, as it is the only one that has the ability to handle the other four elements (Montalvan, 1999). The relevance that the human element has gained in corporate structures comes from Elton Mayo's School of Human Relations in the 1940s. From these studies, principles were established that emphasize the significance of the human element in the efficiency of the organization. According to Cequea and Núñez (2011), this element is vital since it manifests itself in all the productive stages of a company, with repercussions at the individual, group and corporate levels.

Ramírez (2015) mentions that human resources represent the most precious asset of an organization. Its importance lies in the ability to acquire and transfer knowledge, as well as in the possibility of sharing it through training, thus establishing the foundations of an entity's creativity and competitive advantage. Although human resource education focuses on the acquisition of wisdom, it also fosters attitudes, competencies, and skills in the individual, increasing their effectiveness in their job role (Pardo & Díaz, 2014).

Training

The technical development of human resources is based on knowledge and skills obtained through training, whether structured or casual. The primary goal is to connect the individual with the structure of the role and the demands of the position, so that he or she can perform a given task in the entity. In this way, the proper integration of these components directly affects the efficiency of the company (Chiavenato, 2000).

In Mexico, the legal basis for training is found in Article 123, Section A, Paragraph XIII of the Magna Carta of the Mexican Republic. This standard states that it is the employer's responsibility to provide training and coaching to the employee to improve their work performance. In addition, Article 153-A of the labor legal framework indicates that such training seeks to improve the well-being of the employee and enhance the performance of the organization.

From a rigorous perspective, training begins by detecting drawbacks in human performance that affect organizational efficiency. It has been observed, based on experience, that these challenges arise from technical deficiencies in employees, situations that can be addressed through appropriate instruction. Faced with such a panorama, training is presented as an adequate and profitable response for the preparation of personnel in their work environment.

According to Costa and Aguinaga (1998), there are two perspectives in training: an anticipatory one and a remedial one. The first focuses on anticipating training requirements due to structural and organizational modifications, with the aim of maintaining the adaptability of roles and individuals in a context in transformation. While the remedial perspective aims to identify the educational demands that arise from evident difficulties in performance.

At present, characterized by revolutionary technological innovations, there has been an attrition and expiration of competencies in human resources. Training and constant updating actions are emerging as efficient solutions to counteract the loss of knowledge and skills in personnel. From this perspective, modern dynamics highlight the importance of enhancing skills and competencies in the work team through training and updating, thus providing a competitive advantage. These strategies result in efficiency increases, as indicated by the research of Sapién, Piñón, and Gutiérrez (2014). In one of their studies focused on seventeen medium-sized companies in Chihuahua, Mexico, they showed that investing in team training generated an increase in productivity of up to 59%. Additionally, collateral benefits were observed, such as a 59% decrease in work incidents and a more harmonious work environment, among other aspects.

In relation to this, the research of Padilla and Juárez (2006) in the manufacturing sector of Mexico and Costa Rica, indicates that the equation between the costs and benefits of training can be observed from two angles: from the business perspective, it is considered an investment if it leads to an increase in productivity; while for the employee, training represents a benefit if, in exchange for their time and dedication, they obtain a salary increase or potentially better opportunities in the workplace.

Sánchez (2007) describes vocational training as having a purpose that goes beyond just promoting employment, but also affects its quality. This researcher argues that training must take on a strategic role. In this context, both corporate and government policies related to employment must discern the demands of the production model and align them appropriately with the particularities of the specific industry or business branch.

Productivity

Currently, competitiveness stands as one of the most pressing challenges for companies, since obtaining an advantageous position in the market with respect to rivals is essential for their business strategies. The multifaceted nature of competitiveness makes it a vast and at the same time intricate topic (Saavedra, 2013), which motivates its exploration from an organizational approach. However, a key aspect of Systemic Competitiveness at the micro level focuses on productivity. In this context, achieving efficiency and ideal management of resources and skills is essential to achieve high standards of productivity (Fernández, 1987).

Productivity is described as the effective application of innovations and resources to increase the added value of goods and services, according to the International Labor Organization (2016). In practical terms, it is manifested through the relationship between the inputs used and the quantity of products or services produced, reflecting the efficiency in the use of resources. It follows that by boosting productivity, performance is optimized and, consequently, utility increases. The relevance of analysing and quantifying productivity focuses on its potential to promote economic development (OECD, 2014). This is reflected in an increase in people's quality of life and in high business competitiveness.

As far as the measurement of productivity is concerned, some authors have established various metrics. For Hansen and Ghare (1990), productivity is measured in terms of the relationship of inputs and outputs, where operational efficiency is privileged as a parameter of measurement; however, for Alfaro and Alfaro (1999), productivity is a function of the management capacity of the human factor with respect to other resources. In this management, four aspects are privileged: maximum use of time during processes, efficient management of value-generating activities, reduction of non-productive times and improvement of work methods.

Propenko (1997) proposed a measurement approach in which productivity is seen as an indicator of an entity's overall performance, based on five key pillars: goals, efficiency, effectiveness, comparability, and positive evolution. According to this researcher, productivity is divided into two relevant strata: the fundamental one,

where the global relationship between total revenues and transformation costs is compared; and the derivative, which contrasts the resources used with the affordable expenses, thus allowing a detailed evaluation structure.

Training as a method to enhance efficiency within the context of corporate competitiveness

Schultz (1968) is credited with introducing the notion of human capital into the organizational economic sphere. This idea is reflected in the theory of human capital, which postulates that the training, instruction and development of personnel are an investment, since they become a source of future benefits. In addition, these actions favour specialisation in work, technical innovation, research and the promotion of efficiency and competitiveness in the entities.

From the perspective of the theory of resources and skills (Penrose, 1959), it is understood that companies have both tangible and intangible assets to achieve their goals. According to Del Moral, Pazos, Rodríguez, Rodríguez-Patón and Suárez (2007), in modern organizations, the primary asset has evolved from capital to knowledge. This transformation has led to the understanding that, when knowledge and human capital are interconnected, they have the potential to foster innovation and enhance the productivity and competitiveness of entities (Nagles, 2007).

In the era of the knowledge-based economy, intangible resources stand as the main basis of prosperity and competitive superiority for companies. This is because development and investment in human capital, as well as in education and training, are intrinsically linked to organizational efficiency and the socioeconomic advantages that this entails (Didier et al, 2013).

Staff training and development is a key element of organizational culture, as it allows employees to acquire the skills and knowledge necessary to perform efficiently in their roles. In addition, this type of training initiatives contribute to generating a positive work environment, since they make workers feel that they are an important part of the company and that it cares about their growth and evolution within the organization (Molina, 2017). In other words, investing in human talent training not only improves employees' skills, but also strengthens their sense of belonging and commitment to the organization. This in turn favors a more motivating and collaborative work environment, which results in benefits for the overall performance of the company.

According to Zamorano and Reza (2002), by combining human capital with structural capital, we obtain intellectual capital. From a financial perspective, intellectual capital is an intangible resource that is difficult to evaluate and determine, in contrast to structural capital that is characterized by its ease of valuation. Schultz (1968) argued that human capital is an engine of progress and economic expansion, since, through education and professional training, skills, talents and competencies can be enhanced that increase the productivity of the individual in his or her work.

The relevance of updating knowledge of the human factor becomes a spearhead for the differentiation of the sector, to the extent that its impacts are monetized in the finances of companies. To measure them from the theoretical perspective, they are aimed at measuring the effectiveness of training and its impacts on the organization. For this work, the Training Program Evaluation Model of Kirkpatrick (1999) is used, which recognizes five measurement criteria: Learning, Result and Return on Investment (ROI).

Methodology

This document is quantitative, cross-sectional, deductive, the study population is limited to the municipality of Centro, Tabasco. And the study was carried out by studying small companies.

Operationalization of the variables

In order to meet the objective of the research, the variables of studies are training and productivity, the first "is an educational process of a strategic nature applied in an organized and systemic manner, through which personnel acquire or develop specific knowledge and skills related to work" (Chiavenato, 2009, p. 312). Based on Kirkpatrick's Model, he mentions that the variable is measured in several dimensions in order to measure the impact on the organization. Kirkpatrick's Model is characterized by the fact that it recognizes five categories of analysis for its study: Reaction, Learning, Behavior, Result and Return on Investment.

Table 1. Operationalization of the variables

Variable	Concept	Dimensions
Training	The technical training of human capital consists mainly of knowledge and skills acquired through formal and informal training processes.	Learning Behaviour ROI
Productivity	Productivity is defined as the effective use of innovation and resources to increase the aggregate of products and services (International Labor Organization, 2016).	Competitiveness

Research instrument

To obtain the necessary information, a survey consisting of 19 questions was used, all of them assessed using the five-level Likert Scale, in which the value "1" indicates a total agreement and "5" totally disagrees. For the application of this research instrument, small companies in the municipality of Centro were taken as a sample population.

This instrument seeks to measure two variables, which are: training and productivity. Within the training, the aim is to measure learning, results and Return on Investment. Learning assesses the level of transformation in the attitudes, knowledge and skills of the participants as a result of an educational intervention, the result in turn assesses the level of transformation in attitudes, knowledge and skills of the participants after going through an educational or training process. Likewise, ROI evaluates, through indicators, the potential return on investment offered by the training activity for the organization.

Another variable that is included in the instrument is productivity, which is measured with the dimension of efficiency, in which the extent to which the resources used manage to optimize production is evaluated.

Results

The results obtained as part of the exploratory approach allowed the recognition of various elements that characterize the company that make up the unit and phenomenon of study, therefore, statistical tests were applied in order to account for the behavior of the phenomenon under study.

Sample characterization

Sample characterization in a research protocol refers to the detailed process by which the specific set of individuals, objects, events, or any other entity selected to be studied in the context of a research is described and defined. This characterization is crucial because it allows researchers, and those reading the study, to understand who or what is being studied and whether the results can be generalized to a larger population or to other contexts. For this research, workers from all industries belonging to the municipality of Centro, Tabasco, were taken as a sample.

42% of the people surveyed have an age range of 26 to 35 years, on the other hand, 26% of them are between 36 and 45 years old, 23% are 18 to 25 years old and finally, only 7.9% of the sample is between 46 and 60 years old. This means that, in terms of age, the sample is not so long-lived, but that the bulk of the population is at an ideal age in terms of production.

On the other hand, when asking the sample that was surveyed about How many years have you been working in your company? It was found that 34% have only 2 to 5 years within the organization, 39.5% have one year or less than a year, likewise, 21% have 6 to 10 years and finally, less than 6% of them have 16 years or more within their organizations. Most of the people who were surveyed do not have extensive experience within their organization.

Additionally, when asking the respondents: How many trainings have you received in the last year in your company?, it was obtained as a result that more than 39% of them have received 1 to 2 trainings by their company in the 9 months elapsed in 2023, on the other hand, 28% say that they have had the opportunity to participate in 3 to 5 courses throughout the year. However, 18% of the population sample states that their organization has not provided them with a single training so far this year; a situation that could be very alarming for organizations.

Dimensions

The dimensions in a research project are the categories or specific aspects that define and delimit a concept or variable for its analysis and detailed understanding, these serve to break down and specify the facets of a topic, facilitating its study and analysis in depth.

Learning

Initially, the educational dimension assesses the level of transformation in attitudes, knowledge and capacities of individuals as a result of a training intervention.

The result obtained with this dimension shows us that 84% of the respondents have a high level of learning after having received training from their companies. On the other hand, 13% of them have a medium level of learning and only 2.6% of the population has a low level once the company has trained them. This indicates that when an organization trains its employees, they will have a higher level of learning, because it is highly likely that the teachings have a high index of relationship with their position or line of business where they perform professionally.

Behaviour

The behavioral dimension assesses the level of modification in the behavior of individuals based on technical training. When measuring the level of behavior or involvement that employees have when receiving training from the institution where they work, it was obtained as a result that 89.5% of the respondents have a high level of involvement in these processes, on the other hand, 7.9% have a medium level and only 2.6% of the sample does not generate any sense of interest in participating in the organization's training.

Results

The outcome dimension assesses the organisational repercussions of an educational intervention. Taking into consideration the results obtained, it can be seen that the repercussions of providing training to an employee are highly positive, because on many occasions, the results have implications such as better jobs, professional growth, among many other issues.

Return on Investment

The Return on Investment (ROI) dimension measures the level of the indicator the capacity of the training action in the return on investment of companies. On the other hand, the result obtained with the Return on Investment (ROI) we can observe that there is a 92% high level of ROI, which indicates that for every peso that organizations are investing in their training, they have a high level of performance, however, 7.9% of employees have a medium level of performance, however, none of the respondents showed a low level of return on investment.

Training

Competitiveness, which is measured with the dimension of efficiency, in which the extent to which the resources used manage to optimize production is evaluated.

The results of the training indicator show that 94.7% of respondents have a high level of training in the last year, that is, their organizations have trained them sufficiently in labor issues. Likewise, only 5.3% of respondents have an average level of training received in the last exercise.

Variables

Variables are elements, characteristics or attributes that can be measured, observed or manipulated and that vary or change under different circumstances, being fundamental to formulate hypotheses, design experiments and analyze results to understand and explain phenomena of interest in the study.

It is mentioned that 78.9% of the sample has a medium level of training, while only 21.1% of them have a high level of training. This is because, as we saw in the initial graphs, almost 50% of the surveyed population has two or fewer training sessions in the year, so it may not be enough.

Finally, it can be seen that, although the level of training is medium, the level of productivity does increase significantly once employees receive training, since 94.7% have a high level of productivity once they have received training on the job. This indicates that the more training an employee receives, the higher their level of productivity.

Conclusion

In the context of modern businesses, it is essential to increase profit efficiency, which means refining methods, optimizing quality, and managing costs. In this scenario, the human element stands out when applying its knowledge, skills and talent. Therefore, it is crucial to attend to and promote the development of this crucial resource, especially through training, with the aim of ensuring proper management of business resources and that human capital becomes a competitive differentiator.

It is considered that knowledge management from training carries out a reconfiguration to generate greater production and productivity in companies, in the municipality of the center. The results describe that it develops human capital from the implementation of programs and demonstrate that the development of human capital through training programs has a positive impact on business efficiency and productivity. This leads companies towards an action model where profitability and the achievement of goals are prioritized within a perspective of efficiency in operations.

According to the data collected, it is evident that human capital plays an ideal role in the economic implications in companies, which invest in training as a fundamental part of having a differential value from their competition, which is reflected in their productivity. Likewise, the findings indicate that the strengthening of knowledge, capabilities and talents in human capital leads to notable benefits in the optimization of process quality, reduction of operating costs and greater commitment of the organization's team. Such data also reveal a clear link between training and company productivity, suggesting that this link is closely influenced by the achievement of performance indicators.

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