

# Evaluation of the Impact of Human Resources Practices on Organizational Performance Using the PLS Approach

*İnsan Kaynakları Uygulamalarının Orgütsel Performans Üzerindeki Etkisinin PLS Yaklaşımı İle Değerlendirilmesi*

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## ÖZET

### Anahtar Kelimeler:

İK Uygulaması,

Organizasyonel Performans,

İlişki,

Akıllı PLS,

Bireyin insan kaynakları stratejilerinin merkezinde yer aldığı düşünüldüğünde, bu maddi olmayan sermayeye yatırım yapmak, mükemmelliğe ulaşmak isteyen şirketler için bir zorunluluk haline gelmektedir. Bu çalışmada insan performansı ile işletme performansı arasındaki ilişkiyi ele alan teorik yaklaşımları sunduk. Bu çalışmada, birey ve kurumsal performans arasındaki ilişkiyi ele alan teorik yaklaşımları sunduk. Evrenselci yaklaşımı izleyerek, literatürde en yaygın olan insan motivasyonu uygulamalarını birbirine bağlayan kavramsal bir model geliştirdik: ücretlendirme, eğitim, bilgi paylaşımı ve iletişim, çalışanların katılımı, uygulanan liderlik tarzı ve kurum içi profesyonel ilişkiler. Araştırma modelini doğrulamak için Béjaia Vilayeti'nde sanayi sektöründe faaliyet gösteren 46 şirketle bir saha araştırması gerçekleştirdik. SMART PLS kullanılarak yapısal eşitlik modellemesi yoluyla elde edilen araştırma sonuçları, liderlik tarzının ve şirket içi mesleki ilişkilerin finansal ve finansal olmayan performans üzerinde doğrudan bir etkisinin olmadığını gösterdi. Ancak bilgi paylaşımı ve iletişim yalnızca finansal olmayan performans etkiler. Ücret ve eğitimi ölçen iki değişken ise "PLS Algoritması" yöntemiyle ortadan kaldırıldı.

## ABSTRACT

### Keywords:

HR Practice,

Organizational Performance,

Relationship,

Smart PLS,

Considering that the individual is at the heart of human resources strategies, investment in this intangible capital becomes an imperative for companies seeking to achieve excellence. The aim of this research is to demonstrate the causal link between human resource development practices and organizational performance. In this work, we have presented the theoretical approaches that to treat the relationship between human performance and business performance. Following the universalist approach, we have developed a conceptual model linking the human motivation practices most common in the literature, namely: compensation, training, information sharing and communication, employee involvement, applied leadership style and internal professional relations. To verify the research model, we conducted a field survey of 46 companies in the industrial sector in the wilaya of Béjaia. The research results, obtained through structural equation modelling using SMART PLS, showed that leadership style and internal professional relationships have no direct impact on financial and non-financial performance. However, information sharing and communication only impact non-financial performance. And the two variables which measure remuneration and training were eliminated by the "PLS Algorithm" method.

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## 1. INTRODUCTION

Managing information, planning, making decisions, organizing and defining tasks and responsibilities are necessary to improve organizational performance, but all of this can only be done in the presence of a key element that represents the very essence of the company, namely human capital. The individual, with his knowledge, expertise, and intelligence, presents an asset for improving the effectiveness of the firm (Lesmini et Al., 2023:713). Moreover and Adesina (2021:310) confirms that human capital positively influences organizational performance. Indeed, HR managers must be able to anticipate a future in which strategies and performance can be transformed through effective and efficient management of this resource. Human resource management (HRM) is "*the ability for the company to find a match between its human resources and the constant evolution of its needs in skills*" (Soutenain and Farcet, 2006:270).

According to resource-based theory, firms gain sustainable competitive advantage by creating value in ways that are scarce and difficult for competitors to imitate (Barney, 1991:99-120; Barney, 1995:49-61). Even if traditionally the sources of competitive advantage are natural, technological, material resources, etc., the human capital can constitute a key element of competitive advantage. Now human capital can be a particularly important source in achieving competitive advantage (Garengo et Al., 2022:3057). According to Rouag and Kaddouri (2023:6) people are considered as the generator of productivity surpluses and business development.

The development of human resources is reflected in actions that ensure the enrichment of knowledge, know-how, favorable working conditions and social recognition of employees through motivation, which is a determining factor in motivating workers to act in a certain way (Garengo et al., 2022:3067).

The academic literature shows that the relationship between human resources (HR) and company performance is a recognized phenomenon. The influence of HR practices on performance has been of growing interest to researchers for the past thirty years and this interest has never lost its vigor (Gagnon and Arcand, 2011:2). As a result, this work proposes an additional approach to better understand this phenomenon.

Within the framework of this research work, the objective is to describe the reality of HRM within some industrial companies, from different sectors, in the wilaya of Bejaia and to provide elements of answers to the following problem: what is the impact of HR practices on organizational performance?

Based on the work of Kichou (2015) and de Mulyati et al. (2023:1129-1142), we postulate hypothesis H: which states that the existence of a favorable social climate positively impacts the performance indicators of these companies.

## 2. LITERATURE REVIEW

The economic instability and the intensity of the competition that characterize most sectors of activity incite companies to value their human capital in order to stand out from other competitors and improve their performance. For most companies, it is no longer enough to exist; it is necessary to perform. Thus, HR practices must be integrated with the specific objectives of the company in order to be consistent with the need for organizational performance (Gagnon and Arcand, 2011:2). Human resources have traditionally been considered as a cost to be minimized, yet very rarely have HR decisions been considered as a source of value creation (Becker and Gerhart, 1996:780).

In this perspective, human performance is understood at the individual or group level and suggests that the company should ensure that its employees are satisfied and enthusiastic in the performance of their work, and direct the attention of its employees to the important activities (Oubya, 2016:38).

Valuing human resources is first and foremost about recruiting and searching for talent to fill the gaps felt in terms of numbers and skills. It is a matter of matching a suitable personal profile to the appropriate job profile, thus, "*the quality of a recruitment is the result of the adequacy existing between the person recruited and the immediate and future needs of the company*" (Kichou, 2015:75). According to Rouag and Kaddouri (2023:20), recruitment represents a well-determined procedure in the most successful companies, as it is the first condition to guarantee a continuity of performance and success. Once the person has been identified, recruited and integrated into the company, he or she must be developed through a set of practices, such as compensation, training, motivation, staff involvement and social climate, aimed at stimulating his or her interest in work and

significantly reducing dissatisfaction. Thus, the creation of an atmosphere encourages employees to work better and therefore to develop their businesses (Susanto et al., 2023:553).

## 2.1. Human Resource Development and Organizational Performance

In the last decade, the performance management system has become increasingly important, and the need to manage human performance will also remain a parameter to be taken into consideration as the performance of employees impact organizational performance (Tian et al., 2021:1). The addition of the term performance to that of the individual refers to the idea of measurement, quantification, and evaluation of this complex resource. The place of the individual has become central in the value chain, and the individual has thus passed from the status of a simple passive executor, in the Taylorian model, to that of strategist and developer.

The relationship between human resources and performance is at the center of current debates. However, Tian et al. (2021:1), point out that most existing meta-analyses conducted on the relationship between human resource management (HRM) practices and performance have yielded mixed results. For example, measuring employee motivation and reward is operationally difficult because it is not very tangible. Nevertheless, there are ratios or indicators that we can identify in the social balance sheet, which are: turnover, the rate of absenteeism, illnesses and the number of work-related accidents, the constitution of quality circles<sup>1</sup> (Johnson et al., 2005:113) and the importance of conflicts between the company's internal actors.

The first HR measures were always linked to the notion of costs (cost/employee ratio). Later, with the inclusion of human capital, other complementary indicators were used. In this context, Naro (2006) establishes several categories of social indicators, namely.

- *Economic and financial indicators*: productivity ratios, efficiency indicators, HR expenditure ratio.
- *Structural indicators*: the management ratio, the rate of direct productivity.
- *Recruitment indicators*: time to hire, selectivity, quality of recruitment and average cost of recruitment.
- *Training indicators*: amount spent on training/payroll, number of employees trained/total workforce, number of participants/number of registrants and coverage rate in strategic skills.
- *Compensation indicators*: average compensation ratio, compensation increase ratio, promotion ratio, salary hierarchy ratio etc.
- *Social climate indicators such as*: turnover, absenteeism, conflict, employee involvement etc.
- Indicators for measuring occupational risk, such as accidents and occupational health.

For his part, Guest (1997:270) establishes three types of performance measures due to the application of HR practices. He summarizes them as quantitative measures (units produced, customers served) or qualitative measures: number of errors, employee complaints, time measures such as lateness, absences, lost work time and financial measures, which include a wide range of possibilities.

However, these indicators, which companies use to measure the HR function, are not sufficient on their own to conclude the impact of HR practices on organizational performance. Other measurement indicators must complement them. The most commonly used in previous work are productivity, profitability, innovation capacity, market share, sales growth, efficiency and effectiveness etc.

## 2.2. Theoretical Approaches to the Relationship between HR Practices and Organizational Performance

The human resources theory considers the human as a source of performance that can strengthen competitiveness by contributing to the economic and business performance. Of the company, this is justified on the one hand, by the fact that the human asset is a non-imitable element that distinguishes each company and allows it to stand out from the competition (Rouag and Kaddouri, 2023:1). On the other hand, the performance of employees has an impact positive impact on organizational performance (Mulyati et al., 2023:1139).

The relationship between HR practices and performance has long been the subject of researchers (Delery and Doty, 1996:802-835; Pfeffer and Veiga, 1999:37-48; Lacoursière et al., 2000; Decock Good and Georges,

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<sup>1</sup> Consists in changing a group of voluntary employees to know the possibilities to improve the work.

2003:151-170; Chrétien et al., 2005:107-128; Gagnon and Arcand, 2011:1-23; Kichou, 2015:1-251; Samwel, 2018:68-79; Susanto, 2022:96-103; Mulyati et al., 2023:1129-1142; etc.). However, they did not specify the most effective practices and how to apply them, as this depends on several contingency factors. We distinguish three approaches in HRM establishing the causal link between HR practices and organizational performance which are: the Universalist approach, the contingency approach and the configuration approach.

The Universalist approach refers to Taylor's idea of "*The one best way*", which stipulates the existence of universal best practices that enable high performance to be achieved by adopting them. According to Kichou (2015:55) and Allani-Soltan et al. (2005:606), the implicit assumption of this line of research is that the influence of a best practice is unique, independent of the strategic context and systematically gives companies that use it a competitive advantage over those that do not. According to this model, the application of one or more HR practices could have a direct effect on a company's performance.

This was confirmed by Pfeffer (1998:100), who put forward seven practices considered excellent for better organizational performance: job security, selective hiring, decentralized operation in autonomous teams, a high proportion of remuneration linked to organizational performance, training, reduction of status differences and a strong willingness to share information. In another study, Chrétien et al. (2005:111) surveyed 60 companies in the project management sector. They found a positive relationship between the use of certain HRM practices and performance.

According to previous studies, the Universalist perspective advocates that the most recognized human resource management practices have a positive effect in all companies where they are applied. Indeed, Pfeffer and Veiga (1999:44) supported this point of view, asserting that human resource management practices, regardless of the business context, contribute to increased performance levels. However, this approach does not take into account the context in which these practices are implemented, as some may have a positive impact in some cases and neutral or negative effects in others. This is why other approaches have emerged to complement the shortcomings of this approach.

The contingency approach rejects the idea that there are universal best practices for any company, and is based on the premise that there are as many context-specific practices that must be compatible with the contingency factors prevailing in the environment, both internal and external to the company.

*"Thus, the idea of absolute superiority of one HRM practice or set of practices over others is completely rejected, because all organizations operate in a context of the contingency. This theory seeks to go beyond the sole financial dimension of the performance, as the dependent variable, to integrate other criteria such as innovation, increased market share, customer satisfaction, product quality, flexibility, or social image"* (Kichou, 2015:133).

So, performance depends on the coherence between HR practices and the contingency factors that impose themselves on the company. Therefore, despite the relevance of this approach, in that it takes into account different contexts to determine HR organizational modes, we agree with Chrétien et al. (2005:115) that it is a complex approach to determine and explain the contingency factor-HR practice-organizational performance relationship.

Finally, the configurational approach is based on the most comprehensive yet complex reasoning of the other approaches. According to this approach, organizational performance is the result of a synergy effect due to the clustering of HR practices. In other words, if there is complementarity between different HRM practices, the overall effect of the system will be greater than the sum of the individual effects (Barney, 1995:58).

She is interested in the link between a set of independent variables (HR practices) and a dependent variable (performance) rather than the individual links that various independent variables have with a dependent variable (Kichou, 2015:120). The results found by El Adraoui (2015:48) confirm the hypothesis of the relevance of the configurational model. The author finds that the aggregate effect of HRM practices explains more about the performance of large companies in Morocco than can the sum of the individual effects of these practices.

Although each of the Universalist, contingent and configurational perspectives discussed above is defensible from a theoretical point of view, it is the Universalist perspective that will be retained in the present study. For we wish to see the impact of each practice on organizational performance.

### 3. CONCEPTUAL RESEARCH MODEL

In what follows, we will select a set of dependent and independent variables according to the following two criteria;

- The data are available and frequently used in our companies.
- The data best reflect the elements highlighted in previous empirical research.

#### 3.1. The Independent Variables of the Research Model

Although there is a wide range of practices cited in the scientific literature, we have selected only five staff developments and motivation practices for two main reasons. One the one hand, these practices are the most frequented in the literature and on the other hand, our pre-survey indicated that they are the most used in the field, namely compensation, training, information sharing and communication, employee involvement and applied leadership style, and internal professional relations. Each practice is measured by a set of overt variables (see appendix). It should be noted that all responses to the variables are coded either in dichotomous form (yes/no), or according to the five-point Likert scale.

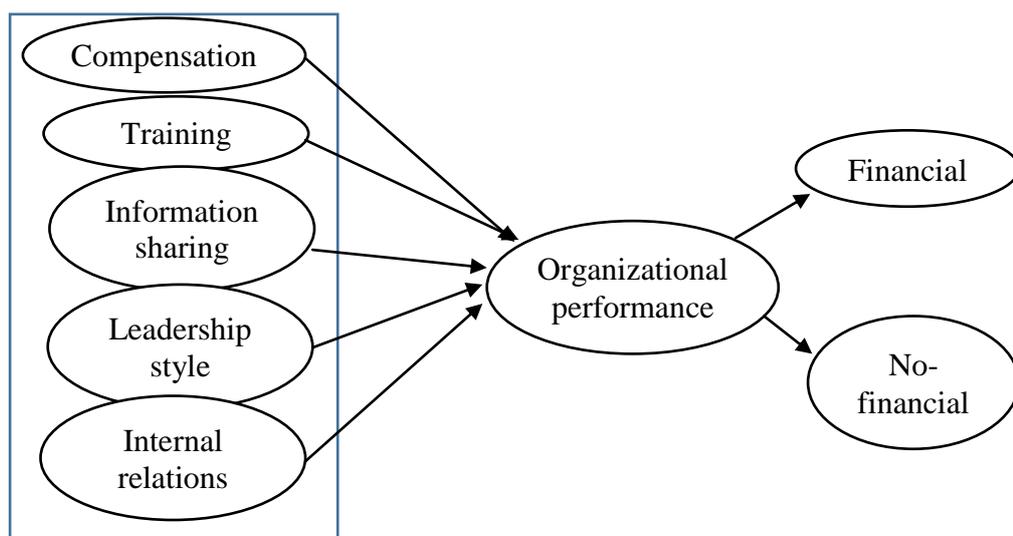
#### 3.2. Research Models Dependent Variables

To measure organizational performance, which is the dependent variable in our model, we selected the following criteria: sales, production, annual profit, financial profitability, customer satisfaction rate and complaint rate. They are measured on a three-item scale (increase, decrease, stable), with evolution referring to the last three years. Drawing on the various works cited, we used social indicators to assess the social climate of the companies surveyed, namely: absenteeism rate, turnover, workers' punctuality, degree of conflict and workers' punctuality.

Finally, we also retained other organizational performance criteria, namely: the degree of innovation and the company's position in relation to the competition, the ability to achieve objectives (effectiveness), the degree of efficiency and effectiveness. All these subjective variables are measured using the Likert scale (see appendix).

Figure.1 gives an overview of our research model, explaining the link between the main HR dimensions and variables retained in our study.

**Figure 1.** Research Model Linking HR Practices to Organizational Performance



Source: Compiled by us

The aim of this research is to verify the impact of certain HR enhancement practices on the organizational performance of companies. To this end, we postulate the overall hypothesis (H3), derived from various previous works;

H: HR enhancement practices have a positive impact on companies' organizational performance.

This leads to five sub-hypotheses, inspired by the work cited above, as follows;

Ha: The more employee-friendly the compensation policy, the higher the company's organizational performance.

Hb: The more employee-friendly the training policy, the higher the company's organizational performance.

Hc: The more employee-friendly the sharing of information and communication, the higher the company's organizational performance.

Hd: The more employee-friendly the leadership style, the higher the company's organizational performance.

He: The better the professional relations, the higher the organizational performance of the company.

#### 4. METHOD AND MATERIALS OF RESEARCH

Our research is based on a positivist, hypothetico-deductive approach. We chose the quantitative method of investigation for data collection by means of a questionnaire administered face-to-face or distributed, depending on the opportunities that arose during the field survey, during the year 2021-2022. We targeted top management (*CEOs, directors, or human resources managers*) to answer our questions.

##### 4.1. Presentation of the Sample

We projected a sample of industrial companies in the wilaya of Bejaia (Algeria), selected from a directory list issued by the CNCR (Center National of commercial registers), as this is the most dynamic sector in the region. It should be pointed out that this list was not exhaustive or up to date, as some of the companies present in the field were not registered, while others had undergone a change of status or had ceased trading.

Our research field is made up of 46 companies, 34 of which are private and 12 public. We approached 57 companies, but some refused due to the unavailability of managers. The sample size is deemed representative in relation to the population size of 83 parent companies. It was obtained by applying the following formula (Thietart, 2014:240);

$$n = T^2 \times pq/E^2 = 1.96 \times (0.5 \times 0.5)/0.12 = 96$$

n : sample size

T : the value of the normal distribution for a significance level of 5%, which is 1.96

p : observed frequency = 0.5

q : 1-p = 0.5

E: the error; in most surveys, the value of E is between 3% and 4%. In our case, the value of E is 10%, a rate tolerated for data collected in companies considered as rational agents (Thietart, 2014:219-253).

According to Thietart (2014:241), if the sampling rate, which designates the ratio between  $n/N$ , is greater than  $1/10$ , we can calculate the sample size corrected by the coefficient of completeness: which is obtained by:  $n' = nN/N+n$ . In our case,  $n/N = 96/83 = 1.15 > 0.1$ . We then have the corrected sample size  $n' = 45$ . Given that we collected 46 usable questionnaires, we consider our sample size to be representative.

To select the companies to be surveyed, we used the quota sampling method, which is a non-random method. The choice of this method is justified by the fact of having a list of the parent population subdivided into homogeneous sub-groups with the same common characteristic (sector of activity). The selection procedure we

chose was random, according to the opportunities that presented themselves to us. We then calculated the number of companies each quota should contain, based on proportional sampling rates (Oumakhlouf and Kherbachi, 2023:116).

**Table 1.** Construction of Sample Quotas

Activity area	1	2	3	4	5	6
Food industry	33	39.75	18	23	4	19
Textile	5	7.14	3	5	/	5
metallurgy	14	16.67	8	5	1	4
Chemistry and plastic	5	5.95	3	5	1	4
Wood processing	4	4.76	2	3	/	3
Construction materials	10	11.90	5	5	2	3
Miscellaneous industry	12	14.29	6	9	1	8
<b>Total</b>	83	100%	45	55	9	46

1: existing number, 2: proportion, 3: number required, 4: number requested, 5: refusal, 6: accepted

Source : Oumakhlouf and Kherbachi, 2023:116.

## 4.2. Data Analysis

We used SPSS V20 to analyze the questionnaire. Table 02 shows Cronbach's Alpha value to demonstrate the reliability of the variables we used in our study. With a value of 71.5%, it is significant and we can draw reliable conclusions in future analyses.

**Table 2.** Reliability Statistics (PS/Organizational Performance)

Cronbach's Alpha	Number of variables
0,715	42

Source: Survey results using SPSS V20, 2022.

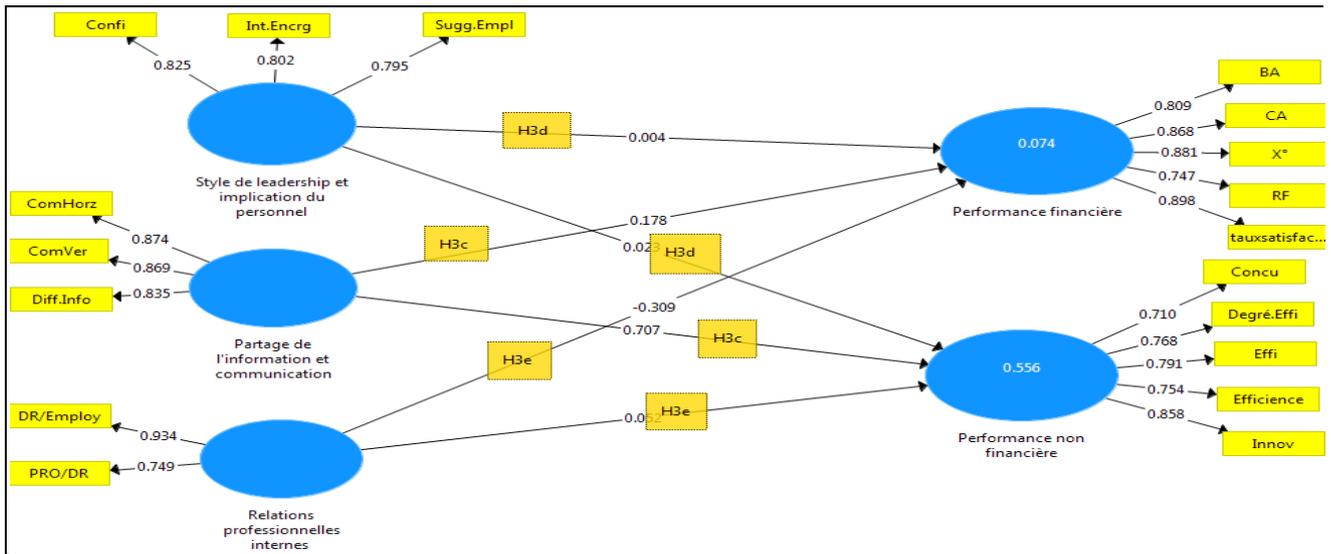
Subsequently, we used the Structural Equation Method (SEM) to analyze our theoretical model through the PLS "Partial Least Squares" approach using Smart-PLS Version 3.0 software. We chose SmartPLS, because the variables in our research had several indicators and PLS weights the loads of the indicators on the constructs in the context of the theory rather than in isolation (Tian et al., 2021:8). PLS makes it possible to measure the impact of several variables on another set of variables through the structural equation method, which is subdivided into two parts, namely evaluation of the measurement model and evaluation of the structural model.

### 4.2.1. Evaluation of the Measurement Model

Evaluation of the measurement model is based on internal consistency indices for the variables selected, namely the loading factor, which must exceed 70%, Cronbach's alpha coefficient (*deemed satisfactory when its value is close to 60% and above*) (Gerbing and Anderson, 1988; Bouzida, 2019:201). The composite index or (*Composite Reliability, when its value exceeds 70%*) and the Average Extracted Variance (*AVE when it exceeds 50%*) (Bagozzi and Yi, 1988:77).

Figure 02 shows only the variables and items selected, as we have excluded the least reliable items, i.e. customer complaint rate, social indicators and staff monitoring sheets. With regard to the items used to measure the circulation of information and communication, all items will be eliminated with the exception of vertical and horizontal communication. We found that all the items measuring training and remuneration did not allow us to measure the phenomenon under study. As a result, these two latent variables are also excluded from our model.

**Figure 2.** Selected Measurement Model (HR Practices and Organizational Performance)



Source: Survey Results Using Smart PLS V3, 2022.

The formative variables represent the two dimensions of organizational performance. They are explained and formed by a set of independent variables (*the questions related to each dimensions are different, and we cannot do without one of them*) (Oumakhlouf and Kherbachi, 2023:118). The reflective variables are linked to leadership style, information sharing and internal professional relations. Their corresponding items are close and correlated. As a result, the direction of the arrows is related to the nature of the normative or reflective variable.

**4.2.2. Assessment of Convergent Validity**

Analysis of our selected measurement model begins with verification of the validity and reliability of the endogenous (*financial and non-financial performance*) and exogenous latent variables (*information sharing and communication, leadership style, internal professional relations*).

**Table 3.** Convergent Validity Results for the HR/Organizational Performance Model

Latent variable	Item codes	Loading	Cronbach's Alpha	CR	AVE
Information sharing and communication	Diff.Info	0.835	0.830	0.894	0.739
	CommVer	0.869			
	CommHorz	0.874			
Internal Professional Relations	PRO/DR	0.749	0.632	0.833	0.716
	DR/Employ	0.934			
Leadership style and employee involvement	Confi	0.825	0.737	0.849	0.653
	Int.Enrg	0.802			
	Sugg.Empl	0.795			
Financial performance	CA	0.868	0.902	0.924	0.710
	X°	0.881			
	BA	0.809			
	RF (Rentabilité Financière)	0.747			
	Taux de satisfaction clients	0.898			
No-Financial performance	Eff	0.791	0.837	0.884	0.605
	Degré d'eff	0.768			
	Efficience	0.754			
	Concu	0.710			
	Inno	0.858			

Source: Survey Results Using Smart PLS V3, 2022.

Table.3 shows the convergent validity results for the constructs used. We find that all measures are above the recommended limits. Cronbach's Alpha values range from 0.632 (Internal Professional Relations) to 0.924 (Financial Performance). Composite Reliability (CR) values range from 0.833 (Internal Professional Relations) to 0.927 (Financial Performance). In this case, we consider that the variables used are reliable. The validity of the variables is also verified by means of AVE, which varies between 0.605 (Non-financial performance) and 0.739 (Information sharing and communication).

#### 4.2.3. Assessment of the Discriminant Validity of the HR/Organizational Performance Model

The results of the cross loadings test presented in Table 04 show that all manifest variables are relevant, as there is no overlap in their distribution. Each item belongs to the appropriate latent variable.

**Table 4.** Results of the Cross Loadings Test of the HR/organizational Performance Model

Discriminant Validity							
	Fornell-Larcker Criterion	Cross Loadings	Heterotrait-Monotrait Ratio (HT...)	Heterotrait-Monotrait Ratio (HT...)	Copy to Clipboard:	Excel Format	R Forr
	Partage de l'information et com...	Performance financière	Performance non financi...	Relations professionnelles i...	Style de leadership et implication du p...		
CA	-0.011	0.868	-0.022	-0.148	0.004		
ComHorz	0.874	-0.023	0.521	0.457	0.474		
ComVer	0.869	-0.048	0.537	0.397	0.437		
Concu	0.403	-0.027	0.710	0.318	0.419		
Confi	0.437	0.024	0.328	0.363	0.825		
DR/Emp...	0.514	-0.250	0.404	0.934	0.405		
Degré.Effi	0.672	-0.092	0.768	0.405	0.344		
Diff.Info	0.835	0.111	0.781	0.392	0.431		
Effi	0.519	0.065	0.791	0.251	0.071		
Efficience	0.556	0.235	0.754	0.321	0.372		
Innov	0.673	0.085	0.858	0.262	0.389		
Int.Encrg	0.391	-0.054	0.376	0.285	0.802		
PRO/DR	0.240	-0.085	0.246	0.749	0.233		
RF	-0.047	0.747	0.032	-0.111	-0.119		
Sugg.E...	0.441	-0.027	0.280	0.319	0.795		
X*	-0.010	0.881	0.044	-0.200	0.027		
tauxsati...	0.124	0.898	0.097	-0.228	-0.009		

Source: Survey Results Using Smart PLS V3, 2022.

Table.5 shows the correlation matrix for the latent variables used. All values on the diagonal are higher than those outside the diagonal. This indicates that the model variables are valid and reliable and confirms the discriminant validity of our measurement scales.

**Table 5.** Correlation Matrix of Latent Variables (HR/Organizational Performance)

Discriminant Validity							
	Fornell-Larcker Criterion	Cross Loadings	Heterotrait-Monotrait Ratio (HT...)	Heterotrait-Monotrait Ratio (HT...)	Copy to Clipboard:	Excel Format	R Forr
	Partage de l'inf...	Performance financière	Performance non fina...	Relations professionnelles...	Style de leadership et imp...		
Partage de l'information et communication	0.859						
Performance financière	0.032	0.843					
Performance non financière	0.744	0.067	0.778				
Relations professionnelles internes	0.481	-0.221	0.401	0.846			
Style de leadership et implication du personnel	0.520	-0.026	0.411	0.397	0.808		

Source: Survey Results Using Smart PLS V3, 2022.

After assessing the internal consistency of the research constructs, we will present the evaluation results of the structural model that relates HR enhancement practices to the organizational performance of the surveyed companies.

#### 4.2.4. Evaluation of the Structural Model (HR/Organizational Performance)

To evaluate the structural model of our research, we will present the results of the parameters, namely the goodness of fit (GOF), the coefficient of determination (R<sup>2</sup>), and the hypothesis test. Before calculating the GOF, which measures, the goodness of fit of the overall model, we first give the value of R<sup>2</sup>. According to Chin 1998 in (Bouzida, 2019:222), if R<sup>2</sup> is less than 19%, it is rejected; if its value is between 19% and 33%, it is insignificant; if it is between 33% and 67%, it is moderately significant; and if it is more than 67, it is highly significant. Table 6 (in appendices) gives the R<sup>2</sup> results for the latent variables to be explained:

The R<sup>2</sup> value is equal to the average of the R<sup>2</sup>s of the variables presented, and the AVE value is equal to the average of the AVEs of the variables in the model multiplied by the number of items in each variable (Bouzida, 2019:204). The structural model goodness-of-fit test measures the model's degree of predictability in explaining the phenomenon under study. The fit of the overall model is estimated by calculating the following GOF (Goodness Of Fit) formula (Ali Belhadj, 2016:52);

$$GOF = \sqrt{(AVE) \times (R^2)}$$

AVE: Average Shared Variance

R<sup>2</sup>: Coefficient of determination

According to Henseler and Sarstedt (2013:573-577), if GOF is less than 0.1: the model is not predictable, if its value varies between 0.1 and 0.24: the model is not very predictable, if it is between 0.25 and 0.36: the model is moderately predictable and if it exceeds 0.36, the model is very predictable. After the calculations, we obtained GOF = 0.25, based on the following data: R<sup>2</sup> = 0.33 and AVE = 0.19. We consider the structural model's goodness of fit to be average.

Finally, the hypotheses supported are those with a P-value less than 0.05 and a T-Student value greater than 1.97 (Bouzida, 2019:206). Table.6 gives the R<sup>2</sup> results for the latent variables, namely financial and non-financial performance;

**Table 6.** Coefficient of Determination R<sup>2</sup> (SP/Organizational Performance)

Variable	R <sup>2</sup> R-Square	Decision
Financial performance	0.074 < 0.19	Rejected (insignificant)
No-Financial performance	0.556 > 0.19	Accepted

Source: Survey Results Using Smart PLS V3, 2022.

According to the table, information sharing and communication, leadership style and staff involvement, and internal professional relations (*independent variables*) contributed 7.4% to the explanation of financial performance. A very low and insignificant rate, which means that these variables do not explain the variation in financial indicators. On the other hand, the R<sup>2</sup> value for non-financial performance is 55.6%, a moderately satisfactory rate, and these variables contribute moderately to improving the non-financial performance of the companies surveyed.

After calculation, we obtained GOF= 0.46 > 0.36, based on the following data: R<sup>2</sup> = 0.315 (*average R<sup>2</sup> of latent variables to be explained*) and AVE=0.68 (*average AVE of latent explanatory variables*). We consider the goodness-of-fit of the structural model to be very good, and the model linking HR practices and organizational performance to be highly predictable.

The values of the "Effect size" F<sup>2</sup>, which measures the contribution of each latent explanatory variable to the improvement in organizational performance (*financial and non-financial*), are presented in the following table;

**Table 7.** Effect Size F2 Result (PS/Organizational Performance)

f Square					
Matrix	f Square	Copy to Clipboard: <a href="#">Excel Format</a>			
	Partage de...	Performance financière	Performance non financière	Relations prof...	Style de leader...
Partage de l'information et communication		0.022	0.721		
Performance financière					
Performance non financière					
Relations professionnelles internes		0.076	0.004		
Style de leadership et implication du personnel		0.000	0.001		

Source: Survey Results Using Smart PLS V3, 2022.

According to table 07, information sharing and communication (horizontal and vertical) have a very low impact on financial performance ( $F2 = 0.02 = 0.02$ ) and a very significant impact on non-financial performance ( $F2 = 0.721 > 0.35$ ). Internal professional relations have a very weak impact on financial performance ( $F2 = 0.07$ ), and no impact on non-financial performance ( $F2 = 0.004 < 0.02$ ). Leadership style and staff involvement have no impact on either financial performance ( $F2 = 0$ ) or non-financial performance ( $F2 = 0.001$ ).

Finally, to affirm or confirm the hypotheses initially put forward, we rely on the results presented in Table.7. Since all overt variables measuring compensation and training were eliminated by the PLS Algorithm, the sub-hypotheses corresponding to these two aspects are not verified, as they were not subjected to hypothesis testing. On the other hand, the hypotheses supported are those whose P-value is less than 0.05 and whose T-Student value is greater than 1.97. We find that only information sharing and decision communication have an impact on non-financial performance.

**Table 8.** Result of Hypothesis Test (HR/Organizational Performance)

Hypothesis	Relation	P-Value	T Student	Decision
Hc	Information sharing and communication - financial performance	0.490	0.692	Rejected
Hc	Information sharing and communication - no-financial performance	0.000	5.573	accepted
Hd	Leadership style and employee involvement - financial performance	0.987	0.017	Rejected
Hd	Leadership style and employee involvement - no-financial performance	0.860	0.176	Rejected
He	Internal Professional relations-financial performance	0.216	1.240	Rejected
He	Internal Professional relations- no-financial performance	0.674	0.421	Rejected

Source: Survey Results Using Smart PLS V3, 2022.

## 5. CONCLUSION

According to the results, the two hypotheses Ha and Hb were not tested because they were excluded from our research model. Table.8 shows that all sub-hypotheses are rejected except the sub-hypothesis Hc. As a result, we reject the overall hypothesis (H) linking HR valuation practices to organizational performance, with the exception of the hypothesis stipulating a positive relationship between information sharing and communication and non-financial performance.

We can therefore affirm that, despite the importance of HR improvement practices for employee job satisfaction, they do not have a direct impact on organizational performance. This result can be justified by the fact that the increase in figures achieved over the last three years is linked to internal factors (which may include managerial practices, organizational structures, innovation, product quality, etc.) or external (supply/demand).

Given that all of the manifest variables which measure remuneration and training were eliminated by the “PLS Algorithm” method, the sub-hypotheses which correspond to these two aspects were not the subject of the hypothesis test.

Or, the results showed that leadership style and internal professional relationships have no direct impact on financial (Sales (CA), Production (X°), Annual profit (BA), Financial profitability and Customer satisfaction and complaints) and non-financial performance (efficiency, effectiveness, innovation, competition and social indicators). However, information sharing and communication only impact non-financial performance.

We therefore reject researchers' assertions that there are individual links between best HR practices and organizational performance (Pfeffer and Veiga, 1999; Chrétien et al., 2005). Organizational performance could then result from the coherence and synergy of all HR practices. On the other hand, we note a positive link between information sharing and extra-financial performance indicators. Through their information systems and social dialogue, workers share their cultures and knowledge, building a common language that allows them to effectively accomplish their tasks and advance the projects of the companies concerned.

At the end of this work, we can say that human resources development actions are diverse and aim to take into consideration the intangible aspect, which is becoming an imperative for any company seeking to achieve excellence. We have tried to summarize the most frequent practices likely to motivate staff and rally them towards the company's common objectives, namely remuneration, training, the social climate and staff involvement, which translates into employee participation in the company's actions and the leadership style adopted by managers.

We have developed a theoretical model that relates several HR practices to financial and non-financial performance. The survey results showed that no correlation existed between HR practices and organizational performance, with the exception of information sharing and non-financial indicators, and this was confirmed by structural analysis. Consequently, we reject our hypothesis linking HR practices to financial and non-financial indicators. Despite the absence of a direct link between HR practices and organizational performance, they nevertheless remain necessary for the development of workers within these companies.

This work remains a common thread both in managerial and academic terms. On the one hand, this research could serve as food for thought for managers wishing to improve the performance of their companies. In this case, they should place the human being at the forefront of their concerns by offering them a working climate in which they can fade away and add value to their companies. It is also advisable to monitor the evolution of employee performance, which is likely to have an impact on organizational performance. Following the example of this research, several avenues can be explored to complement our work. It would be interesting to broaden our targets by including other companies in other sectors. To integrate other performance measurement variables, so as to be able to be more exhaustive in the assessment of HR practices in the operation of company activities, and to choose a more comprehensive approach that links human capital with company performance.

#### **YAZAR BEYANI / AUTHORS' DECLARATION:**

Bu makale Araştırma ve Yayın Etiğine uygundur. Beyan edilecek herhangi bir çıkar çatışması yoktur. Araştırmanın ortaya konulmasında herhangi bir mali destek alınmamıştır. Makalede kullanılan ölçek için yazar(lar) tarafından ölçeğin orjinal sahibinden izin alındığı beyan edilmiştir. Yazar(lar), dergiye imzalı “*Telif Devir Formu*” belgesi göndermişlerdir. Mevcut çalışma için mevzuat gereği etik izni alınmaya ihtiyaç yoktur. Bu konuda yazarlar tarafından dergiye “*Etik İznine Gerek Olmadığına Dair Beyan Formu*” gönderilmiştir. / **This paper complies with Research and Publication Ethics, has no conflict of interest to declare, and has received no financial support. For the scale used in the article, it is declared by the authors that permission was obtained from the original owner of the scale. The author(s) sent a signed "Copyright Transfer Form" to the journal. There is no need to obtain ethical permission for the current study as per the legislation. The "Declaration Form Regarding No Ethics Permission Required" was sent to the journal by the authors on this subject.**

## BIBLIOGRAPHY

- ADESINA, Kolade Sunday (2021), "How Diversification Affects Bank Performance: The Role of Human Capital", **Economic Modelling**, S.94, ss.303-319.
- ALÍ BELHADJ, Yassine (2016), "Factors Influencing the Use of the Balanced Scorecard Performance Model by Algerian Companies", **Forum for Economic Studies and Research Journal**, S.4(1), ss.20-31.
- ALLANÍ-SOLTAN, Nada, ARCAND, Michel and BAYAD, Mohamed (2005), "La Gestion Stratégique Des Ressources Humaines: Un Déterminant de L'accroissement du Niveau D'innovation Des Entreprises Françaises", **Revue Internationale Sur Le Travail Et La Société**, S.3(2), ss.602-638.
- BAGOZZI, Richard P. and YI, Youjae (1988), "On the Evaluation of Structural Equation Models", **Journal of the Academy of Marketing Science**, S.16(1), ss.74-94.
- BALLAND, Stephane and BOUVIER, Anne-Marie (2008), **Management Des Entreprises En 24 Fiches**, Dunod Publisher, Paris (France).
- BARNEY, Jay (1991), "Firm Resources and Sustained Competitive Advantage", **Journal of Management**, S.17(1), ss.99-120.
- BARNEY, Jay (1995), "Looking Inside for Competitive Advantage", **Academy of Management Executive**, S.4, ss.49-61.
- BECKER, Brian and GERHART, Barry (1996), "The Impact of Human Resource Management on Organizational Performance: Progress and Prospects", **The Academy of Management Journal**, S.39(4), ss.779-801.
- BOUZIDA, Zahia (2019), "L'impact De La Démarche Qualité Sur La Performance Des Entreprises Industrielles Algériennes: Cas De: ENIEM Et Condor Electronics", **Thèse D Doctorat**, Université Mouloud Maameri, Tizi Ouzou.
- CHRÉTIEN, Lise, ARCAND, Guy, TELLIER, Geneviève and ARCAND, Michel (2005), "Impacts Des Pratiques De Gestion Des Ressources Humaines Sur La Performance Organisationnelle Des Entreprises De Gestion De Projets", **Revue Internationale Sur Le Travail Et La Société**, S.3(1), ss.107-128.
- DECOCK GOOD, Christel and GEORGES, Laurent (2003), "Gestion Des Ressources Humaines Et Performance Economique : Une Etude Du Bilan Social", **Revue De Comptabilite-Contrôle-Audit**, S.9(2), ss.151-170.
- DELERY, John H. and DOTY, D. Harold (1996), "Modes of Theorizing in Strategic Human Resource Management : Tests of Universalistic, Contingency and Configurational Performance Predictions", **Academy of Management Journal**, S.39(4), ss.802-835.
- EL ADRAOUI, Hayat (2015), "Effet De La GRH Sur La Performance: Validation Du Modèle Configurationnelle Après D'un Echantillon De 92 Entreprises Au Maroc", **Rvue Question(s) De Management**, S.3(11), ss.43-56.
- GAGNON, Olivier and ARCAND, Guy (2011), "Les Pratiques De GRH Comme Catalyseur De La Performance Organisationnelle", **Revue Internationale Sur Le Travail Et La Société**, S.9(2), ss.1-23.
- GARENKO, Patrizia, SARDI, Alberto and NUDURUPATI, Sai Sudhakar (2022), "Human Resource Management (HRM) in the Performance Measurement and Management (PMM) Domain: A Bibliometric Review", **International Journal of Productivity and Performance Management**, S.71(7), ss.3056-3077.
- GUEST, David E. (1997), "Human Resource Management and Performance: A Review and Research Agenda", **The International Journal of Human Resource Management**, S.8(3), ss.263-276.
- HENSELER, Jörg and SARSTEDT, Marko (2013), "Goodness-of-Fit Indices for Partial Least Squares Path Modeling", **Computational Statistics**, S.28(2), ss.565-580.
- JOHNSON, Gerby, SCHOLE, Kevan, WHITTINGTON, Richard and FRÉRY, Frederic (2005), "Les Leviers Stratégiques", **Stratégique**, Pearson Education, Paris (France).

- KICHOU, Djedjiga (2015), “*L’impact Des Pratiques De Gestion Des Ressources Humaines Sur La Performance De L’entreprise: Cas Des Entreprises Algériennes*”, **Thèse De Doctorat**, Université De Mouloud Mammeri, Tizi-Ouzou.
- KMIECIAK, Roman, MICHNA, Anna and MECZYNSKA, Anna (2012), “*Innovativeness, Empowerment and IT Capability: Evidence from SMEs*”, **Industrial Management & Data Systems**, S.112(5), ss.707-728.
- LACOURSIÈRE, Richard, FABI, Bruno and ST-PIERRE, Josee (2000), “*Impacts De Certaines Pratiques De GRH Sur La Performance Organisationnelle Et Financière Des PME*”, **5. Congrès International Francophone Sur La PME**, 25-27 October 2000 – Lille, AIREPME Publisher, Lille (Fr), ss.1-18.
- LESMINI, Lis, KAMSARIATY, Kamsariaty, MARLITA, Devi, SAWITRI, Ni Nyoman and SOEHADITAMA, Josua Panatap (2023), “*Business Software Human Resource Information System for Assistance Human Capital Performance*”, **Formosa Journal of Multidisciplinary Research (FJMR)**, S.2(4), ss.711-718.
- MEZIANI, Mustapha (2012), “*Contribution A la Méthodologie D’intégration De La Qualité Dans Les Entreprises: Evaluation Des Performances Managériales*”, **Thèse De Doctorat**, Université MIRA, Béjaia.
- MULIYATI, Muliya, LILY, Lily, FEBRIAN, Wenny Desty, RAJAB, Muhammad and AR, Muhammad, Thamrin (2023), “*Transactional Leadership: Employee Performance and Organizational Performance (Literature Review)*”, **East Asian Journal of Multidisciplinary Research (EAJMR)**, S.2(3), ss.1129-1142.
- NARO, Grald (2006), “*Les Indicateurs Sociaux : Du Contrôle De Gestion Sociale Aux Développements Récents Du Pilotage Et Du Reporting*”, **Récupéré sur slideshare** (E-Article), <https://fr.slideshare.net/AbderraoufHAMZAOUI/les-indicateurs-sociaux-grald-naro> (Date of Access: 03.08.2022).
- OUBYA, Ghozlene (2016), “*Contribution De L’étude Des Déterminants De La Performance De L’entreprise : Impact De La Création De Valeur Pour Le Client Sur La Performance Des Entreprises Hotelières En Tunisie*”, **Thèse de Doctorat**, Université CÔTE D’AZUR, Nice.
- OUMAKHLOUF, Naoual and KHERBACHI, Hamid (2023), “*Measuring the Impact of Strategic Planning on Organizational Performance Using the PLS Approach*”, **Les Cahiers Du Cread**, S.39(2), ss.103-131.
- PFEFFER, Jeffrey (1998), “*Seven Practices of Successful Organizations*”, **California Management Review**, S.40(2), ss.96-124.
- PFEFFER, Jeffrey and VEIGA, John F. (1999), “*Putting People First for Organizational Success*”, **Academy of Management Executive**, S.13(2), ss.37-48.
- ROUAG, Soumia and KADDOURI, Amar (2023), “*Le Capital Humain, Un Élément Immatériel Stratégique Pour Devenir Meilleur*”, **La Ressource Humaine Un Facteur A L’origine De L’Avantage Concurrentiel**, Ecole Supérieur Du Commerce, ss.1-22.
- SAMWEL, Janes O. (2018), “*Effect of Employee Relations on Employee Performance and Organizational Performance-Study of Small Organizations in Tanzania*”, **Global Journal of Management and Business Research**, S.18(8), ss.68-79.
- SOUTENAIN, Jean-François and FARCET, Philippe (2006), **Dans Organisation Et Gestion De L’Entreprise**, Foucher Publisher, Berti (France).
- SUSANTO, Primadi Candra (2022), “*Employee Engagement Strategy: Analysis of Organizational Commitment, Compensation, Career Development*”, **International Conference of Humanities and Social Science (ICHSS)**, 15-17 December 2022, V.1, ss.96-103.
- SUSANTO, Primadi Candra, AGUSINTA, Lira, SETYAWATI, Aswanti and PANJAITAN, Anggia Rettrisunz Pim (2023), “*Determinant Organization Commitment and Development Organization: Analysis Servant Leadership, Transformational Leadership, Transactional Leadership*”, **Formosa Journal of Multidisciplinary Research (FJMR)**, S.2(3), ss.541-558.
- THIETART, Raymond-Alain (2014), **Méthode Et Recherche En Management**, Dunod Publisher, Paris (France).

TIAN, Anna Yumiao, AHAMMAD, Mohammad Faisal, TARBA, Shlomo Yedidia, PEREIRA, Vijay and ARSLAN, Ahmad (2021), "Investigating Employee and Organizational Performance in a Cross-Border Acquisition: A Case of Withdrawal Behavior", **Hum Resour Manage**, S.60(5), ss.1-17.

**Appendix.** Summary of Research Model Variables (HR/Organizational Performance)

	Variable	Items	Reference
Remuneration	Type of remuneration	Our remuneration policy is based on : - Diplomas required - Positions held - Individual skills - Experience acquired within the same company (employee loyalty)	Balland and Bouvier, 2008:289
	Individual bonuses	- The manager gives rewards or incentives to his employees for positive results or specific tasks.	Inspired by Kichou, 2015:178
Training	Training program	- The use of specific training programs to enable employees to fulfill their job requirements	Kichou, 2015:181
	Executive training	- You've had management training - You have received training in entrepreneurship	From the survey
Sharing information	The flow of information	- Staff members concerned are informed of decisions taken - The organization enables employees to share corporate values and culture. - Information is disseminated in a timely and effective manner (Diff.info)	From the survey. Inspired by Kmiecik, Michna and Meczynska, 2012:720
	The communication	- Your company's structure enables vertical communication (ComVer) - Your company's structure enables horizontal communication (ComHorz)	From the survey
Leadership style and Employee involvement	Executive orientation	The top priority in our company is : - Task completion - Employee satisfaction - Both	Meziani, 2012:356
	Employee trust	- We believe in the abilities of our subordinates (Conf) - Initiatives are officially encouraged (Int.Encrg)	From the survey Meziani, 2012:356
	Participation in decision-making	- We take our subordinates' suggestions into account (suggestion box) (Sugg.Empl)	From the survey
Internal relations	Professional Relations	- Owner-manager relationship (PRO/DR) -Management-employee relationship (DR/Employ)	From the survey
Personnel monitoring	Personnel monitoring	- Our company has personnel tracking sheets.	From the survey
Organizational performance	Financial measures	- Sales (CA) - Production (X°) - Annual profit (BA) - Financial profitability (RF) - Customer satisfaction and complaints	Inspired by Tian et al., (2021:7); Adesina, 2021:309-310
	Non-financial measures	-Competitive position (Concu) -Innovation in relation to competitors (Inno) - Efficiency: the company is able to achieve its objectives (Eff) -Degree of effectiveness (Eff Degree) -Efficiency  - Social indicators : * Absenteeism rate (Absent) * Turnover rate (Turnv) * Degree of conflict (Conflict) * Worker punctuality (Ponctu)	Kichou, 2015:201)  Various jobs

Source: Compiled by us from Several Readings.