

The Impact of Good Human Resource Management Practices (GHRMP) in Reducing Hidden Costs and Improving the Overall Performance of Organizations - IRIS Case Study

أثر الممارسات الحسنة لإدارة الموارد البشرية في تخفيض التكاليف الخفية وتحسين الأداء
العام للمؤسسات – دراسة حالة شركة IRIS

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Abstract: This study aims to highlight the impact of good practices of human resource management on reducing hidden costs and improving global performance of enterprises. To achieve the goal of this study, we have selected one of the largest production companies in Setif, **IRIS** Company for electronics and household appliances. The study found a positive relationship between good human resource management practices and hidden costs in this company, and showed that good human resource management practices contribute to creating added value for IRIS by converting hidden costs into performance.

Keys words: Good practices of human resources management; Hidden costs; Organizational dysfunctions; Human behaviors; Company structures

JEL classification codes :M12, M41, M59, J28, D21.

ملخص: تهدف هذه الدراسة إلى تسليط الضوء على أثر الممارسات الحسنة لإدارة الموارد البشرية في تخفيض التكاليف الخفية وتحسين الأداء العام للمؤسسات، ولتحقيق هدف هذه الدراسة فقد قمنا باختيار إحدى كبريات الشركات الإنتاجية بولاية سطيف وهي شركة IRIS للأجهزة الالكترونية والكهرومنزلية، وقد توصلت الدراسة إلى وجود علاقة إيجابية بين الممارسات الحسنة لإدارة الموارد البشرية والتكاليف الخفية بهذه الشركة، وأظهرت أيضًا أن الممارسات الحسنة لإدارة الموارد البشرية تساهم في خلق قيمة مضافة للشركة من خلال تحويل التكاليف الخفية إلى أداء.

الكلمات المفتاحية: الممارسات الحسنة لإدارة الموارد البشرية، التكاليف الخفية، الاختلالات التنظيمية، السلوكيات البشرية، هياكل المؤسسة.

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Introduction: Cost control is the cornerstone of building the competitive advantage for any company. Therefore, Companies have to Pay close attention to this aspect. The Hidden costs represent one of the important costs that must have been controlled by the company.

Hidden costs are the costs that do not appear in the organization's various information systems, and they are outside the traditional accounting control circle. These costs are mainly caused by the gap between the actual performance and the targeted performance, in other words hidden costs are a translation of the organizational dysfunctions that the organization suffers from, resulting from the permanent and continuous interaction between the organization's structures and the behavior of its human resources.

Based on the fact that these dysfunctions result from the interaction between the company's structures and the human's behavior, good human resource management practices may be an effective tool to reduce these costs. Good human resource management practices (GHRMP) aim primarily to improve individuals' behaviors and motivate them to work and thus may be a way to reduce organizational dysfunctions and create an added value for the company. From the above, we can ask the following research question:

1- Can good HR practices reduce hidden costs at IRIS company?

To answer the previous questions, the following hypothesis is put forward:

- Yes, Good human resource management practices (GHRMP) contribute efficiently in reducing hidden costs by converting hidden costs into performance;

Methodology:

In order to understand the aspects of this study, we used the descriptive and analytical approach. by relying on the description and analysis of the information and data collected from books, magazines and IRIS documents, and this is due to the nature of the topic in a template through which it seeks to answer the main question, and to address the research topic was done.

This study was divided into two parts: The first part was devoted to dealing with the theoretical framework of the study, and through it we will provide a brief definition of hidden costs, identify the sources of hidden costs, indicators and components of hidden costs, to come finally to present the general model for calculating hidden costs. The second part was devoted to addressing the practical side of the study, and through it we will present

the organization under study and the reasons for its selection, calculate the indicators and hidden costs components in the IRIS company before applying GHRMP (the first semester of 2019) and analyze the findings. Then we will present the most important practices carried out by the organization to reduce these costs. Finally, we will calculate the indicators and components of hidden costs in the organization after applying GHRMP (the first six of the year 2020) and analyze the results.

Previous studies:

1- The study of Cristallini, Vincent. In 2013 titled *Les coûts performances caches, mesure scientifique de la sante et de la vitalité d'une organisation et contribution a la validité des concepts de gestion*. Where she wanted to present the most dysfunctions suffered by the company and its impact on the health of the company. The study sums up that reducing dysfunctions can rise the benefits by 45% and enhance the overall performance of the company in the long term.

2- The Study of Drouiche Ammar in 2018 titled “*Hidden costs control and its role in improving the financial performance of economic enterprises - Case study of cement company Beni-Saf (SCIBS)*”. The study aimed to determine the effectiveness of hidden cost control in improving the performance of the enterprise. The study found that there is a negative relationship between the increase in hidden costs, annual sales and the profitability of the enterprise. Therefore, our enterprises have to follow the best ways to reduce these costs, especially those related to the human resource for his role in increasing productivity and reducing hidden costs.

- **What distinguishes our study** from the others is focusing on the role of human resource in reducing hidden costs and enhancing the overall performance of IRIS Company.

Section 01: The concept of hidden costs

1.1. Definition of hidden costs:

Hidden costs are those costs that do not have a landmark or explanation in the accounting information systems used in the company (budget, general accounting, cost accounting...etc.). These costs are an approximate measure of the cost that bears the organization as a result of regulating dysfunctions. Its impact is clear on the budget, but it is difficult to separate and record it in the company's accounting information systems^I (Savall & Zardet, 2003).

^I *Maitriser les couts et les Performances caches*, 3rd éd. Economica Paris, 2003., P 13.

1.2. The origin of the hidden costs: A hidden cost is the economic consequence of a dysfunction. In other words, the hidden costs are the monetary translation of the disruptions undergone by a company and the organizational mechanisms that it puts in place to alleviate the primary effects of these dysfunctions. These mechanisms are called **regulations**.

Figure N ° 01: The origin of the hidden costs

The Hidden costs are the monetary translation of regulation activities:

Dysfunction → **Regulation** → **Hidden costs**

Source: Henry Savall and Véronique Zardet ^{II}

Given that hidden costs are an inevitable consequence of the dysfunctions that the organization faces, eliminating part of these dysfunctions will be able to recover part of the current hidden costs. So, the hidden costs constitute a hidden potential performance (Savall & Zardet).

1. 3. Indicators and components of hidden costs

Indicators of dysfunction are socio-economic variables, which reveal a state of social efficiency of the system [Structures - Behaviors]. These dysfunctions can be expressed under five indicators:

1- Absenteeism; 2- work accidents; 3- Staff turnover; 4- Non - quality or lack of quality of products; 5-productivity gap or under-productivity

The regulations of dysfunctions are expressed either through human activities or through the consumption of goods and / or services. These indicators are broken down into six components

^{II} *Maitriser les coûts et les performances cachés*, 6th éd, Economica, Paris, 2015, p 128.

(Savall & Zardet) ^I:

1.3.1. Over-consumption: quantity of products and services consumed in addition to regulate dysfunctions suffered by the company (Cristallini, 2013).

1.3.2. Over time: they represent the cost of time devoted to the regulation of dysfunctions instead of being devoted to obtaining a solvent production. Overtime is evaluated by the hourly contribution to the margin on variable costs (HCMVC). (Noguerra, 2002). It is calculated as follows:

Margin on variable costs (MCV) = Sales Number (SN) - Variable costs

$$\text{Hourly contribution to the margin on variable costs (HCMVC)} = \frac{\text{Variable cost margin (MCV)}}{\text{Number of expected hours (HA)}}$$

1.3.3. Over salary: these are the elements of remuneration and associated expenses paid without activity counterpart or in the event of a shift in function, salary differential between a worker and his replacement. Indeed, overtime is not valued at the wage cost, but according to the principle of the hourly contribution to the margin on variable costs (Moreau, 2012).

These three components constitute **charges** that companies and organizations could avoid, at least partially, by mitigating the scale of dysfunctions. They are called **overcharges**.

1.3.4. Non-production: it does not represent a real charge but an opportunity cost due to loss of margins relating to missed opportunities to produce and sell a good or service (machine breakdowns, stock outs, work accidents...). Like overtime, non-production is evaluated by the hourly contribution to the margin on variable costs (Annamari, 2015);

1.3.5. The non-creation of potential: it does not constitute a real charge. It illustrates the performances delayed by the non-realization of intangible investments because of the current dysfunctions, which monopolize the organization's means and resources^{II} (Savall, 1986).

1.3.6. Risks: these are the damaging effects that may result from the occurrence of these dysfunctions. (**Ex:** the risk of loss of a customer following the delivery of non-compliant merchandise (Noguerra, 2002).

These last 03 components constitute hidden costs not included in the visible costs. They are called non-products; they represent the absence of production causing loss of gross margin resulting from dysfunctions.

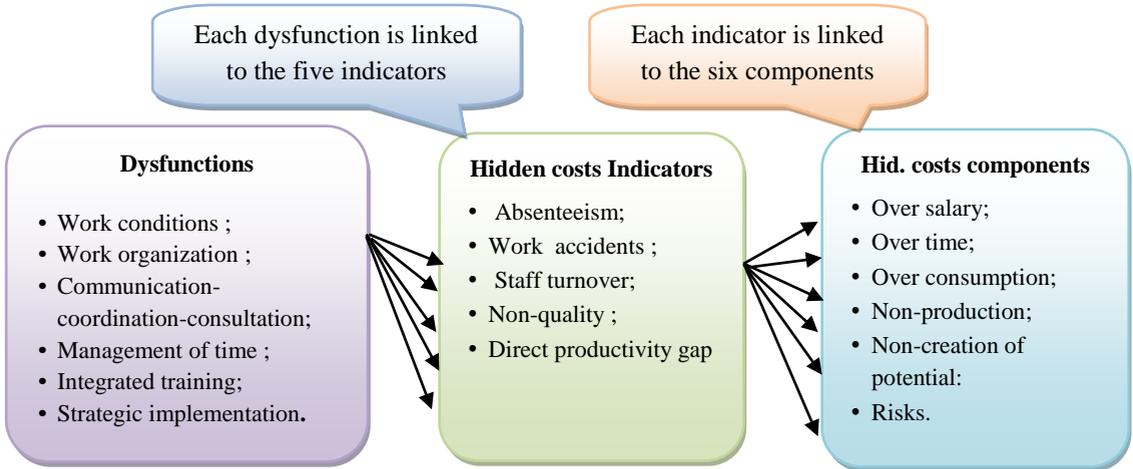
^I Savall & Zardet (1992). *Le nouveau contrôle de gestion : méthode des coûts-performances cachés* (éd. 01). Paris, France: Malesherbes accounting. P 21.

^{II} Savall, H. (1986). *Le gisement exploitable des coûts cachés, vers un nouveau contrôle de gestion. Exchange review* (86), 08-09.

1.4. Link between dysfunction indicators and hidden cost components:

This link can be schematized as shown in Figure 02.

Figure 02: Link between dysfunction indicators and hidden cost components



Source: Henri Savall and Others ¹

1.5. General model for calculating hidden costs: The hidden costs assessment model consists of associating with each of the five indicators of dysfunction the six hidden cost components corresponding to the regulations actually implemented by the company, as shown in Table 01.

Table 01: General model for calculating hidden costs

Components	Over salary	Over time	Over consumptions	Non-production	Non creation of potential	Total hidden costs	Risks
Indicators							
Absenteeism						Hidden costs related to absenteeism	
Work accidents						Hidden costs related to work accidents	
Staff turnover						Hidden costs associated with staff turnover	

¹ *Libérer les performances cachées des entreprises par un management socio-économique* », 2nd éd, Lyon, 2008, P 33.

Non-quality						Hidden costs linked to the Non quality	
Direct productivity gap						Hidden costs linked to Direct productivity gap	
Total	Over salary generated by the 05 indicators	Over time generated by the 05 Indicators	overconsumption generated by the 05 indicators	Non-production generated by the 05 indicators	Non creation of the potential generated by the 05 indicators	Total Hidden Costs	Risks generated by the 05 indicators
Economic concepts	Historical costs			Opportunity costs			
Accounting concepts	Surcharges			non-product			

Source: Henry Savall and Veronique Zardet ¹

II- The practical aspect of the study: To answer the main question and to prove or deny the validity of the hypotheses, we have to calculate the hidden costs **before and after applying the GHRMP** in the IRIS Company. Then, we will compare the results to find out the effect of these practices on the overall performance of this company.

2.1. Limits of the study: We conducted the applied study on the IRIS company for Electronic and Home Appliances, exactly in the refrigerator production unit N° 02 (URF 02) in Setif. It is an independent unit started production in January 2018, employs more than 360 workers with a sales number exceeding 1.7 billion DZD. This study was conducted during the first semester of 2019 and the first semester of 2020. We chose this unit for several reasons, which are:

- The unit is modern and has a suitable working environment;
- the considered sales number of the unit;
- The considered number of workers that exceeds 360 worker, which increases the accuracy of the study;
- It uses a large number of raw materials, which allows us to test the different hypotheses of the study;
- It contains a number of experienced and competent persons who want to develop the unit and reduce dysfunctions.

¹ Henry Savall and Véronique Zardet, *maitriser les coûts et les performances cachés*, 6th édition, Economica, Paris, 2015, P 131.

2.2. Calculating the indicators and components of hidden cost in the URF 02 unit before applying good human resource management practices (GHRMP): During this part, we will calculate the hidden cost indicators before applying the GHRMP (first semester of 2019) and the resulting hidden costs. They are shown as follows:

2.2.1 .Calculation of the hidden costs' indicators on URF 02 for the first semester of 2019: These indicators can be illustrated in the following table:

Table 02: URF 02 Hidden Cost Indicators for the first semester of 2019

	Absenteeism	turnover	works Accidents		Non-quality		Productivity gap
	Absenteeism rate	Turnover rate	Number of work accidents	lost Works days	Scrap products rate	Downgraded Product rate	Deviation rate
Jan	9,19%	5,88%	7	13	0,42%	1,07%	9,91%
Feb	8,79%	8,61%	5	8	0,44%	1,01%	4,28%
March	6,98%	4,79%	8	10	0,24%	1,35%	7,67%
April	4,81%	3,17%	4	6	0,37%	1,25%	5,22%
May	5,74%	3,35%	6	7	0,41%	1,23%	4,14%
June	5.37%	4.06%	7	12	0,39%	1,39%	6,19%
Expected rate	05%	02%	5	-	0.25%	01%	02%

Source: Prepared by researchers, relying on IRIS documents and data

Through the table above, we note an increase in hidden cost indicators in the URF 02 unit for the first semester of 2019, and during the following points, we will try to explain the most important reasons for this increase:

First: regarding to the absenteeism and turnover indicator: We note the high rates of absenteeism and turnover during the first semester of the study compared to the expected rate of 05% and 02% respectively, to know a relative stability after that, this increase is due to:

- Absence of moral and material incentives.
- The absence of the update of internal system and the disciplinary system.

- Exhaustion and fatigue that afflicted the workers during the equipment's installation period, which exceeded two years.
- Absence of job satisfaction and the lack of responsibility sense.
- More than 72% of the unit's workers are under 25 years of age, these make difficulties for them to adapt to work compared to the elderly.
- Commitments and obligations of employees outside the organization (family engagements, disease's obligations, etc.);
- Work conditions, which were characterized by frequent work accidents during that period;
- The nature of the job (routine, some positions require great effort ... etc.);
- Workers' relations with the first responsible and between us, which are always characterized by the presence of obstacles and tension;
- Transportation problems, especially in the night shift.

For the turnover rate, the increase also is due to:

- A defect in the scale of wages and arrangements;
- Lack of promotions and career enhancements;
- Absence of internal and / or external training processes;
- setting goals and work plans without the workers' participation;
- Presence of competing companies willing to obtain expert worker such as **Brandt** and **Condor** with a higher wage than the one provided by IRIS.

Third: the indicator of work accidents: We note the high rate of work accidents compared to the expected rate, which is two accidents per month. This rise is due to:

- Neglecting the safety and security's instructions by Workers;
- Working conditions and the presence of many risks that can only be controlled or eliminated with time;
- High rates of absenteeism and turnover, So, changing the absentee workers by a new workers who are inexperienced in treatment with the machines and equipment, which often causes work accidents;
- Work intensity and The fast pace of production;
- Psychological frustration resulting from disliking the work position or the tasks assigned to the worker or as a result of daily routine;
- The newness of the unit and the lack of experience and skill required of the workers, as the experience of most workers do not exceed two years;
- Mechanical faults while regulating the machines, some of them become obsolete, and the aging and damage of some molds;
- The absence of the disciplinary penalties regarding to security standards.

Fourth: the non-quality indicator: Through the table, we note the high rate of downgraded products (partially defective) compared to the expected rate of 01%, and the high rate of scrap products (totally defective) compared

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to the expected rate of 0.25%, This increase is attributed to several factors, which are:

- work intensity and the fast pace of production;
- High rates of absenteeism and work turnover, so changing absentee workers with inexperienced workers in operating the machines and equipment. Consequently, lower productivity and higher defective products;
- Lack of necessary experience and skill for workers, as most workers do not have more than two years of work in the institution;
- Absence of internal and / or external training and training processes on production methods, machine work, standards ... etc.
- The absence of moral and material incentives;
- Psychological frustration resulting from dislike the work position and the tasks assigned to the worker or as a result of the absence of job satisfaction,
- Lack of sense of responsibility and loyalty to the company;
- Problems related to the quality of raw materials such as (Polyol, Iso, C5), which are included in the insulating paste compounds (the Foam) that prevent internal gas leaks inside the refrigerator.
- Technical problems related to controlling the machines, such as the machines that design the interior part of the refrigerator (Inner), and the aging of some of them and damage to some of the molds;

Fifthly: low productivity indicator: From the table we note the high rate of deviation between the number of expected products and the number of real products compared to the expected rate of deviation estimated at 02%. **This increase is almost due to the same factors that led to the rise of defective products** (work intensity, high rates of absenteeism, lack of job satisfaction, breakdowns in the means of production, etc.), in addition to:

- The company sets goals that do not correspond to its productive capabilities;
- The quality of the raw materials, which interrupt the production process due to the presence of several defective components(engines and internal parts..);
- Injuries and work accidents that stop the chain of production for a specific period to help the injured worker, and these accidents often lead to the loss

of some skilled workers for several days, So, a difficulty of compensating them and bearing the decline in productivity.

- Mechanical faults while regulating the machines, some of them become obsolete, in addition to aging and damage of some molds;

2.2.2. Calculation of the hidden costs' components on URF 02 for the first semester of 2019: During our study, we will calculate hidden costs using the SOF model(Social, Organizational and Financial), It is as follows:

1- The social model: During this stage, we will identify the most important dysfunctions that the company suffers from.

2- The organizational model: During this stage, we will determine the procedures taken by the company for regulating the dysfunctions.

3- The financial model: During this stage, we will determine costs of regulating this dysfunctions or what are known as hidden costs.

Calculation of URF 02 hidden costs: Tables 03 and 04 below summarize how to calculate hidden costs and how to calculate the hourly contribution of margin to the variable cost (HCMVC).

Table 03: The hidden costs grid

1- Social Model		2- Org Model		3- Financial Model					
Dysfunction	Cause	Repetition	Regulation	Approach to economic impacts					
				Over salary	Overtime	Over-consumption	Non-Production	No creation of potential	Risks
				$P * T * (HWW2 - HWW1)$	$P * T * HCMVC$	Cost * volume	$P * T * HCMVC$	SN	SN
P: represents the number of people involved; HWW 2: The hourly wage for the worker N° 02; HCMVC: The Hourly Contribution of Margin on Variable Cost				T: Time spent; HWW 1: The hourly wage for the worker N°01 SN: Sales Number					

Source: H. Savall and V. Zardet ¹

¹ H. Savall and V. Zardet, *Le Nouveau contrôle de gestion : méthode des coûts-performances cachés*, Malesherbes accounting éd, Paris, 1992, P 45.

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Table 04: Calculate Hourly Margin Contribution to Variable Cost in URF 02

Calculate Margin on Variable Cost (MVC)	
Sales Number	1 996 018 000,00
- Variable costs	- 1 237 531 160,00
=Margin on variable cost	= 758 486 840,00
Calculate hourly contribution of margin on variable cost (HCMVC)	
Margin on variable cost	758 486 840,00
÷Expected working hours for total workers	÷ 760 320
=Hourly contribution of margin on variable cost	= 997,58

Source: Prepared by researchers, relying on IRIS documents and data

Through the above and based on the company's documents and data, we calculated the hidden costs of the URF 02 unit for the first semester of 2019. With regard to the risks and no creation of potential, we were unable to calculate it due to the lack of necessary data for the company about its customers and competitors, opportunities and potential threats. So it will be neglected in our study. The table below shows the most important findings.

Table 05: URF 02 Hidden Costs for the first semester of 2019

	Over Salaries	Over Time	Over Consumption	No Production	Total
Jan	39 966,00	357 487,50	4 075 897,00	6 552 500,00	11 025 850,50
Feb	32 425,00	514 277,00	4 902 190,00	7 133 295,20	12 582 187,20
Mar	51 781,50	134 826,00	3 855 897,00	5 259 699,63	9 302 204,13
April	37 799,00	338 106,50	3 803 360,50	6 171 891,80	10 351 157,80
May	41 838,00	328 009,00	4 276 807,00	6 851 856,40	11 498 510,40
June	45 951,00	377 841,00	3 605 713,00	6 926 722,60	10 956 227,60
Total	249 760,50	2 050 547,00	24 519 864,50	38 895 965,63	65 716 137,63

Source: prepared by researchers, relying on IRIS documents and data

Through the table above, we note the high rate of hidden costs in general during the first months of the year 2019. We will try to explain the reasons for the high hidden costs in the URF 02 unit:

- The big number of dysfunctions that the unit suffers from, such as working conditions, work organization, which lead to the rise of various regulations.
- The high rates of absenteeism, work turnover and consequently the high costs of regulating its effects (over salaries, over consumption of RM, etc.);
- The high rate of work accidents and the number of lost workdays, and consequently the increase in productivity gap, over salaries and overtime;
- High rates of Non-quality and low productivity, so, an increase in raw materials consumed and overtimes needed to regulate defective products.

2.3. Most practices undertaken by the unit to reduce hidden costs

During this period and in light of the increase in these costs and indicators and with **the workers' company strike**, the Management Control department, in coordination with the Human Resources Department, decided to find some ways to reduce these hidden costs and satisfy the workers, especially with regard to over-consumption and non-production. Therefore, the company tried to reduce the dysfunctions in the unit and reduce these costs by conducting an investigation about the most important dysfunctions that the unit suffers from and the problems facing workers in addition to their needs and desires. In light of the findings, The Company has implemented several procedures and practices; the most important of these practices are:

First: With regard to work conditions and work organization: the company has taken the following procedures:

- An increase in workers' wages by 5000 AD due to workers' dissatisfaction with the wages offered to them;
- Increasing occupational safety procedures and prevention measures and imposing disciplinary penalties to reduce the work accidents' rate;
- Placing the new workers in easy-to-task positions to ensure they adapt easily and avoid low productivity and too many defective products;
- Changing the work positions for workers every week to avoid routine work and to ensure the adaption of workers in all positions while respecting the desires and abilities of some workers in the inability to work in some positions that require a lot of muscle effort or a lot of concentration;
- Solve problems related to transportation by purchasing buses for the unit;
- Imposing disciplinary penalties in the event of unjustified absenteeism and a reduction of 3000 DZD of the monthly wage;
- Establishing a requirement to employ only workers over the age of 25;

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- Contracting with private doctors and clinics to benefit from the necessary medical care at very satisfactory prices;
- Contracting with some nurseries to take care of the children's workers;
- A lottery was drawn up to take 05 people for Umrah during the month of Ramadan for who work more than 5 years in the company.

Second: With regard to communication, coordination and consultation: a several measures has taken by the company, most important of which are:

- Involving workers in setting up the monthly plan of production (a representative of each production division);
- Focusing on electronic messages and avoiding verbal communications between workers and officials and between workers, especially with the organization obtaining ISO 9000 and ISO 14000 certificates to ensure that the information reaches in the right time and to the right persons;
- Holding more work meetings between workers and officials to discuss working conditions and problems faced by workers in the unit;
- Put a book note for workers in the unit to write the objectives and obstacles that hinder the production process in the unit and other observations (quality of raw materials, molds, means of production, ... etc.).

Third: With regard to integrated training: the company has taken several measures, the most important of which are:

- Carrying out several internal and external training processes to address the shortage experienced by workers and to be able to reduce the percentage of defective products and avoid low productivity rates;
- Hiring 03 backup workers to compensate absentee workers or those who may leave the company,
- Training workers to work in various positions so that they can compensate absentee workers and avoid low productivity and the defective products;
- Put a system for the promotion and improvement of the workers' career;
- Changing work positions for workers so that workers can be trained to work on various positions, various machines and means of production.

Fourth: Regarding to the time management: Among the measures taken by the company with regard to time management are the following:

- Appointing two occupational safety and security workers to provide relief to the injured worker and avoid the production chain being interrupted by the injury of one worker;
- Put a Process timer for each process to avoid wasting time and taking each worker his responsibilities in the production chain;

- Diversifying the number of raw material suppliers with a significant increase in the safety stock (03 months of production) to ensure the availability of raw materials and at the right time.

Fifth: Regarding the implementation of the strategy: the company has taken several measures, the most important of which are:

- Involving workers' representatives in preparing the monthly production plan, setting goals and ensuring its feasibility;
- Doubling of control processes over the quality of raw materials and semi-finished products imported or produced;
- Diversifying the sources of obtaining the raw material to ensure its abundance and uninterrupted production process due to stock run out;
- Increasing the number of regular maintenance operations to avoid unnecessary interruptions in the production chain;
- Investment of a significant amount to acquire new molds and reduce the number of defective products;
- Bringing the Chinese engineers who installed the machines and production means in the unit for the first time to reset the machines and production means according to their normal capabilities and train workers working on them in general and maintenance workers in particular.

2.4. Calculating the indicators and hidden costs in the URF 02 unit after applying the GHRMP during the first semester of 2020: During this part, we will calculate the hidden costs indicators after applying the GHRMP. We will also calculate, the hidden costs resulting from that for the first semester of 2020 in the URF 02 unit, they are as follows:--

2.4.1. Measuring hidden cost indicators in the URF 02 unit for the first semester of 2020: They are shown in the following table:

	Absenteeism	turnover	works Accidents		Non-quality		Productivity gap
	Absenteeism rate	Turnover rate	Number of work accidents	lost Works days	Scrap products rate	Downgraded Product rate	Deviation rate
Jan	4,81%	3,53%	3	5	0,25%	0,82%	4,95%
Feb	5,27%	3,35%	4	8	0,26%	0,61%	3,57%
Mar	4,89%	3,78%	4	9	0,31%	0,81%	4,60%
April	3,02%	1,90%	2	6	0,22%	0,75%	3,13%
May	3,44%	2,02%	5	6	0,24%	1,02%	2,49%
June	3,58%	1,83%	4	7	0,23%	0,83%	3,71%

Table N° 06: URF 02 Hidden Cost Indicators for the first semester of 2020

Source: prepared by researchers, relying on IRIS documents and data

Through the table above, we note the decrease in hidden cost indicators during the first semester of 2020 compared to the first semester of 2019, we will explain through the following points:

First: With regard to the indicators of absenteeism and work turnover:

We note the decrease in absenteeism and work turnover rates during the first semester of 2020 compared with the expected rates of 05% and 02% respectively, to know a relative stability after that, this decrease is due to several factors, the most important of which are:

- The moral and material incentives provided by the company (increase in wages, improvement of the workers' career ...etc.);
- Updating the internal unit system and the disciplinary penalties system (ex: deduction of 3000 AD from the wage as a penalty for unjustified absence);
- An increase in the level of job satisfaction and a sense of responsibility among the workers. Especially with their participation in the development of production plans and bi-monthly meetings (meetings held on Thursday evening during the last hour of work), in which the workers participate and discuss all matters related to the production and obstacles facing them;
- The decrease in the work accidents rate and the number of lost workdays, especially with the tightening of safety and security measures;
- Changing work positions and the tasks assigned to the worker periodically played a motivating role for the most of workers;
- Improving relations between responsible and workers, especially after changing the production responsible, and the flexibility in dealing between workers and the Direct responsible;
- Solve the transportation problem for workers, especially in the night shift;
- The continuous training processes have created a kind of motivation and loyalty among the workers for the company (employability);
- A modification in the hierarchy of powers and responsibilities, the wage grid, as well as plans for promotion and career improvement.

Second: With regard to the work accidents indicator: We note the decrease in the number of work accidents during the first semester of 2020 compared to the first semester of 2019. But it remains unacceptable compared to the number decided by the company, which is 02 accidents per month and not exceeding 05 lost days for days, this decline is due to several factors, the most important of which are:

- Tightening the procedures related to professional safety and security rules, imposing penalties and wage deductions in case of violating them;
- The continuous training processes for workers on machines and means of production and working in various positions have helped workers well to adapt and control these machines and to identify the risks present at the level of all means of production and how to avoid them;
- The awareness processes carried out by the professional officials of the Safety and Security Department during their studies on each machine and the risks involved in working on it;
- Improving working conditions over time;
- Low absenteeism and turnover rates. Consequently, the decrease in the intensity of work, responsibilities and tasks assigned to the workers. This matter previously caused pressure on the workers and consequently work accidents to the worker and damages for the company.
- Resetting the machines, adjusting the production pace and adapting it according to the average capacity of the machines, especially with calculating the average time for each operation helped in the adaptation of workers to that pace and avoid a faster pace, so, avoiding more accidents;
- To change the work positions and tasks assigned to the worker periodically, to make the workers avoid the daily routine of working in the same position, which may cause work accidents on the one hand, and on the other hand, aware of all the positions and risks that each position entails;
- Obtaining new investments, a new means of production and molds have contributed significantly to reducing the number of work accidents;

Third: Regarding the indicators of quality and low productivity:

Through the table above, we note the decrease in the rate of partially defective products (downgraded) compared to the expected rate of 01%, and we also notice the decrease in the rate of totally defective products (scrap) compared to the expected rate of 0.25%. These two rates remain acceptable. For the low productivity indicator, we notice a decrease in the rate of deviation between the number of expected products and the number of real products compared to the rate of deviation recorded during the first half of 2019. but it remains unacceptable compared to the rate of deviation expected by the company by 02%, and this decrease is due to many of factors, the most important are:

- Re-Set the production pace by experts brought from China, and solve the problem of machines that were the cause of many defective products;
- Decrease in absenteeism and turnover rates, and consequently an increase in productivity and a reduce in defective products;

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- Required experience and skill of workers increased over time, and consequently, defective products decreased;
- job training processes in various positions have greatly contributed in increasing the workers’ skill to adapt with different means of production, thus reducing the rate of defective products and direct productivity gap;
- The moral and material incentives that the workers benefited from, especially in the case of achieving a productivity rate greater than expected;
- Improving communication, coordination and consultation processes between workers and the line official, contributed indirectly to the smoothness of the production process;
- The bi-monthly meetings held between workers and officials, in which they discuss, production methods, machines need maintenance, stocks and obstacles that may face the production process during the coming periods;
- Changing work positions periodically reduces psychological frustration resulting from dislike the routine of work and tasks assigned to the worker;
- Increasing the job satisfaction of the workers and a sense of responsibility, especially after the arrival of the new production line head;
- Tightening control over the quality of raw materials and semi-finished products produced or imported, which contributed significantly to the decrease in the defective rate of products and the stops of the assembly line;
- Acquisition of new investments and means of production contributed to the increase in the productivity rate and the decrease of defective products;
- Reduced number of work accidents and interruptions in the production line;
- The workers ’participation in preparing the monthly production plan, making the production plan more realistic and achievable, because they are well aware company’s productive capabilities and the pace of production.

2.4.2. Calculating hidden costs after applying the good practices of human resources management (the first semester of 2020) in the URF 02 unit: During this part, we will calculate the hidden costs of the URF 02 unit for the first semester of 2020; the following table shows the most findings.

Table 07: URF 02 Hidden Costs for the first semester of 2020

	Over Salaries	Over Time	Over Consumption	No Production	Total
Jan	42 846,72	256 582,88	2 396 627,44	3 706 239,39	6 402 296,43
Feb	31 776,50	362 230,05	3 088 379,70	4 174 267,12	7 656 653,37

Mar	53 868,57	396 826,40	2 429 215,11	3 317 691,12	6 197 601,20
April	45 959,97	405 103,58	2 081 117,12	4 043 120,83	6 575 301,50
May	68 918,50	331 948,75	2 484 388,41	3 415 516,31	6 300 771,97
June	58 216,20	313 346,65	2 376 599,19	3 604 913,81	6 353 075,85
Total	301 586,46	2 066 038,30	14 856 326,96	22 261 748,58	39 485 700,30

Source: prepared by researchers, relying on IRIS documents and data

Through the above table, we note the decrease in hidden costs during the first semester of 2020 compared to the first semester of 2019 in general by about 41%; we also note that over-salaries and overtime have not decreased as required. This is due to its negligence by the company due to its small impact, while the company’s interest has been focused on the variables that have a significant impact on the unit’s results, which are the over-consumption and non-production raw materials. The unit succeeded in reducing over-consumption by 38% and the non-production rate by 43%.

- This decrease is primarily due to the practices and procedures undertaken by the company and the human resources department to reduce the dysfunctions that the unit suffers from, which we will explain as follows:

- Improving working conditions, especially with the incentives provided by the company and solving problems related to medical care, nursery and children's problems, night transportation problems, etc.

- Improving the work’s organization, especially with the periodic rotation of workers to work in various positions, employing new workers in easy positions and ensuring their quick adaptation...etc.

- Improved coordination, communication and consultation processes, especially with the replacement of the production responsible, participation of workers in production plans, maintenance processes and methods;

- Improving internal and external training processes, especially bringing in Chinese engineers who installed machines for the first time in the unit to reset them and train workers to work and maintain them;

- Improving the time management process in the unit, especially with setting a timeline for each processes and diversifying the sources of the raw material to avoid interruption of the productive chain.

- Reducing the problems hindering the implementation of the strategy, such as increasing the number of periodic maintenance operations to avoid unnecessary interruptions of the production chain;

- The amount of investment spent on acquiring new machines, means of production and molds, contributed significantly in the reduction of defective products and the percentage of direct productivity gap;

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- Reduced absenteeism, turnover and work accidents rates, and thus lower hidden costs resulting from regulating them (over-salaries, overtime, Over-consumptions and no-production ...etc.
- Lower rate of defective products and direct productivity gap means lower cost of overtime, over-salaries and over-consumption of raw materials;

Conclusion: The hidden costs method aims to highlight some of the costs that are not identified in the company's information systems. These costs are a critical translation of the dysfunction that the company suffers from, and these dysfunctions arise through the permanent and continuous interaction between the company's structures and the behavior of its members. The dysfunctions are regulated through human activities (labor) or through consumption of goods and / or services,

Through this study, we tried to know the effect of Good human resource management practices in reducing hidden costs by calculating the indicators and components of hidden costs before and after the application of GHRMP in the URF 02 unit of IRIS. We reached a set of results that proved the validity of the study's hypotheses, as follows:

- Dysfunctions (working conditions, work organization...) are the main reason behind IRIS hidden costs, - Hidden costs are an expression of the quality of the company's performance and its high is evidence of weaknesses in the company's performance;
- The causes of dysfunctions are numerous (material and immaterial) and the human factor remains the most influential in the emergence of these dysfunctions, which confirms the validity of the second hypothesis.
- Motivating the human resource in the company is one of the most important factors helping to reduce hidden costs.
- Through the interviews conducted with workers and field observations, communication, coordination and consultation are the most prominent points that determine the success of the production process.
- The bi-monthly meetings that take place in the unit between workers and officials play a major role in solving the problems and dysfunctions that the company and individuals face alike;
- Job satisfaction is the most important factor in determining the long-term functioning and development of the company;
- The work of individuals in various positions contributes significantly to the formation, training and adaptation of workers, reducing boredom (repetitive routine work) and mitigating the effects of absenteeism, work turnover, work accidents, productivity gap and problems of lack of quality;

- For lower class workers, material incentives play a greater role in gaining their loyalty and increasing their motivation towards work, while moral incentives play a greater role in increasing the motivation of officials;
- Giving individuals a margin of independence at work, increases their productivity and motivation towards work;
- Acquiring new means of production and new molds allowed the company to think about developing modern products and sweeping new markets, unlike the previous one, where the main concern of the company was to compensate the productivity gap and fix defective products
- Good human resource management practices contribute to creating added value for IRIS by converting hidden costs into performance (reducing about 39% of hidden costs within one year), through effective use of material and human resources, and this confirms the validity of the third hypothesis;

Through the above and in the end, we can say that a large proportion of the hidden costs in the URF 02 unit in IRIS are due to the human factor and their reduction is through stimulating the latter, so we can say that the human resource may constitute a burden (threat) as well as a source of competitive advantage. (Opportunity) It all depends on how it is managed.

Références

1. Anamari, S. B. (2015). *Dysfunctionalities as source of hidden costs under life quality at work constraint.*, 04(02), 06-07.
2. Chef d'entreprise. (2015, 06 15), *Glossaire des couts cachés*, Article sur <https://www.chefdentreprise.com/Definitions-Glossaire/Cout-cache-239928.htm#>. Consulté le 23-11-2020.
3. Cristallini, V. (2013, 2 18). *Les coûts performances caches, mesure scientifique de la sante et de la vitalité d'une organisation et contribution a la validité des concepts de gestion*. Article sur Academia education: <http://intercostos.org/documentos/apellidos/Cristallini.pdf>. vu le 24-11-20,
4. MOREAU, J. J. (2012, Mars 05). Article en ligne. sur: http://www.jmn-moreau.com/wp-content/uploads/2010/10/doc_230407_105840.pdf .Consulté le 24-11-2020,
5. NOGUERA, F. (2002). *Management stratégique du temps de travail - Instrumentation et impact de l'aménagement - Réduction du temps de travail* (éd. 01). LYON, France: Flammarion.
6. SAVALL, H. (1986). Le gisement exploitable des coûts cachés, vers un nouveau contrôle de gestion. *Exchange review*(86), 08-09.

7. Savall & Zardet (1992). *Le nouveau contrôle de gestion : méthode des coûts-performances cachés*(éd. 01). Paris, France: Malesherbes accounting.
 8. Savall, H., & Zardet, V. (2015). *Maitriser les couts et les performances cachés* (éd. 6). Paris, France: Economica.
 9. Savall, H., & Zardet, V. (2003). *Maitriser les couts et les Performances cachés*(éd. 03). Paris, France: Economica.
10. مساحل. (2004). *دراسة التكاليف المعيارية ضمن نظم المعلومات المحاسبية*. مذكرة ماجستير : جامعة الجزائر،