

# Contributions of Socio-Economic Theory in Hidden Costs Accounting in Companies and Organizations

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## Abstract

The need to know the structure of visible and hidden costs incurred by an organization, and especially in times of crisis, is extremely important in providing conditions to achieve a competitive advantage. The general objective of this paper is to account for hidden costs through the measurement of paid time without any labor compensation to reveal the unknown performance of organizations, based on the socio-economic theory in the Port Company of Cabinda-EP, specifically in the operations department. Bibliographic and descriptive intervention research was used, as data collection techniques, structured and semi-structured interviews, participant observation, document analysis and the software SPSS for data analysis was used. The results of the eighty-nine (89) interviewed and observed reveal a reliability of 82.4% and the adjustment to the normality of the data distribution was normal. Thus, the average values obtained from the results of the structured interview confirm the alternative hypothesis ( $H_1$ ), since most of these values are higher than the score 2.4 as the critical average value. However, six (6) absenteeism disorders were identified as likely to occur with some frequency. This scenario allows counting AKZ 5843590.63 of hidden costs linked to absenteeism, thus representing the unknown economic performance of the studied company. Therefore, with the difficult economic and financial situation faced by national companies and the sector under study, the present research suggests methodologies aimed at recovering idle values related to hidden costs, through an understanding of the fight against dysfunctions that cause hidden costs and that favor the failure of companies and organizations.

## Keywords

Socio-Economic Theory, Accounting, Time, Hidden Costs and Unknown Economic Productivity

## 1. Introduction

The concern with the quality of the services provided as food for the productivity of organizations, as well as the adjustment to the needs of consumers, generates the concern to study with more precision the costs that involve the productive process of the organizations. However, all organizations and especially companies must have knowledge and the ability to measure all costs (visible and hidden) that occur and incur in normal activities, as these occur during the production of their products (goods and services), which obviously confers good quality of services concomitantly with increased productivity of workers and organizations.

The basic controversy lies in the fact that during this exploitation process, not only visible costs occur, but also “hidden” costs linked to absenteeism that must be accounted for and negatively influence the productivity of workers and the organization. For (Savall & Zardet, 2010), hidden costs are the result of a permanent and complex interaction between the structures of the organization/companies and the behaviors of workers (humans), as being those created through dysfunctions resulting from this interaction.

The need to know and quantify every type of cost that appears or that occurs in the production process of an organization is presented as a primordial indicator, for any organization that intends to function normally in the market where it is inserted. The cost is exactly the essence, that is, the starting point for the functioning of any organization. The organization will have to assume a certain cost to expect profit and then deduct the result. In the various criteria of its classification, it is pointed out here, that of “Regarding nature”, in which the costs are classified as visible and invisible (hidden, hidden); or even identified and unidentified.

The methods developed in cost accounting and management are limited in dimensioning the unidentified costs and priori valued (hidden), but which, are measured in the socio-economic theory. The application of socio-economic theory in organizations, in addition to sustaining the gap left by cost accounting, contributes to the diagnosis and accounting of hidden costs resulting from the interaction between the organization’s structures and the behavior of the organization’s employees.

In them, there are costs that derive from overloads (overpayments, overtime, and overconsumption), non-products (non-production and non-creation of strategic potential) that can be converted into indicators of absenteeism (presentism), work accidents, rotation of personnel, defects in product quality, deviations in direct productivity, idleness and litigation. The presence of dysfunctions qualified in these indicators in an organization/company has several consequences on the part of service users which, in addition to the poor quality of services as a final product, provide waiting lines that, in some way, can cause these users psychosocial illnesses and stress. The absence of cost measurement strategies in the Port Company of Cabinda-EP (EPC-EP) makes it easy to think that, until now, it

has provided deficient services/or to those expected, negatively affecting normal functioning, subsequently substantiated productivity in the bad life of its workers. As highlighted by Megliorini (2001), costs are the organization's reflections on attitudes, behaviors, structures and ways of operating, and while more structured it is, better results are found and while less information is available regarding the cost, the poorer results will be found.

In order to ally itself with the present, the concern for the EPC-EP should not be limited to the forms of accounting for the accounting facts, but to identify, measure and accumulate all the costs of the service provided, aiming to provide the necessary information for the decision-making, inventory assessment and results calculation, through a tight control of costs (visible and hidden) through the creation of conditions for the integral monitoring of the company's activity.

Taking into account the questions about the failure to calculate all costs incurred by companies and in particular by Port Company of Cabinda-EP during the production process through cost accounting, as it does not enshrine scientific theory for the accounting of hidden costs, we present as scientific questions: How can socio-economic theory in companies/organizations account for hidden costs through paid time?

Carrying out this research focuses main objective of this research is accounting for hidden costs through paid time without any labor compensation by applying socio-economic theory in companies and organizations.

In specific, with the aim of achieving the main objective, the activities to be carried out in the field are to establish the theoretical basis that sustains the socio-economic theory, characterize the services provided by the Port Company of Cabinda-EP, identify the malfunctions resulting from the service provided through the interaction between the structures and the behavior of workers during the period under analysis, count the time (hours) paid without any labor compensation, taking into account the related indicator, and accounting for hidden costs according to the time of the absenteeism indicator.

## 2. Materials and Methods

### 2.1. Materials

In order to achieve the expected functioning of companies and organizations, knowledge of visible and hidden costs is essential, as costs constitute information with a compass character in the functioning of organizations.

**Conceptual Framework:** Research systematically carried out at the Institut of Institut de Socio-Economique de Entreprises et de Organization (Socio-Economic Institute of Firm and Organizations "ISEOR"), at the Jean Moulin University 3-Lyón-France, by the authors Savall, Zardet, & Bonnet (2008), postulate the emergence of this approach in the early 1970s, first by Professor François Perroux and later by Professor Henri Savall, and then with Professor Veronique Zardet through the ISEOR as a research center which is based on the contradiction regarding the results of classical theories in a current and modern context,

taking as an example Taylor's theory of scientific work organization, with Fayol's theory of administration, sustaining that the main problem of the dichotomous nature of the two theories [Moreno et al. \(2020\)](#), take excessive account of the economic and social concept, and [Savall, Zardet, & Bonnet \(2008\)](#), contradict by saying that neither of the two theories has operational results, as they do not integrate the unofficial systems of workers in organizations and/or companies.

In the other prism of understanding, the authors [Savall, Zardet, & Bonnet \(2008\)](#) and [Savall & Zardet \(2010\)](#), refute the traditional thought that says that organizations function on the basis of the predominance of structures over the behavior of employees, the results of organizations are deterministic in that it is enough to change the structures to influence the company's results and/or that the behavior of employees is the main factor that explains the results obtained by a company and that the management practices of this phenomenon use techniques that are associated to moral principles and values.

However, they point out that none of these conceptions alone is enough to explain the results achieved by a company, if not that each and every company or organization works on the basis of a constant interaction of the two thoughts.

In fact, organizations are increasingly affected by the multiple challenges of change and suffer from the loss of human energy, social and financial resources. Through 1,000,000 hours of research-intervention in companies and organizations, ISEOR researchers discovered 3534 types of dysfunctions, that is, organizational pathologies that constitute performance hemorrhages that weaken vitality. The resulting resource waste measurement showed a significant level of hidden costs: €15,000 to €60,000 per person per year.

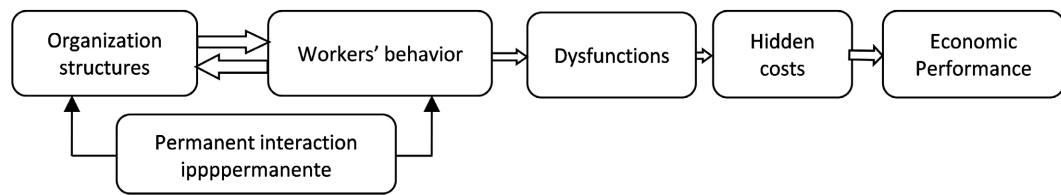
Based on the investigations carried out by the authors ([Savall & Zardet, 2008, 2010](#)), when stating that the structure variable overlaps the behavior variable, and that having a variation in the structures.

To support this thought, [Savall & Zardet \(2010\)](#) studied two identical structures that produce different results according to the staff, given the differentiation of working conditions and the levels of motivation that each of the structures provides to its workers.

Thus, the central hypothesis is based on the behavior to be presented by employees through unofficial power (informal relationships) in the face of organizational structures placed at their disposal for the functioning of organizations, as can be seen in [Figure 1](#).

However, this underlying hypothesis is understood in the sense that the behavior of the worker in the workplace depends on the structural conditions (physical, technological, organizational, demographic and mental) made available to them to carry out their tasks [Savall & Zardet \(2010\)](#).

Thus, the absence of better structural conditions provides dysfunctions that generate hidden costs that affect the company's economic performance, giving rise to unknown economic performance. The dysfunctions resulting from the interaction (structures and behaviors) give rise to hidden costs through their indicators (absenteeism, work accidents, staff rotation, product quality and direct



**Figure 1.** Central hypothesis of socio-economic theory. Source: Savall & Zardet (2010).

productivity) and are solved through the explanatory variables (operationalization of the strategy, organization of the work, time management, working conditions, integrated training and communication-coordination-agreement), as the domains for defining or solving the hidden costs found to safeguard the economic performance of organizations Savall & Zardet (2010).

Therefore, dysfunction is the result of workers' unofficial power according to the company's or organization's structures Savall, Zardet, & Bonnet (2008: p. 135), quoted by Moreno et al. (2020), representing, however, the difference between normal functioning and the real or effective functioning obtained by workers in the performance of their duties.

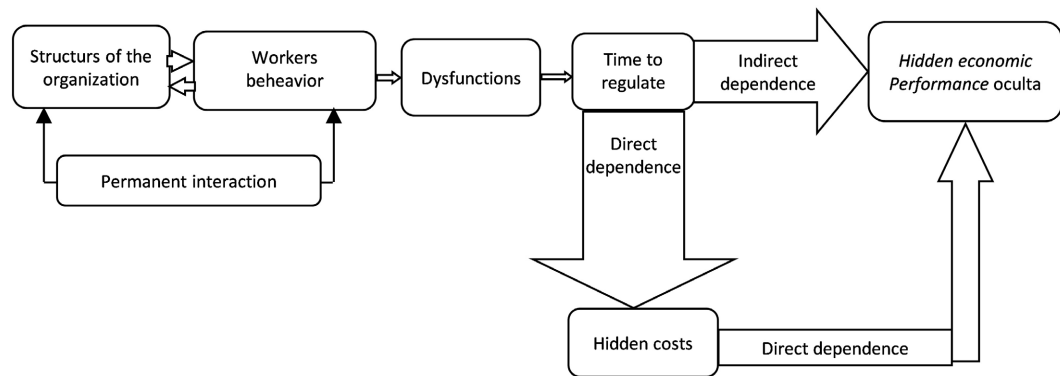
For Savall & Zardet (2010), hidden costs are the result of a permanent and complex interaction between the organization's structures and the behavior of workers, as those created through malfunctions resulting from this interaction (Figure 2).

In the opinion of Da Silva & Severiano Filho (2011), dysfunction by convention is the differential point between the expected functioning and the achieved functioning and which is at the origin of hidden costs. Dysfunctions generate costs, in general, they are hidden and affect the economic performance of the organization.

The central hypothesis emphasizes the relevance of the present research approaching the socio-economic theory as the main one, and in it, the theories are linked: behaviorist (men interact with structures, manifesting appropriate behaviors or not), cost accounting (because it is the traditional and dedicated to the treatment of visible costs), the theory of time management (every negative behavioral manifestation happens at a given moment and its correction requires time).

**Definition of the Investigation Hypothesis:** The characterization of the services provided for the identification of the dysfunctions that cause the costs, which makes it possible to improve the productivity of workers and the achievement of economic, financial and social results closer to those recommended, is presented as a fundamental condition in the socio-economic theory for the accounting of hidden costs in companies and organizations.

Therefore, the success of measuring hidden costs in socio-economic theory is based on the time variable, understood as a conditioning factor of its existence for its accounting. The behaviors displayed by the workers fertilize the dysfunctions that culminate in hidden costs. These behaviors are generated in a given period of time, appear at some point and last for a period of time for their



**Figure 2.** From the central hypothesis to the research hypothesis. Source: Adapted from Savall & Zardet (2010).

regularization justifying the dependence of the variable hidden costs on the variable time and the variable economic performance (performance) depending on the variable hidden costs. This condition highlights the relevance not only of time being a determining factor in the accounting of hidden costs, but also as a link between hidden costs and unknown economic performance (unknown performance).

In socio-economic theory, the process of accounting for hidden costs depends on the measurement of hidden paid time, contributing to the revelation of the unknown economic performance of companies and organizations. The permanent interaction between structures and workers causes behavior on the part of the worker to manifest itself in a formal or informal way. Informal behavior among workers can, of course, produce normal functioning, and it can also produce a malfunction that causes hidden costs.

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## 2.2. Methods

In any investigation, the requirement of a peculiar methodology Tamo (2012), capable of leading the researcher to reach the necessary and quality data, is fundamental in the originality of empirical knowledge.

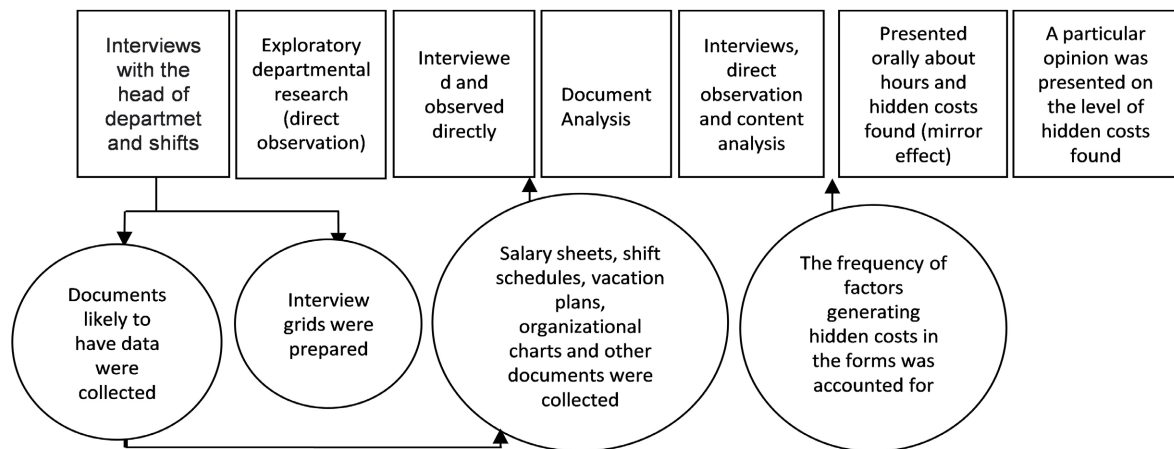
**Investigation Framework:** The research is limited to the management of organizations, referring to the socio-economic theory as the main one, and to theories of cost accounting, behaviorist approach and time management as secondary. The core lies in the permanent interaction between organizational structures and the behavior shown by the employees of the department under study, which fertilizes the hidden costs that prevent the achievement of the ex-

pected economic performance. Therefore, the accounting of visible costs was based on absorption costing, according to the thoughts of Caiado (2011), Tapa (2012) and Martins (2013). Concerning the hidden costs, it was the basis of the socio-economic method in the thinking defended by the authors (Savall, Zardet, & Bonnet, 2008; Savall & Zardet, 2010). The concern to verify the presence or not of dysfunctions that cause the hidden costs in the loading and unloading of goods from this Port Company of Cabinda-EP is of paramount importance, as it is the only one that supplies the products of the first need to the populations in the city of Cabinda. It is therefore a large company, with 417 workers and 89 workers in the operations department, referring to data for the month of 5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023.

**Research Feasibility:** The feasibility of the investigation was achieved first with the gathering of works by several authors, such as: books, newspapers, scientific articles and theses published in several magazines, the achievement of results in the field and the positive interpretation of the results achieved in the field of research through the SPSS statistical software. The software in the first instance was used to verify: reliability of the results achieved through Cronbach's Alpha and for the descriptive analysis (mean and standard deviation) of the data, with the Likert scale, in order to identify the concrete malfunctions that generate hidden costs. The average was used as a determining indicator in the identification of factors that generate hidden costs to be observed for the accounting of time and the calculation of hidden costs. The factors that had averages above 2.4 were the most significant and that negatively influence the service provided, through the first structured interview, according to Savall & Zardet (2010), the identification of dysfunctions is achieved essentially by the interview technique. By definition, correlation is any standardized relationship of the relationship between two variables and that therefore indicates the strength and direction of the linear relationship between two random variables André (2018). In the second instance, it was used to identify the correlation of the variables time and hidden costs, trying to find out the relationship between time and hidden costs, whether they have a direct or inverse relationship in the matter of accounting for hidden costs in companies and organizations.

**Research, Techniques and Instruments Built for Data Collection:** Following the thinking of Savall, Zardet, & Bonnet (2008), intervention research was applied as the main one and which allowed direct contact with the Port Company of Cabinda-EP, information/knowledge was co-produced between researcher and company workers. For data collection, the three simultaneous techniques recommended in the socio-economic methodology were used: interviews, participant observation and document analysis Savall & Zardet (2010) (Figure 3). Three instruments were constructed: semi-structured interview guide, interview grid for structured interviews and observation grid (cards). The semi-structured interview was carried out with the head department and the 3 heads of each shift, and with every workers whenever necessary during observation and





**Figure 3.** Sequence applied to data collection techniques. Source: Adapted from Savall & Zardet (2010).

accidentally by a group of two or three technicians with a duration of 50 minutes even 1 hour of time. The semi structured interviews served as a basis for describing the incidence of factors that generate hidden costs in the service provided on a day-to-day basis and for identifying the witness statements that certify and sometimes disconfirm what was observed about the presence or absence of dysfunctions and also which explained the pertinence of considering important and unimportant factors that generate hidden costs. Based on participant observation, it was possible to complete the process of characterization, identification and accounting of the frequency of occurrence of each factor generating hidden costs. Therefore, three (3) previously trained observation groups were created to collect data with the necessary quality and reliability, composed of four (4) elements, namely: the researcher, each shift leader (three supervisors) and two (2) technicians from the Department. Thus, we were provided with the salary sheets for the month of 5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023, shift schedules, functional organization chart, vacation plans, financial execution and the company's statute, which served as a basis for collecting data to identify dysfunctions as a way to hidden cost accounting.

The structured interview consisted of identifying factors with "important" results according to the Adaptive Likert Scale, for later observation of their frequency.

An observation grid (sheet) was designed to record the appearance frequency of each factor generating hidden costs on each day and on each worker assigned to the department, in 5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023. Therefore, each form corresponded to a worker, satisfying the 89 copies and was coded with the first letters of the first name and surname of the observed gride.

**Accounting Practices for the Frequency of Results:** It was possible to analyze and account for the frequency of dysfunctions, through the number of minutes, of hidden hours that each file contained, using the techniques of document analysis and analysis of interviews according to Savall & Zardet (2010), so that, if the exhaustion in the analysis of the information that each form pre-



sented, exhausting the analysis of all the information contained therein. Documentary analysis was fundamental in the analysis of the content they contained, enabling the calculation of unit hours in each form, depending on the frequency of each hidden cost generating factor, taking into account its indicator (absenteeism, staff turnover, accident work, quality defects, deviation in direct productivity, idleness and litigation). With the salary sheets, it was possible to extract the salary of the employees placed in the Operations Department, identify the employees who were in full possession of the disciplinary leave and the employees who earned overtime in the period under analysis; and with the statute it was possible to characterize the company, from its functioning to the knowledge of the procedures that regulate the operational activity of the company, fact completed with the functional organization chart of the same. With the interviews was possible to analyze and identify the real dysfunctions for a precision of the results that were presented to the responsible of the department (mirror effect); as emphasized (Savall & Zardet, 2010) that the mirror effect is an important lever for the progress of the innovation process; if none of the actors does so, the analysis of the interviews would not be recognized; the state and competence of the actors would be strongly questioned which would slow down the efficiency of the process. Thus, the hidden costs were accounted in part together with the heads of the department, additional interviews were organized with the heads to calculate with them the hidden costs resulting from the frequencies that the cards presented during the mirror effect phase. Therefore, after presenting the results of the investigation, the company launched strategies to improve conditions (such as approved carrier's plan, salary scale update of some categories, increase the value of the workers' basic food basket from AKZ 30000.00 to 40000.00).

### 3. Results and Discussion

Empirical results achieved in the field and their discussion based on behaviorist and time management theories were highlighted.

**Process Dysfunction Diagnosis:** The diagnosis of malfunctions and the later accounting of hidden costs requires, first, the characterization of the service provided by the company, in order to verify the occurrence or not of malfunctions resulting from the interaction between the physical and technological structures with its workers in order to observe the behavior shown by them during the course of their activities. The Port of Cabinda-EP, in addition to its structures, houses a human frame with different origins and interacts with the conditions at its disposal, which in fact leads to inertia when related to the working conditions available to it. At first, it is a phenomenon that would have a solution with the company's culture, but it is not exhausted, because the behavior shown by the employees overcomes the imposed culture and ends up causing dysfunctions that cause hidden costs. In fact, the workers fell in love with the activity, taking into account the established corporate culture, but they are limited by the lack of

some conditions that would give motivation to increase productivity. The intention is to closely observe the behavior of employees in the face of working conditions, measuring the way they organize work, the way they manage time, the training actions and the way they communicate-coordinate and agree on the guidelines issued by superiors to carry out the tasks.

**Service Characterization for Identifying Dysfunctions:** The components were related to the indicators, taking into account the nature of each component in line with the indicator and this, in turn, with the generating factor of the corresponding hidden cost.

According to the authors Savall & Zardet (2008) and Da Silva and Severiano Filho (2011), the hidden cost indicators are explained through generating factors (causes) that generate the hidden costs that, for the absenteeism indicator, can be classified in time spent by supervisors for releasing production and by workers in the reallocation of tasks, not production, possible defects in quality, higher wage costs (extra hours, additional staff), non-coverage of fixed structure costs, under productivity of replacement workers.

The process of identifying the factors that generate hidden costs that, in fact, exist and appear and/or occur in the services provided by the company, in the operations department, in total, there are twenty-three (23) factors that generate hidden costs, of which fifteen (15) were presented in the socio-economic theory according to the authors Savall & Zardet (2010), and the remaining eight (8) were explored in the company under study taking into account its peculiar reality allied also to the General Labor Law in force in Angola. Since, for the absenteeism indicator, twelve (12) were explored, three (3) explored in the company and the remaining nine (9) are mentioned in the socioeconomic theory.

The twelve (12) factors that generate hidden costs are likely to manifest themselves or not in the service provided by the company. For this purpose, the components were related to the indicator, taking into account the nature of each component in line with the indicator and this, in turn, with the generating factor of the hidden cost, as can be seen in **Table 1**.

These factors were interviewed to certify what actually happens. **Table 1** shows the factors that can generate hidden costs according to the company's internal reality, if the theoretical and practical knowledge of the activity, the procedures, and regulations established in the company and compliance with the general labor law in force in Angola are not observed.

The existence of hidden costs means a low level of productivity of workers and the company, which reflects negatively on the living standards of workers and their families, conditioning the growth and economic, financial and social development of employees.

However, this set of factors provides conditions for the elaboration of the capacity grid, for data collection through the structured interview. The factors that actually occur and generate hidden costs are those with an average value of up to 3 (2.5 to 3) according to the adapted Likert scale.

**Table 1.** Component and indicators regarding absenteeism disorders.

COMPONENTS	INDICATORS	FACTOR GERATOR
Salaries	Absenteeism	Compensation wages
		Salary from vacation allowances
		Thirteenth-month allowance wages
		Salaries paid to staff for time dedicated to correcting dysfunctions
		Number of hours (time) supplementary (extra)
		Number of hours (time) of additional staff
The non-production	Absenteeism	Number of hours (time) absent from the workplace (due to illness, death, food and resolution of personal problems)
		Number of hours (time) it takes to make a decision
		Number of hours (time) spent by the supervisor to deliberate on production and to delegate tasks
Not creating potential	Absenteeism	Uncovered amount of fixed installed costs
		Number of hours (time) lost by employees to sell services

Source: Own elaboration (5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023).

The interpretation of the results considers that the higher value of the average score, the greater degree of importance of the generating factor of the workers to think about monitoring the hidden time generated (delay, absence and regularization), but, who is remunerated without any labor consideration; that is, factors with values of 3 “important”, tend to indicate workers who do not have good theoretical and practical knowledge of the activity, procedures, regulation and general labor law, since they have difficulties in putting into practice the knowledge to the point of mastering the factors that can effectively cause hidden costs, and they have difficulties with these factors, hence they are important for monitoring (**Table 2**).

**Reliability Results and Data Descriptive Analysis:** The collected data have 82.4% of reliability results (Cronbach’s Alpha coefficient) confirming good internal data consistency. For the descriptive analysis, the factors that effectively manage dysfunctions with concomitant hidden costs were those with average values from 2.5 to 3. Of the twelve (12) factors, six (6) have average values above 2.4, they are the factors that can generate hidden costs, hence their frequencies were observed.

**Identified Dysfunctions Causers of Hidden Costs:** **Table 3** presents the factors that occur in the service provided, according to the structured interview

**Table 2.** Capacity grid.

#	GENERATING FACTOR	Code	Answers		
			1	2	3
1	indemnity time	Ti	10	22	57
2	Vacation allowance paid time	Tsf	9	29	51
3	The 13th-month subsidy paid time	Ts13	11	14	64
4	Time paid to dedicated to correcting faults by the person in charge	Tcfr	49	21	19
5	Time paid in overtime	Thex	8	20	61
6	Time paid to additional staff at the post	Tpa	50	27	12
7	Paid time of delay and absence for various reasons of illness, death, etc.	Taam	12	17	60
8	Time paid to the person in charge to deliberate the production and delegate tasks	Trd	10	32	47
9	Paid time of underactivity of substituting workers	Tss	50	21	18
10	Additional and paid time for consumption of inputs	Tci	19	19	51
11	Lost period paid time to sell products	Tvp	60	16	13
12	Additional and paid time on disciplinary leave	Tld	6	12	71

Source: Own elaboration (5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023).

and which served as the basis for the observation grid regarding their frequency of occurrence. The peculiar reality of each organizational activity is decisive in the typology of dysfunctions that may occur during a production process, and it was necessary to interview the department’s workers about the factors that generate hidden costs, enabling the observation of their frequency of occurrence on a day-to-day basis. However, after the interviews, six (6) dysfunctions were found that manifested themselves and that were observed in terms of their appearance frequency during the month of 5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023 (Table 4).

For participant observation, an individual observation form was designed for every 89 workers of the department. However, 62 workers are from the technical area of the department, 13 were in full disciplinary leave, 12 were from the administrative area and 2 were on disciplinary leave.

**Table 3.** Descriptive statistics.

	Ti	Tsf	Ts13	Tcfr	Thex	Tpa	Taam	Trd	Tss	Tci	Tvp	Tld	Trend of the means
N	Valid	89	89	89	89	89	89	89	89	89	89	89	
	Not valid	0	0	0	0	0	0	0	0	0	0	0	
Mean	2.9	2.57	2.73	2.08	2.65	2.18	2.64	2.72	2.17	2.12	2.01	2.42	2.63
Median	2	3	3	2	3	1	3	3	1	3	3	3	
St. Deviation	0.798	0.676	0.579	0.786	0.623	0.853	0.724	0.69	0.81	0.77	0.79	0.666	

Source: Own elaboration (5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023).

**Table 4.** Hidden cost generating factors found.

INDICATOR	GENERATING FACTOR
ABSENTEEISM	Time paid in overtime (extra)
	food and resolution of personal problems)
	Thirteenth-month allowance paid time
	Paid indemnity time
	Paid time away from work (due to illness, death, Vacation allowance paid time

Source: Own elaboration (5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023).

The six malfunctions are the generators of hidden costs, through delays, absences, non-compliance with procedures, non-compliance with the law and the theory and practice of the activities carried out.

Article 135 of the 1st section of the 7<sup>th</sup> chapter of (*Lei Geral do trabalho, 2015*) emphasizes that every worker has the right to vacation, the right to vacation allowance and the right to receive the Christmas allowance at the end of the year, according to line (b) of article 158, of the 1st section of chapter 8. The latter was not taken into account because its payment occurs in each month of December.

**Determination of Hidden Absenteeism Costs:** For its scope, observation grid was elaborated which consisted of the frequency observation regarding the occurrence of each malfunction found, through the detailed observation of the factors that generate hidden costs found in the observation grid that constituted the basis that allowed the elaboration of the individual file of each worker placed in the operations department of the Port Company of Cabinda-EP and that, during the thirty-one (29) days of 5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023 except 25<sup>th</sup> December 2022 and 1<sup>st</sup> January 2023 was observed from each dysfunction in each worker assigned to that department. The observation of the occurrence frequency or dysfunction occurrence that can cause the hidden costs in the studied Department, from technicians as well as the administrative ones linked to it, resulting in the synthesis frequency maps in the administration and in the technical area.

**Finding the Hidden Time in Dysfunctions:** The time to be verified and later accounted for corresponds to the time paid without any labor compensation on the part of the worker. Therefore, the number of hours of daily work is different between technical and administrative workers in the department, allowing the design of 2 different tables to later be 1, which gathered the summary of information regarding the frequency of dysfunctions.

3 observation groups were designed and trained by the researcher for direct observation; the first observed 17 operational technicians in addition to the 12 administrative technicians, the head of the shift observed 10, the operational technician observed 7 and the administrative technician observed 12 that are part of the department's administration, with the researcher's millimeter moni-

toring, observing the remaining 3 included in the observation groups.

The second observed 22, the head of that shift, operational technician 10 and administrative technician 12 with the supervision of the researcher.

And, the third observed 23; 14 for the shift manager, 9 for the operational technician and 12 for the administrative technician with the supervisor's company.

After the observation on the 29<sup>th</sup> day of January, the supervisor met with each group to review and receive the results (forms) in the hands of the shift leaders.

Technical workers, work 12 hours a day and 22 working days a month. Administrative staff work 8 hours a day, 22 working days a month, in accordance with the general labor law in force.

The total time observed in each generating factor was translated into units of minutes, hours and served as a basis for the determination of hidden costs.

The dysfunctions that generated hidden time can be seen in **Table 5**. The total number of hours lost in absenteeism through the holiday allowance, overtime and time of absence and delay due to illness, death, resolution of personal problems and time spent to eat, clearly shows the achievement of the recommended objective in relation to the estimated production volume in the department. This reality was fertilized by the lack of some motivation on the part of the workers, made possible by the lack of observance of the theoretical and practical knowledge of the activities carried out. The number of hidden hours verified reflects the deficiency of internal communication in the company and, consequently, the poor flow of information between those responsible, between technicians, between those responsible and between technicians in the department. This reality does not ignore the lack of specific training, aimed at providing professionals with the skills to fully respond to the specific obligations of each job.

**Determination of Production Cost:** To determine the hidden costs, it is necessary to know the entire structure of visible costs assumed by the company in the period under analysis. Their knowledge makes it possible to calculate the hourly contribution of the margin on variable costs as an essential element in accounting for hidden costs. Thus, the production cost and cost price are calculated,

**Table 5.** Synthesis map of the frequency of generating factors.

INDICATOR	DEPARTMENT OF OPERATIONS		
	GENERATING FACTOR	HOURS	DAYS
ABSENTEEISM	Vacation subsidy salary	1502	63
	Overtime	126	5
	Time of absence from the workplace due to illness, death, food and personal problems	118	5
	Time spent by the supervisor to deliberate the production	-	-

Source: Own elaboration (5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023).

based on the dictates of the absorption method offered by cost accounting referred to by [Caiado \(2011\)](#); [Tepa \(2012\)](#) and [Martins \(2013\)](#).

With the concern to determine the variable cost (CV) of production, for the calculation of the hourly contribution of the margin on the variable costs (CHMS/CV) of each employee, the cost of production of the company was determined without the hidden costs and the price cost of the total service provided in 5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023.

However, direct costs are shown as the direct labor costs of the 89 operational workers who work in the department, totaling AKZ 25524214.38, while indirect costs according to [Table 6](#) total AKZ 266214358.10, which makes the total cost of production valued at AKZ 291738572.48.

The unit cost of production was evaluated at AKZ 12356.57, which translates to the production cost of each service unit provided in the department studied. This cost serves as the basis for measuring unit profit given the unit sales price in operational terms.

Adding the distribution cost to the total production cost and because all production was commercialized, using the absorption method for cost analysis, the variable distribution cost was valued at AKZ 4973764.98; variable distribution cost and fixed distribution cost are included in the same amount. The sum of the distribution cost and the total cost of the part of production sold and because all production was sold translates to a cost price valued at AKZ 296712337.46 and with a unit cost price valued at AKZ 12567.23, having account AKZ 23,610 of cargo handled in that month.

The production cost analysis that was carried out in the department under study derives from the understanding that one must have in the application of socio-economic analysis for the purpose of accounting for hidden costs that pass before accounting for paid time without any labor compensation. Hence, it was not necessary to think about the concept of analysis centers for sharing indirect costs, because the study took place in one of the main centers of the company.

Therefore, the process of analysis of production costs and cost price followed the precepts of calculating the cost in a direct way; Indirect costs were directly allocated to production, a condition made possible by the particularity of the company, since it simply provides a single service, which is the loading and unloading of containers and various goods.

**Calculation of the Margin Hourly Contribution on Hidden Costs:** The hourly contribution of the margin on variable costs (CHMSCV) for the period was determined as a fundamental element for the accounting of hidden costs.

According to [Table 7](#), with a business figure (CN) of AKZ 437490547.00 and with variable costs (CV) of AKZ 191858930.00, the margin over variable costs (MS/CV) is AKZ 245631.617.00 which is the difference between the business figure (CN) and the variable costs (CV) assumed during the period. The variable costs mentioned are the difference between the total cost of production (TCP) for the period and the cost of indirect labor (CMOI). All costs minus the cost of indirect labor (salary of departmental administrators) are variable costs, that is,



**Table 6.** Production cost map.

DESCRIPTION OF COSTS	LOADING AND UNLOADING OF CONTAINERS AND MISCELLANEOUS MERCHANDISE /1678/21.932	
	QUANTITIES	COSTS
<b>Direct Charges</b>		
DIRECT LABOR COST	89	25524214.38
<b>SUBTOTAL OF DIRECT CHARGES</b>	<b>89</b>	<b>25524214.38</b>
<b>Indirect Charges</b>		
COST OF INDIRECT LABOR	328	99879642.48
MAINTENANCE COST	-	6444389.00
AMORTIZATION FOR THE YEAR	-	104322897.31
TAXES	-	31897371.96
ENERGY AND WATER	-	1213890.79
COMMUNICATION	-	1734200.00
HYGIENE, CLEANING AND SAFETY	-	17478639.88
COMPUTER SUPPLIES	-	600398.87
OTHER TERTIARY SERVICES SUPPLIE	-	10388.69
ADMINISTRATIVE CHARGES	-	29690789.46
SPONSORS AND DONATIONS	-	2832391.99
BANK CHARGES	-	1230945.83
OTHER CHARGES	-	30476961.95
<b>SUBTOTAL OF INDIRECT CHARGES</b>	<b>328</b>	<b>266214358.10</b>
<b>TOTAL PRODUCTION COST</b>	<b>417</b>	<b>291738572.48</b>
<b>PRODUCTION UNIT COST</b>	<b>23,610</b>	<b>12356.57</b>
DISTRIBUTION COST	-	4973764.98
<b>COST PRICE (PC)</b>	-	<b>298712337.46</b>
<b>UNIT PRICE OF COST</b>		<b>12567.23</b>

Source: Own elaboration (5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023).

all costs that vary taking into account the level of variation in production, regardless of whether said cost is understood to be indirect or direct.

As for direct costs, they are direct labor costs (CMOD), and indirect operational costs, understood to be variable, taking into account production during the exploration process.

According to socio-economic theory, the inclusion of other indirect costs in the variable cost results in the fact that they are closer to production and vary in relation to the level of variation in production, although not proportionally.

The hourly contribution of the margin on variable costs is the quotient between the margin on variable costs (MS/CV) and the product resulting from the

**Table 7.** Hourly contribution of the margin on variable costs.

DESCRIPTION OF COSTS	LOADING AND UNLOADING OF CONTAINERS AND MISCELLANEOUS MERCHANDISE/1678/21.932	
	QUANTITIES	COSTS
<b>Direct Charges</b>		
DIRECT LABOR COST	89	25524214.38
<b>SUBTOTAL OF DIRECT CHARGES</b>	<b>89</b>	<b>25524214.38</b>
<b>Indirect Charges</b>		
COST OF INDIRECT LABOR	328	99879642.48
MAINTENANCE COST	-	6444389.00
AMORTIZATION FOR THE YEAR	-	104322897.31
TAXES	-	31897371.96
ENERGY AND WATER	-	1213890.79
COMMUNICATION	-	1734200.00
HYGIENE, CLEANING AND SAFETY	-	17478639.88
COMPUTER SUPPLIES	-	600398.87
OTHER TERTIARY SERVICES SUPPLIE	-	10388.69
ADMINISTRATIVE CHARGES	-	29690789.46
SPONSORS AND DONATIONS	-	2832391.99
BANK CHARGES	-	1230945.83
OTHER CHARGES	-	30476961.95
<b>SUBTOTAL OF INDIRECT CHARGES</b>	<b>328</b>	<b>266,214,358.10</b>
<b>TOTAL PRODUCTION COST</b>	<b>417</b>	<b>291738572.48</b>
<b>PRODUCTION UNIT COST</b>	<b>23,610</b>	<b>12356.57</b>
DISTRIBUTION COST	-	4973764.98
<b>COST PRICE (PC)</b>	<b>-</b>	<b>298712337.46</b>
<b>UNIT PRICE OF COST</b>		<b>12567.23</b>

Source: Own elaboration (5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023).

total number of workers that make up the company, the number of hours worked during the day and the number of working days worked during the month under review.

However, the hourly contribution of the margin on variable costs was estimated at AKZ 3346.84, the cost of each hour worked by each worker through variable costs, that is, the contribution per hour of each worker taking into account the assumed variable costs in the said department. Therefore, variable costs are preferred because they are the most significant and/or most representative portion of the total cost of producing the products, which is AKZ 291738572.48, that is, AKZ 291738572.48 is greater than AKZ 99879642.48 as exclusive indirect

costs incurred during the period in question.

**Accounting for Hidden Absenteeism Costs in the Period:** We are in a position to account for hidden costs, since the hourly contribution of the margin on variable costs is known.

The hidden cost is therefore the product of the hourly contribution of the margin on variable costs and the total number of hours not worked mentioned in each hidden cost absenteeism dysfunction. It can be seen that the total hidden cost of Absenteeism taking into account the observed dysfunctions is AKZ 5843590.63. These hidden costs of absenteeism constitute the values that the company lost in January 2018, translated into the total unworked time paid in favor of the workers, that is, the unknown economic performance (lost performance) by the company in that department. In short, the company lost AKZ 5843590.63, as a result of paying its employees money without a labor consideration (Table 8).

The hidden costs found resulted from the interaction between the structures of the department and the informal behavior manifested among the workers of the department.

The level of hidden costs of absenteeism found can be mitigated by putting into practice some strategy, if it exists, and if it does not exist, it should be built focused on monitoring the observed dysfunctions, through integrated training, identifying the needs of the positions to give more skills to workers substantiated in know-know (skills in theoretical knowledge); knowing how to be and being (competences in attitudes and virtues in knowing how to deal with day-to-day problems); know-how to listen (ability and humility to hear what one does not expect to hear) and know-how (technique and skills of doing tasks well in practice).

The worker receives scientific theoretical knowledge, attitudes and skills that professionalize him to stay in the company, planning and organizing his tasks, managing his time better and carrying out his activities in a timely manner.

By doing so, workers will avoid wasting time, clutter, procrastination, lengthy conversations, unnecessary visits to colleagues, phone calls, unproductive meetings

**Table 8.** Hidden cost accounting map.

INDICATORS	GENERATING FACTORS	CHMS/CV	HOURS	HIDDEN COST
	Vacation subsidy salary	3346.84	1502	5026960.55
	Overtime	3346.84	126	421702.42
<b>ABSENTEEISM</b>	Time of absence from the workplace due to illness, death, food and personal problems	3346.84	118	394927.66
	Time spent by the supervisor to deliberate the production	3346.84	-	-
<b>TOTAL</b>		-	<b>1746.00</b>	<b>5843590.63</b>

Source: Own elaboration (5<sup>th</sup> December 2022 to 5<sup>th</sup> January 2023).

and being on social media instead of work.

On the part of those responsible, it is necessary to select the important activities and consider them as non-urgent through advance planning, carrying them out with zeal and with all possible calm, condition for achieving perfection. By doing so, it will be operating under the guidance of the time management model, with activities appearing in the second quadrant of the time management model by (Coview, 2007), making it possible to prevent problems in the management of departmental activities, identifying opportunities for new activities and carrying out tasks with zeal, enabling the innovative spirit of technicians through obedience to planning as a departmental culture “nothing can be done without planning, nothing can be done that has not been planned”. If actually worked, the lost hours calculated above would boost the company’s productivity and results to the extent that part of the hidden costs of verified absenteeism could be recovered.

#### 4. Conclusion

With the difficult economic and financial situation faced by national companies and the sector studied, this research suggests methodologies aimed at recovering idle values related to hidden costs, through an understanding of the fight against dysfunctions that cause hidden costs and that favor the failure of companies and organizations; the Port Company of Cabinda-EP is unaware of the existence of dysfunctions in the service provided and causes hidden costs; the Company is inviting with the socio-economic theory for providing a more than convincing strategy in the characterization of services for the identification of dysfunctions and later the accounting of hidden costs; the Company must continue to improve its working conditions as a whole in order to maximize the motivation levels of the workers, consequently improving their behavior; the total number of hours of absence, of delay in the workplace related to absenteeism, is 1746 hours paid without labor compensation by the workers. Due to lack of theoretical and practical knowledge of the tasks performed, non-compliance with the statute, the internal regulations and the general labor law in force in Angola, they cover the hidden costs in absenteeism in the amount of AKZ 5843590.63; it is a cost that indicates low productivity, which negatively affects results as well as visible economic performance, supporting the hidden performance; the general objective was achieved, as the hidden costs were accounted for in accordance with the precepts of socio-economic theory, through the measurement of paid time without any labor compensation, which contributes to the revelation of the company’s performance and/or unknown economic productivity.

#### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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