



# RELEASING THE UNTAPPED POTENTIAL OF ENTERPRISES THROUGH SOCIO-ECONOMIC MANAGEMENT

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## PART II

# HOW THE SEAM INTERVENTION RESULTS IN RELEASING HIDDEN POTENTIAL OF COMPANIES AND ORGANIZATIONS THROUGH TRAINING IN NEW MANAGERIAL SKILLS

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# 5 HIDDEN COSTS AND HIDDEN PERFORMANCE

## 5.1 Definitions and examples

The aim of this chapter is to present the concepts of hidden costs and hidden performance, demonstrating that these are high in any kind of enterprise. We will illustrate the hidden costs and performance and explain how to pinpoint these phenomena and control them.

### 5.1.1 Hidden costs and hidden performance considered as an inseparable duo

Figure 3.1 has shown that organizational performance can always be upgraded because there is always a difference between what the actors (employees, managers, customers, shareholders) expect and what actually occurs. Hidden costs reveal the exercise of the informal power of employees through dysfunctional behaviour. There are six dysfunctions: working conditions, work organization, communication-coordination-cooperation, time management, integrated training and strategic implementation. These dysfunctions result in costs which are not always visible, which means that:

- There is no specific heading to record the cost in the accounting system of the enterprise (e.g. a cost linked to client dissatisfaction).
- There is a specific account to record the cost but it is not assessed. For example, there is an account for absenteeism but the complete cost of absenteeism is not assessed.
- The cost is assessed but no action is taken to reduce this cost e.g. some enterprises try to estimate the cost of nonquality but they do not try to reduce this cost through concrete actions.

Consequently, hidden costs are not identified, quantified or controlled by classical information systems such as budget, general or cost accounting. Hidden costs are distinct from the visible costs which fall under specific headings for accounting purposes, such as labour costs or raw material expenditures. Thus, hidden costs cannot be measured or controlled with classical managerial tools.

Hidden costs are high in all organizations even in the better performing ones ; they often amount to the payroll costs of the enterprise. The aim of estimating hidden costs is not to judge the enterprise's performance but to help it to upgrade its management and its potential through a learning process. One major difference between a long-term performing enterprise and a short-term performing one is that the latter does not control and prevent its hidden costs.

***Hidden costs fall into two categories:***

- They are sometimes incorporated in visible cost accounts, but are then diluted among various operating expenses and hang heavily on the debit side of the income statement. This is so, for instance, in the case of penalties for late delivery which appear as « contingencies ».
- They may be left unrecorded in visible cost accounts. They are then considered as lost earnings assessed in terms of destruction of value added. This type of cost has a negative effect on the credit side of the income statement.

Hidden performance can in turn be considered either as the reduction of hidden costs or as the creation of potential gains which have not been measured. The usual indicators do not take hidden performance into account, because they focus on immediate results. This is detrimental to a balancing long-term and short-term management. Chapter 3 has shown that there is a trade-off between immediate results and the creation of potential gains. The SEAM puts an enterprise on a development path where the reduction of hidden costs and the identification of hidden performance are critical.

**5.1.2 Examples of hidden costs**

A fishing company attempted to protect its market share by reducing the price and the quality of the products sold (see figure 5.1). This was based mainly on the reduction of supply costs which meant that the company bought poor quality fish (see figure 5.1 period A). This resulted in hidden costs because in the following year some clients stopped buying from this company. To address this, managers developed a new strategy based on the development of quality (e.g. absence of germs) with a high level of health safety. This resulted in a conversion of hidden costs into value-added due to an increase in client confidence, which is not visible in the accounting system and which can be considered as hidden performance (see figure 5.1 period B).



Figure 5.1: Hidden costs and hidden performance in a fishing company

	PERIOD A	PERIOD B
VISIBLE COSTS AND PERFORMANCE	Cut in visible costs due to a reduction in supply costs: + 500,000 euros	Increase in visible performance due to increase in quality: - 1,000,000 euros
HIDDEN COSTS	Increase in hidden costs due to customer dissatisfaction: - 4,000,000 euros	Cut in hidden costs due to an increase in customer loyalty: + 5,000,000 euros
OVERALL PERFORMANCE	Reduction of profit margin: - 3,500,000 euros	Increase in profit margin: + 4,000,000 euros

This example illustrates that cutting visible costs can result in higher hidden costs and a decrease in the profit margin. To assess hidden costs, ISEOR has developed a model which links the dysfunctions to several indicators and components as illustrated in figures 5.2.a and 5.2.b. This grid was designed to represent the hidden costs, the dysfunctions and the financial impact of the dysfunctions. Appendix 5 presents examples of assessment of the five main indicators of hidden costs.



Figure 5.2a: Dysfunctions and hidden costs

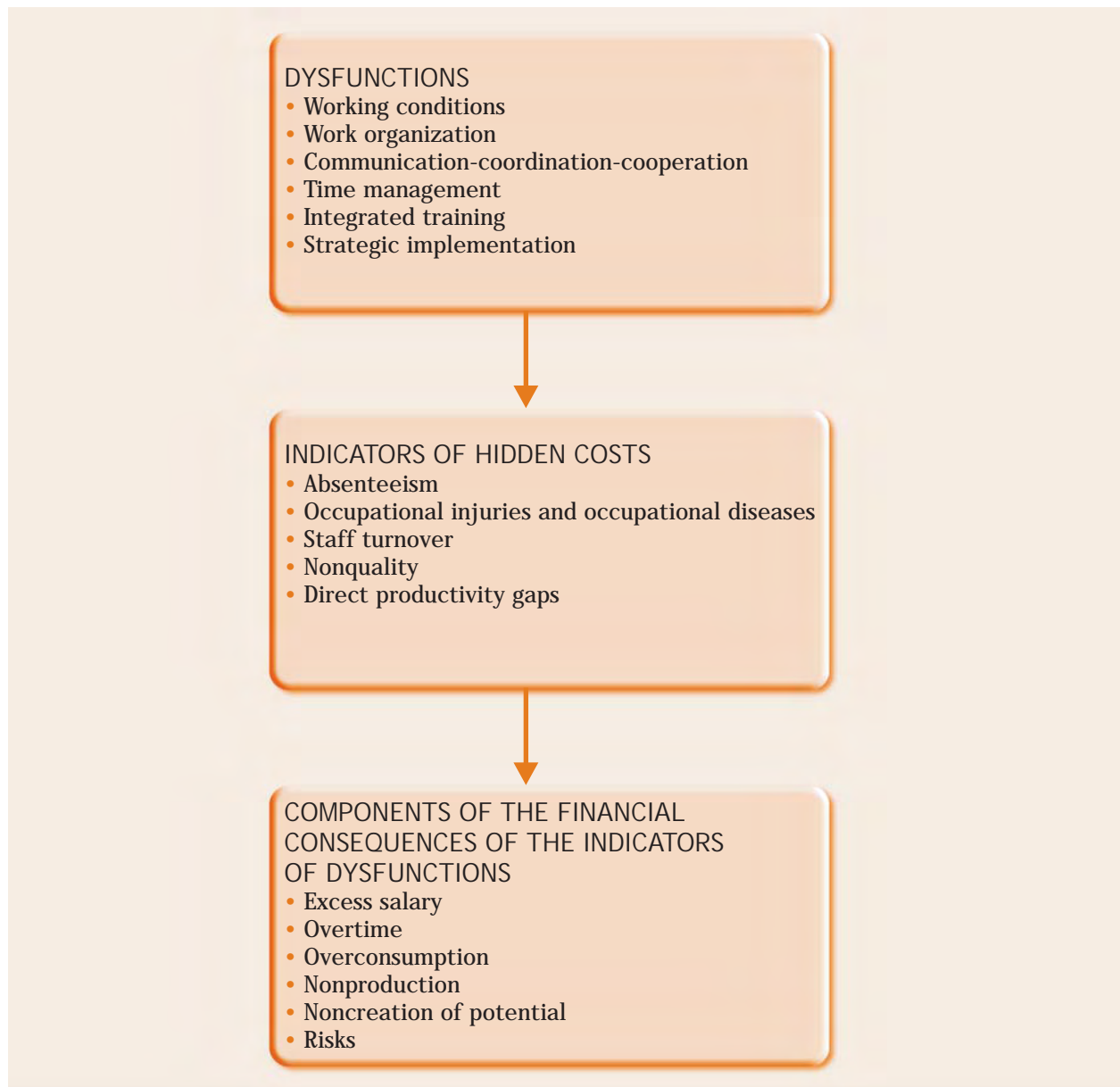
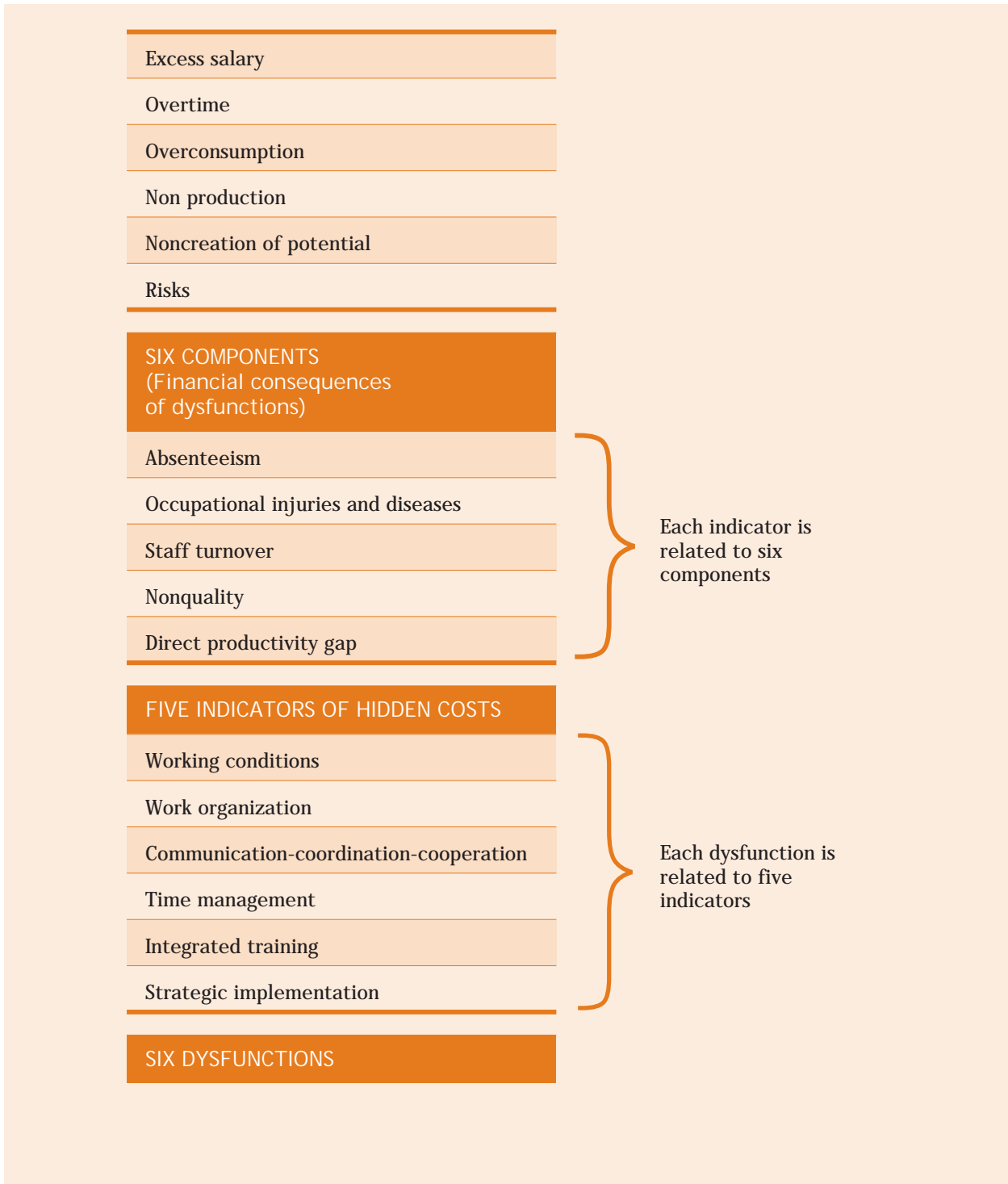




Figure 5.2.b: Link between the dysfunction indicators and the components of financial consequences





## 5.2 How to calculate hidden costs

### 5.2.1 Hidden costs may be calculated in any kind of enterprise

The following examples illustrate dysfunction costs in different regions of the world. They represent a sample of ISEOR database which shows that there are various kinds of dysfunctions and hidden costs, but that all types of organization are affected.

#### **Example of a fruit juice company (see figure 5.3)**

In a fruit juice company, production was frequently disrupted because of delays in the supply chain of fruit due to vehicle breakdown. The **direct productivity gaps** resulting from this disruption was analysed as a nonproduction. Due to the breakdown of delivery trucks, production stopped for an average of two days per month. A total of 2.640 hours (8 hours x 2 days x 15 employees x 11 months) were lost one year, a cost equivalent to 11 percent of the payroll. This example illustrates that hidden costs may have an external cause (breakdown), but they are usually worsened by internal factors (no brick-up truck in this case).

Figure 5.3: Hidden costs analysis in a fruit juice company

Dysfunction cost observed	Frequency	Reasons for the dysfunction	Components of the financial consequences
Production stoppage ( <i>nonproduction</i> )	Two days per month	The fruit was picked too late resulting in stock shortage ( <i>time management</i> ) Low quality of fruit due to the supplier ( <i>strategic implementation</i> ) Breakdown of the delivery trucks due to lack of preventive maintenance ( <i>work organization</i> )	Loss of production for two days per month, which adds up to : 2 days x 8 hours per working day x 15 employees x 11 months = 2,640 hours which represent a cost equivalent to 11 percent of payroll ( <i>nonproduction</i> )





**Example of a maintenance company (see figure 5.4.)**

In a maintenance company, supervisors spent most of their time on jobs which should have been done by less qualified staff. This resulted in excess salary (the differential between the wages of supervisors and those of less qualified staff). The supervisors thought they were creating a substantial amount of value added when they worked 12 hours a day, but they were not aware of the costs linked to shifts in functions (the cost was equivalent to 11 percent of the payroll). The value added to the company depends on the relevance of the work, not on the time spent working. This example reveals the need to link strategy to the high value added activities which should be performed by managers and supervisors.

Figure 5.4: Hidden costs analysis in a maintenance company

Dysfunction cost observed	Frequency	Reasons for the dysfunction	Components of the financial consequences
The supervisors spent most of their time on jobs which should be done by less qualified staff <i>(excess salary)</i>	70 percent of their time	Lack of staff training <i>(integrated training)</i>  Lack of scheduled activities <i>(time management)</i>	excess salary equivalent to 11 percent of the payroll <i>(excess salary)</i>  Non-creation of potential gains : there are delays in improving the equipment, which in turn affects future turnover <i>(noncreation of potential)</i>

**Example of a furniture company (see figure 5.5)**

In a furniture company, 30 percent of the managers' time was spent on dealing with absenteeism problems. The **high rate of absenteeism** (12 percent) was due to the lack of empowerment of the personnel and to an inappropriate pay and rewards system. Absenteeism resulted in delivery delays and disruption to the organization. This led to a loss of production equivalent to 24 percent of capacity, resulting in a financial loss equivalent to 32 percent of the payroll.

Figure 5.5: Hidden costs analysis in a furniture company

Dysfunction cost observed	Frequency	Reasons for the dysfunction	Components of the financial consequences
High rate of absenteeism resulting in delivery delays and disruption to the organisation ( <i>absenteeism</i> )	Absenteeism rate of 12 percent	Health problems ( <i>working conditions</i> ) Inappropriate pay and rewards system ( <i>strategic implementation</i> )	30 percent of management time was spent on dealing with absenteeism problems (overtime) Loss of production assessed at 24 percent of capacity, resulting in a cost equivalent to 32 percent of the payroll ( <i>nonproduction</i> )



**Example of a chemical company (see figure 5.6)**

In a chemical company, **delays in launching a new product** affected enterprise performance. On average, it took two years to finalize a product while competitors only needed one. This was because the company did not invest enough on updating equipment and training employees. Moreover, the lack of cooperation among the different departments, the fact that the strategic objectives were not clearly defined and the reluctance to change increased the risk of losing customers. Consequently, the destruction of value-added on sales (for a one-year period) was calculated at 64 percent of the payroll. This example illustrates that cutting visible costs is sometimes useless when the result is a failure to create value.

Figure 5.6: Hidden costs analysis in a chemical company

Dysfunction cost observed	Frequency	Reasons for the dysfunction	Components of the financial consequences
Delays in launching a new product ( <i>nonquality</i> )	On average, it took 2 years to finalize a new product while competitors took only one year	Lack of cooperation between the R&D, marketing, and production departments ( <i>communication-coordination-cooperation</i> )	Loss of margin on sales during one year equivalent to 64 percent of the payroll ( <i>nonproduction</i> )
		Reluctance to change ( <i>strategic implementation</i> )	Risk of a competitor cornering the market, which would result in loss of customers ( <i>risks</i> )
		Strategic objectives did not clearly show priorities ( <i>strategic implementation</i> )	

**Example of an electronic components company (see figure 5.7)**

In an electronic components firm which had relocated some of its functions to another country, **non-productive tasks** accounted for 25 percent of the activities. As the company suffered from overcapacity but was reluctant to downsize, the manager tried to occupy employees with low value added tasks. It would have been better to create high value added tasks such as retraining courses, which would contribute to the company's economic recovery in the future through the creation of new activities. On the contrary, employees were discouraged as they realized that the tasks assigned were useless. The cost of the non-productive tasks was estimated at 35 percent of the pay-roll.

Figure 5.7: Hidden costs analysis in an electronic components company

Dysfunction cost observed	Frequency	Reasons for the dysfunction	Components of the financial consequences
The company had relocated some of its high value added tasks to another country, leaving only low value added tasks to be performed in the original location <i>(direct productivity gaps)</i>	25 percent of the activity was affected	New assignments for employees were not ensured <i>(work organization)</i>  Lack of retraining <i>(integrated training)</i>	Non-production representing 35 percent of the pay roll <i>(non production)</i>  Risk to maintain low value added tasks <i>(risks)</i>



### 5.2.2 The five main indicators of hidden costs

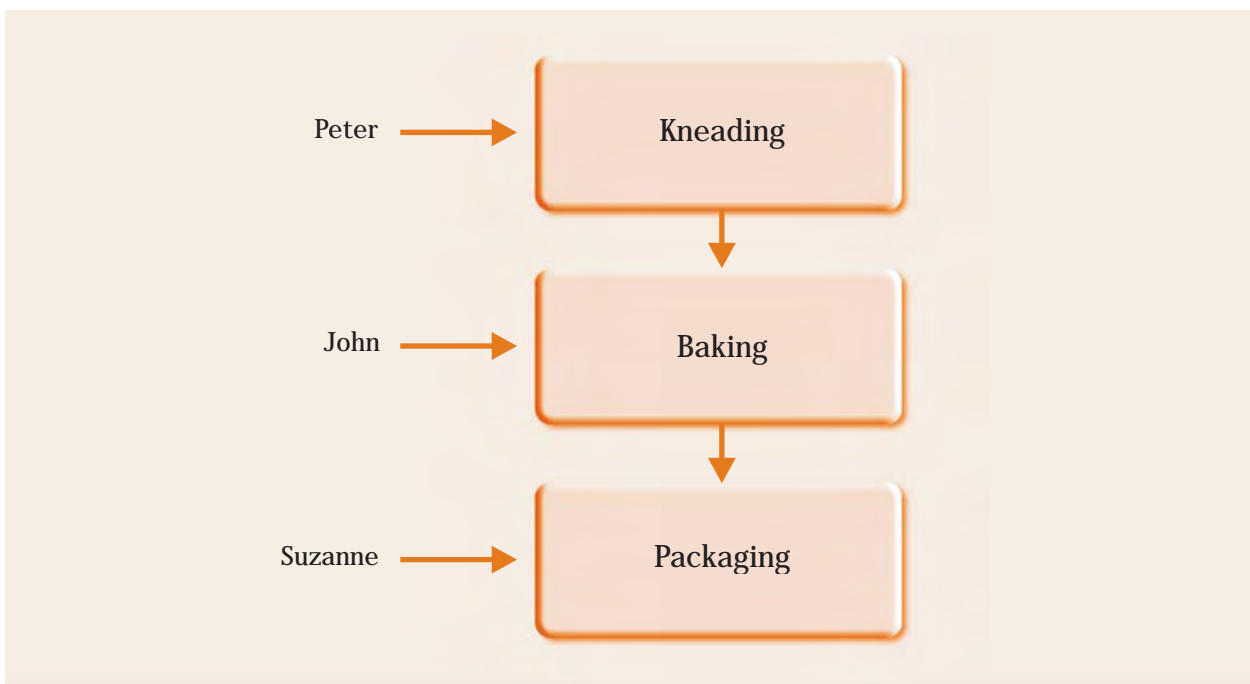
Hidden costs are identified through five indicators: absenteeism, occupational injuries and diseases, staff turnover, nonquality and direct productivity gaps.

#### **Absenteeism** (see figures 5.8 and 5.9)

**Absenteeism in a bakery:** the cost preventing absenteeism would have been much lower than the cost of accepting it. The following example shows how to estimate the hidden costs linked to absenteeism.

The production line was divided into three different operations. First the dough was kneaded, then it was baked and the product was finally packaged. This process required three different employees as shown in figure 5.8.

Figure 5.8: Production process in a bakery



After an argument with his supervisor, Peter decided to take sick leave for a week. In his absence, John and Suzanne were asked to perform Peter's work for which they were not trained. Figure 5.9 gives a financial evaluation of the result of absenteeism. In this case, the cost was equivalent to 4 months of Peter's salary.



Figure 5.9: Evaluation of the cost of absenteeism in a bakery

Organizational impact	Components of the financial consequences
Line start-up delayed	Nonproduction
Time spent by management reorganizing the line	Overtime
Bonus given to Suzanne and John	Excess salary
Inappropriate use of ovens	Overconsumption
Line production below normal	Nonproduction
Risk of losing customers	Noncreation of potential



**Occupational injuries (see figure 5.10)**

In a building company, the manager believed that the costs of health care and compensation due to industrial injuries were supported mainly by the state. In fact, an in-depth investigation has demonstrated that the hidden costs were much higher than the visible costs of an accident prevention programme. The costs linked to industrial injuries consisted of the cost of production disruption and the company's contribution to the National Health Service. The economic impact of industrial injuries on this building company can be assessed as shown in figure 5.10.

Figure 5.10: Evaluation of the cost of occupational injuries in a building company

Dysfunction cost observed	Frequency	Reasons for the dysfunction	Components of the financial consequences
High rate of sick leave due to occupational injuries	15 times a year	Safety rules are not applied or non-existent <i>(work organization)</i>	Sick leave due to accidents disrupts the organization of the construction site and causes delays. The cost is equivalent to 14 percent of the payroll <i>(nonproduction)</i>
Serious and even fatal accident <i>(occupational injuries)</i>	3 times a year	Lack of safety equipment (ropes, hard hats, gloves) <i>(working conditions)</i>	Payment of compensation to incapacitated workers, in addition to social costs involved <i>(noncreation of potential)</i>



### **Staff turnover in a metal casting company (see figure 5.11)**

Because of a temporary slump, this metal casting company had laid off highly skilled employees. When demand recovered, the company suffered from a loss of skills: the hidden costs stemmed from a short-sighted human resource policy. Staff turnover can be seen as a dysfunction as soon as it results in disturbances to the company. Hidden costs linked to staff turnover depend on the level of turnover and on the measures implemented to address this turnover (in other words, hidden costs are influenced by the recruitment policy, the integration of newcomers and so on). The following figure illustrates the effects of downsizing and its impact on the performance of the metal casting company in the face of high staff turnover.

**Figure 5.11: Evaluation of the cost of staff turnover in a metal casting company**

Dysfunction cost observed	Frequency	Reasons for the dysfunction	Components of the financial consequences
High turnover resulted in loss of skills <i>(staff turnover)</i>	Up to 20 percent loss on certain activities	Due to loss of skills, the company could not function properly in respect of the sophisticated products <i>(integrated training)</i>	Loss of 8 percent of turnover resulting in a cost equivalent to 15 percent of the payroll <i>(nonproduction)</i>  Time wasted due to disruption in the organization: 42,000 hours were wasted, the equivalent of 14 percent of the payroll <i>(overtime)</i>





**Nonquality in a clothing company (see figure 5.12)**

In a clothing company, the costs of nonquality were the result of weak in the organizational processes, e.g. design, production, delivery. It is necessary to repair defects before sending clothes to the market. If the defects are not repaired the company faces the risk of having to do the work all over again, but the process is also a cost to the company. ISEOR calculated that this kind of waste represented 8 to 10 percent of work hours. Moreover, the lack of quality made it necessary to lower the price.

Figure 5.12: Evaluation of the cost of nonquality in a clothing company

Dysfunction cost observed	Frequency	Reasons for the dysfunction	Components of the financial consequences
Quality defects ( <i>nonquality</i> )	8 percent of the production	Machines badly adjusted ( <i>work organization</i> )	Overconsumption of material ( <i>overconsumption</i> )
Lack of quality in the design ( <i>nonquality</i> )	Most of the products	Loss of concentration due to overwork ( <i>working conditions</i> )	Time spent on repairs ( <i>overtime</i> )
		Lack of cooperation between the sales department and the design department ( <i>communication-coordination-cooperation</i> )	Need to lower the price due to poor quality of the product, resulting in a loss in earnings estimated at 16 percent of turnover ( <i>nonproduction</i> )



***Direct productivity gaps in a travel agency (see figure 5.13)***

In a travel agency, the 75 employees had to stop work for 10 minutes 15 times per week because of computer trouble. It turned out that 9,750 hours of productive work per year were lost because of a data processing system overload.

Figure 5.13: Evaluation of the cost of direct productivity gap in a travel agency

Dysfunction cost observed	Frequency	Reasons for the dysfunction	Components of the financial consequences
Overloaded data processing system resulting in work disruption ( <i>direct productivity gaps</i> )	15 times a week for 10 minutes each time for each employee	Failure to analyse the needs of employees involved in data processing ( <i>communication-coordination-cooperation</i> )	75 employees had to stop work for 10 minutes 15 times a week. This added up to :  75 employees x (10/60) hours x 15 times x 52 weeks = 9,750 hours. ( <i>overtime</i> )



Other examples of low direct productivity may be given. Some of them stem from the inadequacy of the equipment and the underemployment of workers.

Concerning low productivity caused by inadequate equipment and premises, ISEOR has noted the following examples:

- *Breakdown* of the computer system cost approximately 11 percent of the travel agency payroll.
- *Costly and partly useless equipment* in a mining company: instead of buying an expensive drill, managers should have subcontracted part of this activity. The difference in cost resulting from the purchase of the drill was estimated at 4 percent of the payroll.
- *Underproductivity of new equipment*: when a new computer system was installed in a metal casting company, it took one year for employees to master it. As the investment was depreciated over a 3-year period, the extra cost was estimated at 33 percent of the investment.
- *Underutilization of premises* accounted for 3 percent of the payroll in a dyeing company. The major part of the cost resulted from the fact that the building was too big and not sufficiently functional.

Concerning the low direct productivity of workers, the following situations have been identified:

- *Differences between time spent in the enterprise and productive time*: in a cleaning firm, productive time was estimated at 57 percent of the time spent in the enterprise. The rest was spent in chatting and frequent breaks. This variation represented a cost equivalent to 68 percent of the payroll.
- *Unnecessary work*: in a food company, the product orders were given both orally and in writing. The accountant spent 25 percent of his time doing the same job twice. This cost was estimated at 44 percent of his salary (including social security contributions).

### 5.2.3 The six components of the financial consequences

The assessment of hidden costs is based on a classification of the dysfunctions and a precise study of their financial impacts. Dysfunctions usually affect the enterprise either by increasing a resource consumption (e.g. raw materials, work hours) or by limiting sales in the short term and slowing the creation of potential gains in the long run. Therefore, in the profit and loss account, the hidden costs have an impact both on overheads and on sales.

The components of hidden costs are the following:

#### ***Excess salary: example of shift in function in a department store (see figure 5.14)***

Excess salary result mainly from a shift in functions, when managers perform tasks that should be done by subordinates. Given the differential between the salaries of managers and the wages of their subordinates, the enterprise pays a premium for low or medium value added tasks assumed by management and executives.



This is the case when the departmental supervisor of a chainstore takes 2 hours per day to display the product, while this job should be done by subordinates. If the salary differential amounts to 5 euros per day, the cost is 5 euros x 300 days = 1,500 euros per year. In this example, the departmental supervisor decided that the shift in functions was justified because employees were not trained. However, he forgot to take account of the excess salary and to balance this cost against the cost of a training scheme. In this case, the cost of such a training programme was 500 euros to which should be added 1000 euros given the time spent by the supervisor with his employees to implement the programme. This investment of 1,500 euros would have been recovered in 12 months due to the conversion of hidden costs into value-added.

In this case, it was critical to make the supervisor more aware that he was not paid to display the product but to perform tasks that need special attentions such as responding to customers' needs and developing economic vigilance.

Excess salary can derive from different sources such as:

- a shift in function due to absenteeism ;
- a shift in function due to lack of personnel ;
- a shift in function due to over-activity, when managers take up tasks because subordinates are overworked ;
- unnecessary time spent by superiors correcting subordinates' errors.

Figure 5.14: Example of excess salary in a service company

Types of excess salary	Examples
Excess salary due to absenteeism	Managers often take up tasks normally performed by subordinates
Due to lack of personnel	Managers take up low value added tasks because nobody else performs them
Due to over-activity	Managers take up tasks because subordinates are overworked
Due to errors	Managers spend time correcting errors of subordinates



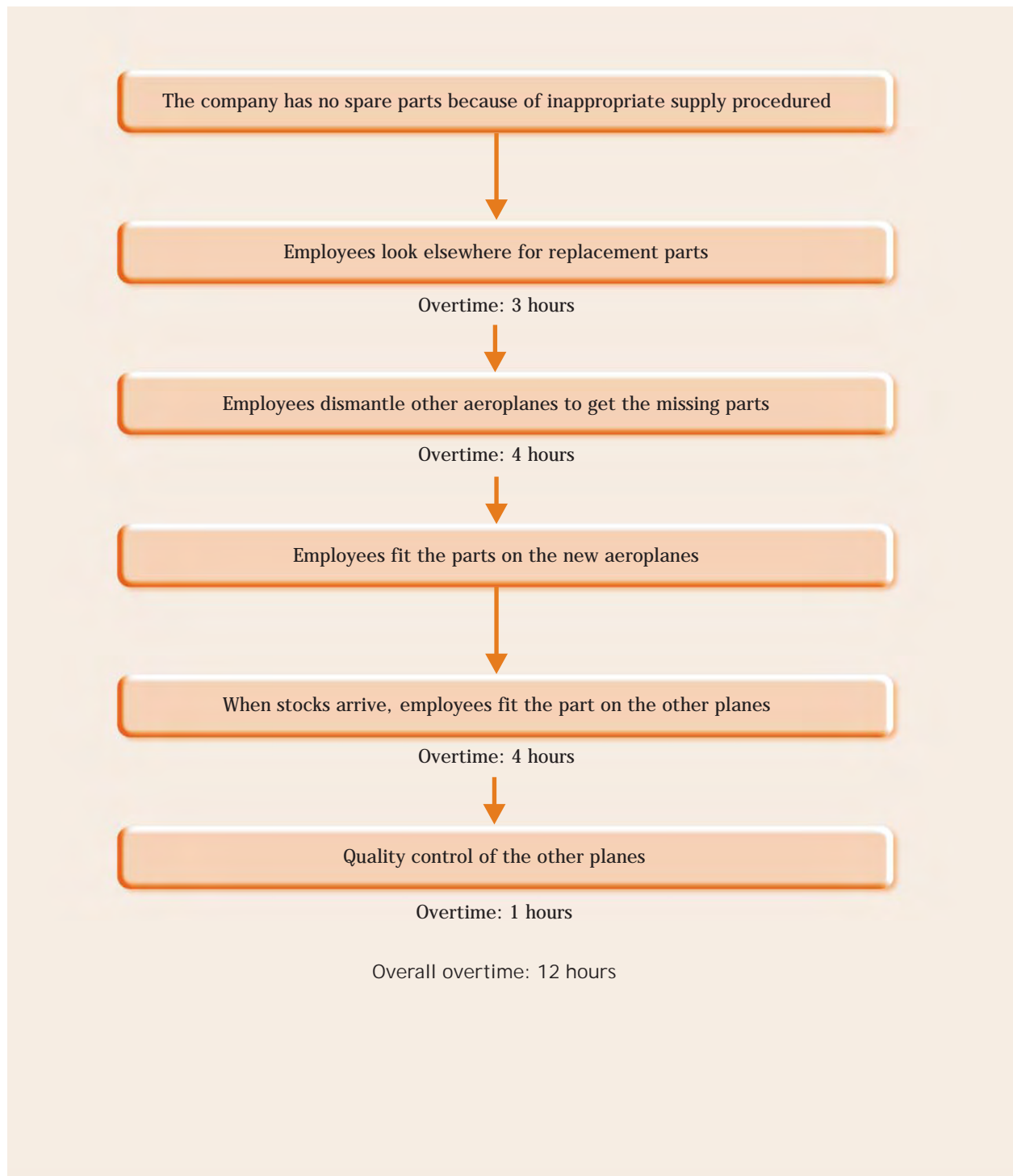
***Overtime (see figures 5.15 and 5.16):***

Overtime is defined as the time spent in the enterprise which does not add value. It is a cost, not only because the enterprise pays wages for this time, but also because the infrastructure and equipment are not used to capacity. This can also be seen as an opportunity cost, as in the case of nonproduction, because the time lost could have been used to perform high value added tasks, either to produce and sell more, or to create potential gains stemming from strategic opportunities.

Different case studies can be used to illustrate time wasted. One of them is the time spent in repairing defects. To sell a product, it is sometimes necessary to run through the process of production a second time. Another example is the overtime due to disruption of the organization: an aircraft manufacturer when out of stock, used to dismantle the wings of other aeroplanes to obtain the missing parts. This process avoided production stopping and enabled the enterprise to deliver on time. However, the cost of this operation was very high due to time wasted, as shown in figure 5.15.



Figure 5.15: Analysis of overtime in an aircraft plant





In this example, the cost of the dysfunction is 600 euros (12 hours at 50 euros per hour). As the company was out of stock of spare parts more than 18 times in one year, the total cost was 10,800 euros. Made aware of this cost, managers could see that it is less expensive to spend 1 hour per month (12 months x 1 hour x 50 euros = 600 euros) to ensure a permanent supply of spare parts.

Overtime can be classified as follows:

- Overtime: due to errors.
- Overtime: due to unnecessary work, such as following pointless procedures. In a food firm, ISEOR found that 6 percent of working time was spent in the preparation of useless reports or documents due to the bad design of the information system. Moreover, employees used to write reports out of habit and because they thought it would make their jobs more secure. This company was not able to overcome its delivery delays because of lack of time.
- Overtime: finding the right data: in the same company, the lack of organization and poor information flow between services led to a loss of 2 hours in dealing with each customer complaints. As the company received two complaints a week, this represented 200 hours lost in a year. This time could have been used to improve the quality of service and shorten delivery delays.
- Overtime: because of distractions: in a service company managers were not used to writing notes to exchange information. An analysis of the managers' time showed that they could gain two hours by holding a weekly meeting, by being more disciplined during meetings and by developing a minimum of written communication. Over a year, this would represent a gain of more than 100 hours per manager, which could be used to work on product innovation.
- Overtime: because of inefficient machinery: in a food company, ISEOR observed that cleaning was difficult owing to a lack of room around the machines. This wasted half an hour per day and led to health risks. More space should have been left round the machines when the factory was built. The cost would have been ten times lower than the cost of the overtime.

Figure 5.16: Examples of overtime in a food company

Types of overtime	Examples
Quality defects	Running through the production process a second time
Errors	Finding and correcting errors
Useless work	Two employees doing the same job
Searching for information	Looking for reports or checking data
Distraction	Unprepared meetings
Inadequate equipment	Fixing the equipment



**Overconsumption (see figure 5.17):**

Overconsumption is defined as consumption that could have been avoided. For example, the use of raw materials or energy tends to vary even if production stays at the same level. The gap between the resource needed and the actual consumption of input is thus overconsumption. In other words, certain resources are used but do not produce any output or value added. Overconsumption can be classified into different types:

- Squandering: in an administration, 25 percent of the office stationery was wasted or stolen. The hidden cost linked to this dysfunction was equivalent to 4 percent of the payroll.
- Overconsumption of energy: in a transport company, there were wide variations in the consumption of petrol (a variation of 20 percent depending on the drivers). The reduction of this variation could result in savings estimated at 5 percent of the payroll.
- Overconsumption due to errors: in a service company, an employee forgot to deliver a product to a customer and special delivery had to be arranged.

Figure 5.17: Examples of overconsumption in a transport company

Types of overconsumption	Examples
Squandering of raw material	Stationery wasted or stolen
Waste of energy	Variation in the consumption of petrol
Correction of errors	An employee forgot to deliver a product to a customer and special delivery had to be arranged





**Nonproduction (see figure 5.18)**

Nonproduction is defined as disruption or stoppage of activity linked to a dysfunction. The following instances of nonproduction in a plumbing and heating company were identified:

- Idle period: when ordering spare parts, the computer was so slow that for each entry employees wasted 3 minutes. Twenty orders were placed daily with this company. The time wasted was estimated at 12 percent of the time spent in the supply department and the cost was equivalent to 16 percent of the payroll of this department.
- Slowdown in production due to delays or bottlenecks in the production process: for example, the crane was not available on a building site when the plumber needed it. The employees continued to work, but at a slower rate. Due to such disruptions it was estimated that the firm was working at only 88 percent of capacity, so that non-production amounted to 12 percent. The cost linked to this dysfunction was equivalent to 20 percent of the payroll.
- Disruption or stoppage of the production process: some equipment was not working well, resulting in disruption of production. The cost of such a dysfunction was estimated at 8 percent of the payroll.

Figure 5.18: Examples of nonproduction in a plumbing and heating engineer company

Types of nonproduction	Examples
Idle period	Time wasted when ordering spare parts
Slowdown of the production flow	Employees had to work slowly because the crane was not available
Stoppage or disruption of the production process	Some equipment was not working well
Hold-ups on a production line	Breakdown of a machine



### ***Noncreation of potential (see figure 5.19)***

Noncreation of potential can be seen as an opportunity cost for the company. The following instances were observed in an electronic component company.

- **False savings:** when investing in a new building, the company decided to limit the storage space in order to save 3 percent of the investment cost. However, the cost of the overtime due to lack of storage room was estimated at 8 percent of the working hours. This cost will be paid each year over the 10 following years, which correspond to the life cycle of the investment. The overall cost was equivalent to 40 percent of the investment costs.
- **Loss of market share.**
- **Loss of know-how:** in this company, a highly qualified technician decided to leave the enterprise. The cost of recruiting and training a replacement was estimated at one year's salary of the new technician.

Figure 5.19: Examples of noncreation of potential in an electronic component company

Types of noncreation of potential	Examples
Lack of storage capacity due to false savings	Future overtime
Loss of market share	Future nonproduction
Loss of know-how	Future overconsumption due to recruitment and training costs
Delays in launching a new product	Future loss in earnings due to lost turnover (nonproduction)



### **Risks (see figure 5.20)**

Risks are possible future costs generated by current dysfunctions. To assess them, one could estimate the probability of the risky event actually occurring and multiply this probability by the costs generated by the dysfunctions. For example, in a logistics company, there may be a 20 percent risk of losing a customer because of delivery delays, which would result in a loss in profit margin of 500,000 euros. The cost of the risk may be assessed as follows: 20 percent x 500,000 euros = 100,000 euros. These hidden costs may be generated by the following dysfunctions:

- Absenteeism
- Occupational injuries and diseases
- Staff turnover
- Nonquality
- Direct productivity gaps

Figure 5.20: Examples of risks in a logistics company

Types of risks	Examples
Absenteeism	Risk of absenteeism due to backache
Occupational injuries and diseases	Risk of accidents due to lack of safety rules within the plant
Staff turnover	Risk of employees leaving due to health problems
Nonquality	Risk of loss of clientele and commercial set-backs
Direct productivity gaps	Risk of delay leading to cancellation of an order

#### 5.2.4 Methodology for calculating hidden costs (see figure 5.21)

To measure hidden costs, managers have to fill in specific grids to analyse and measure dysfunctions. Figure 5.21 represents a grid used to evaluate the global amount of hidden costs:

Figure 5.21: General model for calculating hidden costs

Components of hidden costs	Overcharges (historical costs)			Nonproduct (opportunity costs)			Total
	Excess salary	Overtime	Over-consumption	Non-production	Non-creation of potential	Risks	
Indicators							
Absenteeism							
Occupational injuries and diseases							
Staff turnover							
Nonquality							
Direct productivity gaps							
Total							



All the indicators and components of the hidden costs are represented in this grid. Using the socio-economic diagnostic, managers should be able to identify the dysfunctions. Once these are identified, managers still have to analyse their impact:

As previously mentioned, excess salary are mainly due to a shift in functions: if a manager performs the tasks of a subordinate, the financial estimation will be based on a wage differential because it represents a surplus that the company is paying. This surplus is not productive since the same task should have been performed, with fewer resources.

**Overconsumption** is quite easy to deal with since it can be estimated in relation to the price of the goods wasted. As in the case of excess salary, overconsumption is the utilization of resources that does not produce value added.

To assess **non-production** and **overtime**, it is necessary to compute the hourly contribution to value-added (or margin) on variable costs. Let us take the example of a company where 100 employees work 2000 hours per year, and sell goods for 9,800,000 euros. Its variable costs are estimated at 3,000,000 euros.

The margin is then assessed as follows (see figure 5.22):

Figure 5.22: Calculation of hourly contribution to value-added (or margin) on variable cost

Sales (turnover)	: 9,800,000 euros
Variable costs	: 4,200,000 euros
Value-added (margin) on variable costs	: 5,600,000 euros
Overall number of hours worked Per year (100 * 2,000)	: 200,000 euros
Hourly contribution to value-added (or margin) on variable costs (i.e. average hourly margin on variable costs)	: 28 euros

The variable costs in this case consist mainly of raw materials. Wages and depreciation allowance are not included in costs which are variable in the short term. One hour lost means that with the same wage costs and the same infrastructure expenditure, the company could have made and sold more products. In this case, we assume that the market is not saturated. If the market is saturated, the hour lost remains an opportunity because it could have been devoted to the creation of potential or to the development of new ways to control costs and increase efficiency and effectiveness.

Some components of the calculation of hidden costs affect the immediate results, whereas others are detrimental to future economic results (noncreation of potential).

## 5.3 The creation of potential as hidden performance:

### 5.3.1 The creation of potential is underestimated and underdeveloped

As presented in figure 3.2, the economic performance of a company includes both immediate results and the creation of potential. When an enterprise invests in implementing its strategy (e.g. development of new products, acquisition of new technologies and so on) or in improving its functioning (development of multi-skills), this is not entirely taken into account in the accounting and budgetary information system.

For example, a chemical company decided to develop a new kind of paste. The tangible part of this investment was estimated at 300,000 euros and the hidden investment representing time spent by technicians and other employees was estimated as an extra cost of 400,000 euros. This additional cost resulted in a short-term profit loss of 400,000 euros, yet this loss should have been viewed as the creation of potential and hence as a kind of hidden performance. In this case, the entire estimated cost for developing the new product was 700,000 euros instead of the mere 300,000 euros which appeared in the initial accounting records. A failure to take into account the hidden performance of this intangible investment may lead to two kinds of mismanagement:

- Lack of intangible investment due to a budget strictly limited to 300,000 euros. This is futile because the tangible investment in the new product without the intangible investment will lead to no profit gains at all: thus, inadequate training will inevitably lead to incorrect use of equipment, and therefore poor quality of the new product.
- Sanctions against middle-management for not respecting the required profitability when in fact there is a hidden performance in the creation of potential, resulting in a medium and long term gain. Indeed, in this case, the 400,000 euros invested in the development of the new product and in training time significantly affect the previously accepted budget for the fiscal year.

In this case, the 700,000 euros investment redeemable over 3 years yielded 500,000 euros per year in value added due to increased sales and improved productivity, resulting in a pay back period slightly inferior to 6 months.



### 5.3.2 Different types of creation of potential

There are two kinds of creation of potential: those resulting from implementation of the strategy and those stemming from development actions focused on preventing the dysfunctions.

*Creation of potential related to implementation of the strategy:*

These consist mainly of the creation of new products, the development of new markets and finalization of new technologies, and the upgrading of human potential. An example is the case of a bank (see figure 5.23), where the development of commercial activities consisted of improved financial advice to the clients. This required the creation of the following potential gains, consisting of both tangible and intangible investments:

- Tangible investment in lap-top computers (400,000 euros).
- Intangible investment in human potential consisting of training employees in commercial negotiation and of management time spent supporting employees in their first negotiation. The time spent was valued at 300,000 euros. In this case, the overall result was 1,400,000 euros due to a better profit margin resulting from increased customer satisfaction.

Figure 5.23: Example of creation of potential related to implementation of the strategy in a bank

Type of investment	Tangible investment	Intangible investment	Return on investment per year
Reorientation of administrative employees towards commercial activities (investment in human potential)	Investment in lap-top computers to calculate repayments	<ul style="list-style-type: none"> <li>● Retraining for employees in commercial negotiation</li> <li>● Management time spent supporting employees in their first negotiation</li> </ul>	1,400,000 euros
	Costs: 400,000 euros	Costs: 300,000 euros	



### ***Creation of potential focused on preventing dysfunctions:***

These investments correspond to the development actions taken by the enterprise to improve its operations by reducing dysfunctions. The investments may be related to :

- working conditions
- work organization,
- communication-coordination-cooperation,
- time management,
- integrated training,
- strategic implementation.

In the case of a transport company, time management was improved through better concerted delegation: instead of directly answering telephone calls (shift in functions), the manager delegated this responsibility to an assistant, thus gaining an hour per day to deal with more appropriate development actions such as writing quality procedures.

This prevention of dysfunction required a 3,000 euros tangible investment in a direct access telephone system, plus a 7,000 euros intangible investment in training employees to perform the delegated tasks. The overall 10,000 euros investment resulted in a 24,000 euros value-added increase per year due to increased customer satisfaction, as illustrated in figure 5.24. Moreover, it was observed that the job enrichment of the assistant was accompanied by improved working conditions.

**Figure 5.24:** Example of creation of potential related to the prevention of dysfunctions in a transport company

Dysfunctions which were prevented	Tangible investment	Intangible investment	Return on investment per year
Delegation of answering telephone calls to allow manager to spend more time working on development actions (reducing shift in functions)	Investment in a direct access telephone system	Time spent by an assistant in training Assistance by a management consultant to train managers in collaborative delegation	24,000 euros increase in value-added
	Costs: 3,000 euros	Costs: 7,000 euros	





### 5.3.3 Evaluation of the hidden return on creation of potential

ISEOR has worked in over 1,200 companies of very different sizes - from 10 to 30,000 employees - in 70 different industrial, public and private sectors and has constantly shown the very **high profitability of investment in human potential**, whenever companies and organizations adopt pro-active strategies through mobilizing all categories of personnel.

Results presented at the First Transatlantic Accountancy, Management Audit and Cost Management Congress organized with the International Institute of Costs (IIC) and the American Accounting Association (AAC) **are spectacular: between 200% and 4,000 %** depending on the case. 1€ invested in the development of human resources during the process of effective participative change generates a return on investment in the form of the creation of value added of from 2 to 40 euros - pay-back in 1 to 6 months<sup>20</sup>! **No technological investment is as profitable!**

The same logic applies to business and non-profit organizations. It is important to assess the overall creation of potential consisting of both tangible and intangible investments, but it is also necessary to assess both their visible and hidden impacts. Figure 5.25 illustrates an example of the impacts of a 45,000 euros investment made on a production line in a bakery. The investment consisted of both a tangible investment in a new software system (15,000 euros) to pilot the production line, and of an intangible investment in time spent in training employees (30,000 euros) as shown in figure 5.25.a. This overall investment made it possible not only to yield visible returns due to higher productivity (estimated at 10,000 euros per year), but also to achieve a conversion of hidden costs into value added as shown in figure 5.25.b. For example, a 33,000 euros hidden cost generated by poorly baked products was expected to be reduced by two-thirds leading to an expected 22,000 euros reduction of dysfunction costs per year. Figure 5.25.c shows an overall expected reduction of hidden costs of 59 percent, resulting in a 52,000 euros additional profit.

Figure 5.25: Example of conversion of hidden costs into value-added on a production line in a bakery due to both tangible and intangible investments

#### Figure 5.25.a Evaluation of the total cost

New software system (tangible investment)	15,000 euros
Time spent training employees	30,000 euros
Total cost of the creation of potential gains (both tangible and intangible investments)	45,000 euros

<sup>20</sup> See Savall, H., Zardet, V., (2008). Le concept de coût-valeur des activités. Contribution de la théorie socio-économique des organisations. [The activity cost-value concept. Contribution of the socio-economic theory of organizations]. *Revue Sciences de Gestion – Management Sciences – Ciencias de Gestión*.



Figure 5.25.b Analysis of the conversion of hidden costs into value-added due to the creation of potential (both tangible and intangible investments)

Impact of the creation of potential gains	Present hidden costs (per year)	Conversion rate of hidden costs into value-added	Expected hidden performance (per year)
<ul style="list-style-type: none"> <li>● Poorly baked products</li> </ul>	33,000 euros	2/3	22,000 euros
<ul style="list-style-type: none"> <li>● Boxes damaged or broken during packaging</li> </ul>	9,000 euros	2/3	6,000 euros
<ul style="list-style-type: none"> <li>● Overweight products</li> </ul>	30,000 euros	1/3	10,000 euros
<ul style="list-style-type: none"> <li>● Time wasted on cleaning and maintenance due to carelessness</li> </ul>	10,000 euros	3/3	10,000 euros
<ul style="list-style-type: none"> <li>● Useless maintenance interventions due to operating errors</li> </ul>	6,000 euros	2/3	4,000 euros
<b>TOTAL</b>	<b>88,000 euros</b>	<b>59 percent</b>	<b>52,000 euros</b>

It is possible to gather all the data in the economic balance illustrated in figure 5.25.c. The main figures are the following:

- Visible cost of the investment redeemable over 3 years: 15,000 euros software system
- Expected visible performance : 10,000 euros risk in productivity per year
- Hidden creation of potential gains: redeemable over 3 years: 30,000 euros intangible investment in time spent training employees.
- Expected conversion of hidden costs into value-added: 52,000 euros per year



This example demonstrates that there is a 8.7-month investment pay-back period based on visible cost and performance. The traditional accounting system would show lower investment (without the intangible investment) but the payback period would be twice as long due to the lack of conversion of hidden costs into value-added.

Figure 5.25.c: Economic balance and calculation of the pay-back period of the creation of potential

Element	Costs	Performances
Visible costs and performance	New software : 15,000 euros	Rise in productivity : 15,000 euros per year
Hidden costs and performance	30,000 euros intangible investment in time spent training employees	52,000 euros conversion of hidden costs into value-added
Hidden qualitative and quantitative data	The need to define new quality standards	A 35 percent increase in customer satisfaction due to improved product quality
TOTAL	45,000 euros redeemable over 3 years	} 62,000 euros plus increased customer satisfaction
ANNUAL COSTS/ PERFORMANCE	15,000 euros	
PAY-BACK PERIOD	4.13 months	

## Appendix 4 DYSFUNCTIONS ANALYSIS

Figure A.4.1: Dysfunction analysis

Hidden costs	Frequency	Possible reasons for the dysfunctions	Confirmed economic impacts (components)
<ul style="list-style-type: none"> <li>● Absenteeism</li> <li>● <b>Staff Turnover</b> (e.g. departure)</li> <li>● <b>Occupational injuries and diseases</b></li> <li>● <b>Nonquality</b> (e.g. return of products by customers)</li> <li>● <b>Direct productivity gaps</b> (e.g. work overlap)</li> </ul>		<ul style="list-style-type: none"> <li>Time management</li> <li>Integrated training</li> <li>Strategic implementation</li> </ul>	<ul style="list-style-type: none"> <li>● Excess salary</li> <li>● Overtime</li> <li>● Overconsumption</li> <li>● Non-production</li> <li>● Non-creation of potential</li> <li>● Risks</li> <li>● Working conditions</li> <li>● Work organization</li> <li>● Communication-coordination-cooperation</li> </ul>

## Appendix 5 CALCULATION EXERCISES OF HIDDEN COSTS AND PERFORMANCE IN ONE'S OWN ENTERPRISE

Figure A.5.1: Exercise 1: Analysis of a dysfunction cost (form to be filled in)

Dysfunction costs observed	Frequency	Possible reasons for the dysfunction	Confirmed economic impacts (components of the financial consequences)	Impacts on economic performance (components of hidden costs)