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Research paper

Managing Human Resources in the Light of Corporate Culture as a Lever for Supply Chain Performance

A.Elmortada[1]*, A.Mokhlis[1], S.Elfezazi[1], C.E.Mokhlis[2]

[1]Laboratoire Process Signaux Système Industriel et Informatique (LAPSSII)
Cadi Ayyad university, Higher School of Technology of Safi
[2]Laboratory of Scientific Engineering of Organizations,
Ecole Nationale de Commerce et de Management,
**Corresponding author E-mail: Asmaa.elmortada@gmail.com*

Abstract

In an economic environment increasingly complex and competitive, firms are now aware, more than ever, of the role of the human resources function as being a primary factor to the success and performance of their supply chains. The scope of this article is to highlight the relationship that exists between human resource management and supply chain management. It also explain how human resource management practices affects the supply chain performance while taking into consideration the company culture and under the effect of a human resource management strategies influenced by the increase in terms of environment competitiveness that results in a variety of business mutations…

Keywords: *Human resource management; HR Function; HR practices; Supply chain management, Organizational culture*

1. Introduction

As the world became a global village, firms are continuously facing risks and greater degree of uncertainty due to the increase in global competition. This situation promoted the integration of supply chain management into the organization processes in the 1990's decade which is has been is increasingly transforming into a key function that acquires strategic importance for any entrepreneurial structure whose performance, and sometimes even sustainability, depends on the control of the logistics process implemented [1]. This importance remains strategic and irreversible for the company in order to counteract the systematic effects of the financial crises which crosses all the countries of the world and which weigh heavily on their social performances. Such a context highlights the necessary reactivity of forms of organization, particularly of a productive nature, by mobilizing and combining diversified skills.
Since human capital is the backbone of every organization, good human resource management remains an undeniable source of value creation that places people and their creative potential at the center of all managerial and organizational concerns of a company. It was even shown that the relationship-based approaches to staffing, training, evaluation, and compensation-which constitute the main activities of HRM- are directly associated with greater supply chain integration and performance [2].

2. Basics human resource management (HRM)

P. Roussel defines the HRM as being "…the set of activities that aims to develop the collective efficiency of people who work for the company. As efficiency is being the extent to which objectives are achieved, HRM will have the mission to lead the development of the human resource (HR) in order to achieve the objectives of the company. HRM defines strategies and HR means, organizational modes of operation and support logistics in order to develop the necessary skills to achieve the objectives of the company. "
Therefore, the aim of human resources management is to help the company reach its strategic goals through seeking for the achievement of employees' satisfaction in order to promote their efficiency, effectiveness and productivity. Indeed, satisfaction motivates employees for developing skills and learning new technology required in the production process.
In this context, the managers are asked to promote trust, decentralization and share of information and knowledge. They have also to maintain the clearness of roles and responsibilities, action' freedom, feedback and motivation. Managers are then bond between achieving employees' satisfaction, company's goals and exercising their functions in order to reach the integrity of the system. Figure 1 presents major processes and functions of human resource management.

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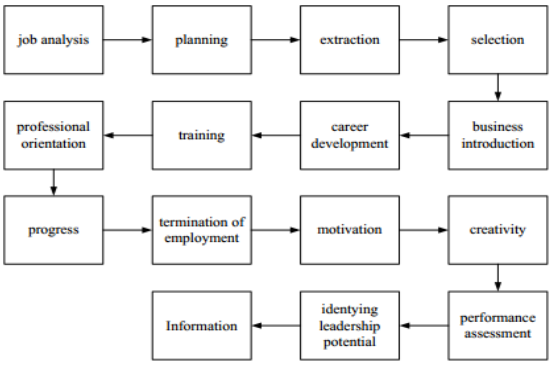


Fig.1: Major processes and functions of human resources

3. Organizational culture

The concept of "organizational culture" refers to the personality of a company, that is, what makes it unique in the eyes of those who work there and others. There are many definitions of culture, but the common theme of all these definitions is the sharing of values, beliefs, ideas and guidelines [3]. Two essential elements are inherent in the definition of the corporate culture. The first characteristic of organizational culture is the sharing of expectations in terms of work or function. In an organization, employees develop in contact with each other, a common knowledge of what is expected of them. Members of a supply chain, too, cultivate over time a common awareness of what is expected of them and what they themselves can expect. In this sense, there are two different forms of mutual expectations: (1) the internal culture that characterizes the expectations of the employee, and (2) the external culture that designates the expectations of the members of the chain. The second element of culture is the stability of the norms and values of the organization. From solid and repeated experiences, employees are standards of behavior. Externally, these standards represent standards allowing a person to anticipate the behaviors and expectations of the members of the chain in terms of relationship.
It is important to understand that there is an interaction between an organization's internal culture and its external culture, or organizational image: the perceptions of chain members are highly influenced by the employees who manage their business relationships. This means that cultural conformity is characterized by fulfilled expectations. Employees and chain members not only know what they have right to expect from the organization, but they also agree on what should be done to meet those expectations, and act accordingly. In other words, both of them respect the terms of their psychological contract [4]. In this situation, a great satisfaction of chain members and employees can be expected. On the contrary, a cultural conflict is characterized by "unsatisfied expectations", which means that there is a disagreement between the expectations of the employees and those of the chain members. This disagreement usually leads to employees' and members' dissatisfaction, which in turn leads to larger direct and indirect supply chain costs.

4. Relationship between HRM and organizational culture

A symbiotic relationship exists between a company's culture and its human resources policy; they influence each other. Recruitment, training, employee evaluation and compensation are the four aspects of HRM that affect organizational culture.
First, the level of qualification of new employees differs considerably from one firm to another. Some strive to engage highly educated people with excellent technical, communication and interpersonal skills, and having a strong work ethic. A such policy can lead to ask job candidates to take several interviews.
Secondly, some companies have large and varied initial training courses, which they supplement with a tutoring and continuous training program at the workplace.
Third, the evaluation and information processing procedures are considerably different from one company to another. Some rarely evaluate their employees and the results they return are mainly related to the amount of work, while others focus more on quality and frequently provide specific information about the behavior. Within some companies, managers receive three to four reports each year on their performance, in addition to information on their progress towards achieving the promotion objectives they have set in agreement with the company [5].
Finally, pay systems vary greatly: some companies adopt a forward-thinking approach (high wages and profits) while other firms adopt an archaic approach (low wages and profits). In companies that take a forward-thinking approach, managers believe that to provide flawless service to customers, employees must also be well-treated. The staff can then benefit from paid sabbatical periods which they can combine with the paid holidays, or receive occasional bonuses for excellent results. These remuneration practices contrast sharply with those of fast food restaurants where wages are minimal and profits are low.
Human resources policies that directly influence the corporate culture are therefore influenced by it: HR decisions are essential because if a company hires staff that adapts to its organizational culture, this enhances common social knowledge and leads to increase the cohesion between the objectives of the employee and those of the company [6]. Sharing a social conscience helps employees make the right decisions in the face of changing circumstances [7]. The influence is therefore mutual.

5. Logistics and supply chain management (SCM)

5.1. Emergence of the concept of logistics

The concept of logistics in the company was born thanks to the marketing department because it is the first to have taken into account the logistical constraints mainly thanks to the problems of the mix marketing. The latter consists of 4 elements (called the 4P) that must be taken into account: Product (product), Price (price), Promotion (communication), Place (distribution).

Physical distribution is an important issue for marketing that will affect all other components of the marketing mix. Transport and storage are essential elements in order to be able to offer the product to different consumers.
Logistics is therefore an essential function for the company if it wants to remain competitive. Indeed, it is his knowledge and mastery of logistics that will determine his performance. This activity characterized as principal by Porter [8], will thus evolve with the changes experienced by the company and especially its management mode. The firm has mainly known these developments to allow exchanges become increasingly important with internationalization. The company is now global and few are those who do not think global. Logistics stakeholders have become more dispersed and more numerous. In order to be more efficient, the logistics system has sought to integrate all these agents. This is how the notion of supply chain was born.
Faced with this globalization, the company also had to adapt its management system. This concerns supplies, production, and distribution to the customer as well as the relationships that bind all these agents. This evolution is mainly due to the increase of actors in the logistics chain but also to the geographical extension of infrastructures.

Table 1. Main characteristics of the logistics function over time

	Compatmentalized logistics	Integrated Logistics	Integrated and collaborative logistics = Supply Chain
Period	Before 1980	1980 – 1995	After 1995
Temporary horizon	Short term	Middle term	Medium and long term
Logistics Manager Priority	Reduce logistics costs	Reduce costs and logistical delays. Improve the quality of logistics services	Reduce costs and time. Improve the quality of logistics services. Improve the level of service
Role of information	Low, because systems do not facilitate information transfer.	High, because integration of more and more information.	Strong, because of frequent and sought of information share through the VMI and CPFR
Relationship between Supply Chain members	Relationships are often aggressive and related to bargaining power	Power relations are common, but other relationships are possible.	The logic "win-win" dominates, without angelism however.
Speed of flows and storage methods	Low, slowed down by multiple stocks throughout the supply chain. Importance of the warehouse	High because stocks are shrinking and information is more fluid. Importance of the platform.	Strong because the information is shared, which leads to higher levels of responsiveness. Importance of warehouse and platform network.
Recognition of logistics = transversal function	Low and little encouraged in practice	High and facilitated by Information and Communication Technologies	Strong. Dominant paradigm.
Measurement of logistics performance	Indicators through function deduced from accounting.	Some cross-cutting indicators.	The level of service is at the center of concern.

The table above highlights, in addition to the evolution of logistics, the importance of communication and especially the exchange of information. Indeed, information is a driving force of this collaboration. Information and the circulation of data are essential for this relationship between the agents of the supply chain. The use of information systems is essential for the good conduct of the supply chain and they facilitate and simplify considerably the exchange of information. It is thanks to them that the collaboration can be efficient and lead to its primary goal, which is customer satisfaction. Moreover this partnership allows many reduce such as the reducing stocks and delays. Since 1995, the concept of
All this gave the concept of the supply chain. This is then an added value for the company that will gain in efficiency and responsiveness. Table 1 presents the main characteristics that logistics function knew during its evolution: supply chain is now the dominant in the management of the customer relationship. Indeed, the customer is at the heart of the concern of the company by the desire to improve the level of service.

5.2. Supply chain management

Supply chain is now a term used internationally to express all efforts that had been involved in producing and delivering a final product or service, from the supplier's supplier to the customer's customer.
Supply chain management is a management of production at each level of the chain, there will be an integration of stakeholders throughout the supply chain. This management method makes it possible to increase the rotations of the stocks per year, to reduce the cost of the products because it will be distributed among the different actors. Supply chain management also reduces production cycles and reduces response and delivery time for customers. Targets can be determined for the entire supply chain.

5.2.1. SCM objectives

The aim of supply chain management is to improve administrative management and reduce a large number of errors. The company has different goals when it decides to move into global supply chain management. Supply chain management can lead to achieve objectives such as:

- **The passage of the pushed flow to the drawn flow.** This helps to reduce inventory and especially to avoid overproduction. The product will no longer be manufactured so that it can be sold, but production will depend on customer orders, this will limit inventories and thus be closer to the needs of consumers.
- **Production planning.** Production is now planned in total concordance with customer demand. It is now the customer who will trigger the production. In fact, either the production will start only when the order has been placed which may allow customization of the product by the consumer, or the product is ready but the customer will have to order in order to trigger the production of the product for the next consumer. The plant then has a very small stock which makes it possible to answer more quickly on demand, this type of production is used mainly for that require a significant manufacturing time.
- **Improvement of traceability.** By the supply chain management the company has a better visibility on the production thanks to the close collaboration which settles between the actors. Similarly, it is easier to follow the production process and to know the exact location where the goods are made. A labeling system is established between the parties to have the same referencing codes for a simpler product management.

- **The improvement of the execution of the order.** The consumer will tend to have his product faster because according to the time of manufacture, the company will put in place a system that will avoid making the customer wait too long. The customer will then be served more quickly and so he will usually be more satisfied. Figure 2 gives a possible representation of the Supply Chain:

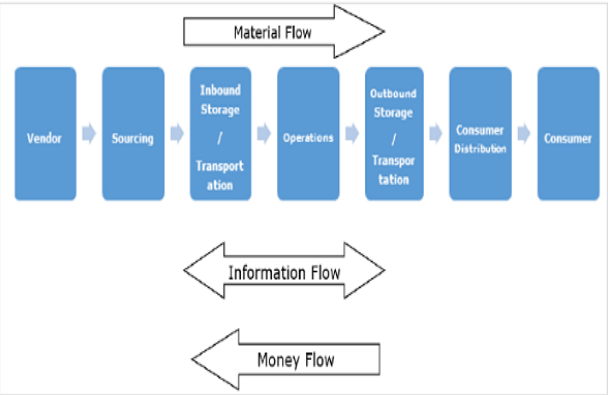


Fig.2: Supply chain flow chart

This diagram makes it possible to highlight the different flows that circulate between the agents of the supply chain. It is essential to understand how information circulates but also to note that the exchanges are as well in one direction as in the other. Indeed, the exchanges are reciprocal and are lateral without being limited to being transmitted in a defined sense.
Besides the flow of information, there are other flows, also necessary for the collaboration to go perfectly: financial flows and physical flows. These already existed before the introduction of the integrated supply chain. Physical flows, also two-way, are broken down into several main stages such as the supply of raw materials, then the transformation where the raw materials are to be worked in order to produce the final product which will then be broadcast to the public through the distribution stage. These flows shown in two directions show that there may be returns in the case of a defect or an anomaly on the product.
The financial flows, meanwhile, only go up the chain because each of the actors will be required to pay the previous speaker on the supply chain. It is indeed the suppliers who will be the starting point and supply the manufacturers. The latter will then have a debt towards the first ones, and so on until the final customer. The main flow of the supply chain remains the financial flow. Financial flows are moving in the direction up the supply chain. It is therefore the customer who will start by paying to the distributor all the races he has made, the payment is direct. The distributor will pay the invoices to the manufacturer for the delivery of the finished products after processing the raw materials. Similarly, the manufacturer will pay the suppliers, or rather suppliers for the supply of raw materials or essential components for the manufacture of products for sale. These are done in different ways because the actors have a longer payment period than the final customer who pays directly.
The supply chain has developed within the company to be able to answer more efficiently and with more efficiency at the request of the customers; it is for this reason that the preceding diagram is not precise enough. Indeed, in this perspective, the customer must be at the center of the supply chain; the final consumer is upstream and downstream of the chain. The customer will be the starting point of the production but also the point of arrival because he is the final consumer of the product. It is the consumer who will trigger the design of the products; he is then at the center of the chain of the global offer as on the representation bellow:

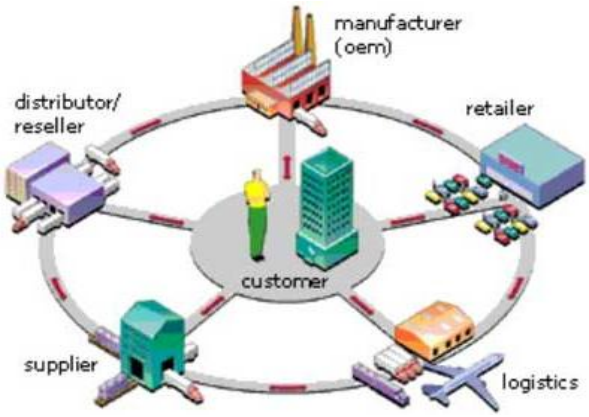


Fig. 3: The customer is placed in the center of the supply chain

This schematization shows the close collaboration between the different actors of the global chain. All stakeholders in the supply chain are interconnected and communicate together to best meet their common target: the final customer. The exchange of information is bilateral which allows a full cooperation between activities. Transparency and trust are also essential.

5.2.2. The stages of the Supply Chain

The consumer is at the center of the supply chain. He is even at the origin of the global logistics chain and who will trigger the production of the product. Indeed, the customer is at the heart of the concerns and he will be the center of the supply chain.
There are different stages in the overall logistics process, which can be described as successive although the relationships and exchanges are constant and reciprocal. Firstly, the order or at least the creation of the good will be generated by the final customer, then the raw

material supplier will deliver to the company that is used to transform the raw materials into a first element of the product (for example the components of an engine will be assembled to form the engine). Then each partner will have a defined task in the creation of the product (for example in automobile manufacturing, one will constitute the tires, another will make the engine, and one last the dashboard). Each of the actors of the chain will have a determined and essential role in order to deliver a satisfying product to the customer on time. It is therefore essential that each actor acts in his interest but also takes into account that of his collaborators. If one of the actors does not respect the rules, the production can be stopped. Similarly, to avoid overproduction, agents will make forecasts based on the forecasts of their previous employees without adding a margin percentage.
Supply chain management requires transparency and total trust between the stakeholders. Collaboration must be complete and followed to avoid unnecessary errors or overproduction. Production and delivery times must take into account each agent. The global logistics chain is longer than when the company is the only manager. The manufacture is then elaborated according to each one.

6. Relationship between supply chain and HRL strategies [9]

Having been defined in several ways over the last 40 years, the modern logistics is understood today as a function of planning, implementation and mastery of flows and stocks in the company. It relies on the implementation of information and communication systems increasingly sophisticated and takes place in the supply chain defined by Mentzer as "a set of three or more entities (companies or individuals) through which flow upstream and downstream products of services, information and finance, from a supplier to a customer." [10]. In terms of purpose, NFX 50-600 standard reminds us that the purpose of the logistic function is to "meet the needs expressed or latent, internal or external, to better economic conditions for a specific level of service" (AFNOR, 2005). This definition makes that the notion supply chain can accommodate different realities as proved by Chen &al [11] because of the existence of a myriad of types of relationships between members of a supply chain, which can be analyzed on how to associate or collaborate [12]. Management practices flow may also differ from one chain to another, according to the way that the relationship in the supply chain is oriented to be:

- Relational: Characterized by content (beginning, signals, and the end) of the communication between the partners in the chain and interactions' mode (speed and frequency), allowing enterprising sides to get goals which are unattainable individually.
- Or transactional: In this relationship, the terms of exchange between buyers and suppliers must be specific (low flexibility of suppliers). The benefits and costs of each member of the supply chain are clearly defined (low ease of provider); little information flow between the parties (poor communication); members of the supply chain have little control over each other (low control); transactions are short-lived and have little chance to train new (sustainability little intended). According to the vocabulary of sale, each member is satisfied with a result of "win-lose" provided that they are winning.

Therefore, despite of the challenges that the company may face [13], the guidelines of the supply chain must be adapted to the culture of the company that comes into mutual influence with HR policies. Indeed, decisions on human resource management have a significant impact because if staff adapts to the culture of the company, it helps to highlight social knowledge, as it helps in promoting cohesion between the objectives of the employee and those of the company [14]. The fact that "Sharing a social conscience helps employees to make the right decisions in the face of changing circumstances" has been proven years ago [7].
In comparison to relations accommodated within the supply chain, human policies and the resulting culture can also be defined according to the Continuum transaction-relation. In other words, we distinguish the relationship-based HRM strategy which emphasizes the reciprocal loyalty between employees and the company and leads to a mutually beneficial relationship in the long run. And the transaction-based human resources strategy according to which employees are interchangeable and replaceable so that much less effort is provided to maintain their loyalty.
By combining the two logistic strategies with the two human resource strategies that a company can adopt, two of the four possible combinations are found to be compatible with both logistic and HRM objectives ("relational logistic-relational HRM" or "transactional logistic- Transactional HRM") while the other two combinations represent a strategic conflict:

6.1. Combined relational strategies

Through adopting this type of strategy, the company's objective is to establish long-term cooperation with the majority of partners (customers, suppliers and distributors) and its own employees. A relationship-oriented firm strives to ensure coherence and complementarity between vendor and distributor' objectives in terms of human and marketing relationships, thus treating customers, suppliers and distributors alike leads to achieve a high level of cultural coherence that fosters mutual trust between the various enterprising parts (company, employee and different members of the supply chain).
In case of combined relational strategy, employees are seen as investments where the importance of shared responsibility and the "employee" factor dominates the human resource management (lifetime jobs, training, high wages, etc). Choi and Joung conducted a study based on the concept of combined HRM and supply chain management strategies [15].

6.2. Combined transactional strategies

A company can also adopt a transactional approach regarding some or all of its supply chain partners as well as regarding its own employees. In this configuration, the loyalty of the employee towards the organization and the members of the supply chain is less considered. In this context, fidelity between a company and its suppliers or distributors is less solicited too.
In this scenario, assessing employees is based on the workload to quality dependency criterion. This results in the fact that employees are strictly defined and managed to achieve daily tasks with minimum qualifications. This leads to situations where employees are replaceable and low paid as it can also lead to a further reduction in the efficiency of the services concerned after each personnel change.

6.3. Mixed strategy: long-term relationship with the supply chain members and transactional relation with employees

In this situation, the strategy of the supply chain is based on relationships while the human resources policy is transactional. Members of the supply chain may then receive transaction-level service. This is due to the fact the transactional HRM strategy prevents staff from

providing a comprehensive and long-term service, especially since employees are not rewarded for the time dedicated to Maintaining long-term relationships because the reward system is linked to quantitative and transactional objectives. On the other hand, the HR strategy is based on simple and routine jobs that require a low-skilled workforce. Hence, employees are less able to provide the level of service required in a real relational environment.

6.4. Mixed strategy: Short-term transaction with the supply chain members and strategy based on relationships with employees

In this case, the company may consider that the members of the supply chain are interchangeable, but it attempts to get a long-term commitment from the employees. Despite the fact that maintaining a first-class workforce (skilled employees, continuing training and receiving high wages, etc.) for transactional works is one of the less economical aspects of this approach, but it lets the firm able to perform tasks that a member or a transaction chain is not capable of.

7. How hrm practices influence the supply chain performance?

On one hand, HRM mission is to help organizations to achieve their goals through acting on human capital issues. On the other hand, nobody can deny that supply chains are made of people. Hence, successful supply chain management rests – in a big part of it- on the performance of the people in the supply chain. Claye-Puaux [16] demonstrated that HRM practices can influence the success of supply chain through:

7.1. The coordination of physical flows

The coordination of physical flows became possible thanks to a HRM activity referring to the field of employment management and work organization which that can be broken down into three levers:

- **Inter-organizational synchronization of activities:**

In the context of Just-in-time manufacturing, the exact synchronization of physical flows, between principals and suppliers, constitutes a basis for the operation of the exchange relationship. This synchronization of the flows of goods is necessarily accompanied by a synchronization of the work activity supporting the circulation of flows. From the point of view of HRM, this forces the supplier to set up work schedules and work organization based on the client's activity. In addition, holiday periods are also affected by the choice of the client. It is in fact the arrangements made by the manufacturer that cascaded to suppliers of second level.

- **Intra-organizational synchronization of activities:**

The continuity and fluidity of the flows must not be realized only externally between the partners of the chain, but also internally, within each link of the chain. The synchronization of the various activities performed internally is therefore as essential as the external synchronization mentioned above. This supposes a perfect harmonization of the schedules between the different services contributing to the realization of the logistic process.

- **Quantitative flexibility of the human resource:**

The coordination of inter-organizational flows assumes a continuous adjustment to the volume of activity. The variability of demand in the example of Just-in-time system makes it necessary to ensure a quantitative level of labor flexibility to avoid under-capacity (introducing a risk of flow disruption) or overcapacity (decreasing the fluidity of flows included in terms of committed human resources - and thus wage costs).

In addition, in a context of lean staffing, the management of planned absenteeism (including time off and absence for training) becomes critical within the production teams, especially since the negotiation on the reduction of time of work, which has been reflected in suppliers by increasing the number of days off. Thus the absenteeism management mission has become more complex for managers who must authorize absences in line with work planning and employees' needs.

7.2. The coordination of information flows

The coordination of information flows is made possible by an HRM activity referring to the areas of training and communication that can be broken down into two levers:

- **Adaptation to information and communication technologies:**

The inter-organizational operational coordination underlying the functioning of the supply chain not only entails a continuous exchange of information on the quantities to be produced and delivered, but also on the quantities actually delivered, their nature and their precise destination.

For instance, it is usual that in the production units, each supply order corresponds to a shipping notice. In practical terms, this bidirectional exchange of information can take various forms: electronic, paper (fax, paper delivery note), standard label with barcode. Little by little, paper disappears in favor of electronic orders. Current developments are imposed by the contractors to the suppliers, who must adapt their technological means but also their skills, under the threat of losing their market. The training activity that falls within the tasks of human resources management is therefore fundamental.

- **Internal decompartmentalization:**

The coordination of information flows is just as indispensable at the intra-organizational level as at the inter-organizational level. The divisions between groups and between functions turn then out to be major obstacles to its realization. Some structures appear in this framework more likely to promote decompartmentalization between functions. By grouping several functions under the same hierarchical authority, the information circulates more fluidly and arbitrations between functions are facilitated.

Moreover, in order that useful information circulates easily, in and between services, favorable conditions can be met. This involves providing communication spaces or specifying exchange times (at the time of team-taking, through intra- or inter-service meetings or by informal communication habits), in order to encourage coordination of information. Finally, the circulation of relevant information may suffer from a lack of clarity in the assignment of roles of each. So in order to guarantee that information will be transmitted reliably and efficiently, interface roles must be clearly defined.

7.3. Random responsiveness

Random responsiveness is made possible by an HRM activity that refers to domain of the valorization of the human potential [16] which can be decomposed into two levers:

- **The effectiveness of external communication:**

In order to make sure that contingencies, which can affect the functioning of the supply chain, can be managed quickly, inter-organizational communication must be effective. It is a matter of understanding each other perfectly, in order to be able to better coordinate one's actions during the occurrence of a malfunction, a machine failure, a transport failure, a computer input error, etc. For this, the identification of the qualities of a communicator or even a negotiator when it comes to finding a common solution to a problem, guides the selection of staff performing the interface with suppliers and customers. On the other hand, the implementation of external socialization practices allow the development of a knowledge of the other, a shared representation of the situations encountered, a common language that promotes inter-organizational communication. This socialization can be natural, playing on the register of friendly links. This external socialization can also be encouraged by the practices of visiting the site; interpersonal meeting between correspondents or inter-organizational meeting. The attention is then particularly turned towards the improvement of the relation with the customer.

- **The adaptability of the human resource:**

The occurrence of a hazard requires that HRM decisions be made quickly, not only in the company where the malfunction occurred, but also in its suppliers and / or customers, or even in a wider area of the chain.

Hazards can be experienced and thus managed ex-post: it is "too late", the malfunction has occurred, for example a machine failure. In this case, HRM's decision taken by excellence is the release of overtime to make up for a delay in reaching the volume of production, which is reflected automatically on the downstream and the upstream in the absence of buffer stocks. The flexibility of the human resource is solicited in terms of its physical availability. However, this availability can only be ensured in the long term if the company offers compensation to employees, which goes beyond simply respecting the legal framework for hourly or financial compensation. The methods of recognizing the involvement in customer satisfaction can then be symbolic (distinction by framing, display, internal diary) or tangible (bonuses, criteria for scaling up, etc.).

In the automotive sector, for example, hazards can also be anticipated and therefore managed ex-ante. In this case, the redeployment of the production personnel and / or the order picking activity at the different levels of the chain may allow at the end of the chain to avoid a stop of the assembly lines. It is the anticipation of a break of subset or components that lead to reprogramming the order of vehicles passage and therefore the need for supplies. The decision to immediately redeploy the activity then supposes that two conditions are fulfilled:

– This decision is first possible only if you benefit from a versatile human resource, that is to say capable of working on different production positions. Training practices to increase the number of job vacancies are mobilized here.

– It is only acceptable if the urgency generated in the work situation does not constitute an excessive risk of accidents at work. When it comes to preparing an order or changing a mold in an emergency, the temptation to run in the shop or in the workshop is great; gestures are faster and the risk of getting hurt or hurting another is real. Action on improving working and safety conditions is then central.

7.4. The primacy of logistical imperatives

The primacy of logistical imperatives became possible thanks to an activity of HRM referring to the field of the participation of the human resource [16] which can be decomposed into two levers:

- **The development of logistics culture:**

The primacy of logistical imperatives is an issue of culture. Giving always the example of the automobile sector, the later is strongly impregnated with various values of which we retain: the rigor (in the production of the quality and in the respect of the delays), the desire for permanent progress (in the control and efficiency of processes), transversality (in order to ensure the coordination of flows), responsiveness (in dealing with hazards). The notion of customer satisfaction is omnipresent in each of these areas; it is the pivot around which the culture of the automobile is forged.

The participative management tools in particular make it possible to disseminate this culture, all the more so if they organize themselves around a project of the company: progress becomes everyone's business and transversal communication benefits from an infrastructure with participatory working groups. At the individual level, involvement8 and autonomy are sought to serve the same imperatives. The procedures for the reception of new recruits by the quality department, then the practices of enlargement and enrichment of tasks (quality control, first level maintenance) and evaluation are then the vectors of the logistics culture. Internal newspapers are also echoing the logistic creed. In a general way, all the practices founding a process of internal socialization can be mobilized.

- **The preservation of the social climate:**

The maintain of a good social climate over time is essential in any organization, but it is all the more so in the context of a tense flow, because any social drift immediately jeopardizes the activity. When work is in Just-in-time, the strike is proscribed. The directorates are therefore particularly attentive to their relations with the social representatives. While approaching their relationship with representatives in different ways, the HR managers of the various sites pursue the same goal: to avoid any relational degradation. The climate must also be maintained by balancing fees with contributions. Recognition becomes a major instrument for nurturing involvement. Even if; in the majority of cases; it remains more easily symbolic (verbal, via the internal newspaper or bulletin boards) than tangible. Only few companies offer variable compensation directly linked to participation in company projects and contribution to progress for the benefit of all employees.

8. How to adopt coherent HRM and SCM strategies in the light of the corporate culture?

Internal coherence between corporate culture and HR policies is a prerequisite for the conscious development of a successful supply chain strategy. The mismatch between culture and the HRM (transactional or relational) of a company makes it difficult, if not impossible, to develop and operate an efficient supply chain.

While achieving coherence seems to be an easy task, there are many factors that can prevent this outcome. First, the sharing of views, beliefs, and patterns of behavior is taking place over a long period of time and is therefore evolving slowly. Thus, it is not because the

company modifies its human resources policies to obtain a transactional or relational culture that the culture will follow instantly. Any transformation will take time. Secondly, the inadequacy can result from the fact that some managers are less able to implement the HR policies set by the company. It is likely that these executives do not have sufficient knowledge of these policies or managerial skills required. Finally, other factors than human resources policies influence the corporate culture such as: external pressures, internal potentials, reactions to critical events, experiences, environment, or members ... [2]. A single factor or combination of factors can therefore result in an imbalance between HR policies and an organization's culture. Thus, before choosing the strategies to adopt, some questions should be answered:

- **Are the human and financial resources required for the internal implementation of the desired strategy (transaction / relationship) met?**

Once the company has achieved cohesion between its culture and its policies, and has decided on its orientation, it must put this strategy into practice. Each strategy requires considerable and variable resources. For example, a relationship-based company will need to dedicate significant resources to recruiting the right employees, providing them with concrete and ongoing training, providing regular and complete information, and raising the financial resources needed to reward and compensate the employee. Not all firms are able to meet these prerequisites or find sufficiently qualified employees in the labor market to match their industry. Transactional strategies require a different set of resources. Because functions are narrowly defined, more employees may be needed. Having simple and repeated tasks performed by low-skilled employees can result in increased turnover. This result can in turn drive the company to invest heavily in machines and processes to stay competitive.

- **Do the cultures and human resource strategies of the other members of the supply chain allow the company to put its strategy into practice?**

The success of a company's logistics strategy depends in a part on the human resources strategy of other members of the supply chain. It is therefore essential that companies consider this issue and determine the potential position of supply chain members on the transaction-relationship continuum. The time that a company devotes to determining the orientation of a member of the chain will depend on the importance of this member in his eyes. Even companies that have adopted a relational approach with supply chain members are likely to conduct only a superficial survey of a non-critical member of the supply chain. For a critical member, the company will be able to obtain answers to the following questions by telephone, site visits and a review of its publications on HR policies and procedures: What are the qualifications of their employees? What training do they follow? How are they paid and evaluated? How complex are the tasks they perform? What is the turnover rate? The answers to these questions can be compared to industry standards [18] as well as to the organization's own standards. A company can then conclude if the expectations of the parties are compatible and can be met.

- **Does the company have the ability to set common standards and culture for its employees and its chain members?**

After concluding that the supply chain member has adopted the correct orientation, the company must be able to develop the appropriate standards between their respective employees. As mentioned above, there is often a mismatch between policies and practices, and a given direction can be implemented in a variety of ways. Two relationship-oriented companies can behave very differently. This is why the firm must know to what extent it can develop a common culture between its employees and those of the member of the supply chain, without taking into account the orientation (relationship or transaction) adopted. Companies that have a relationship-oriented network strategy can facilitate a common culture. For instance, firms can ask their employees to take training programs offered by other member companies on the circuit. Alternatively, new training programs followed by members of both companies can be created. Companies can also hold meetings and perform common social functions to enhance the stability of their crops. To facilitate relationships with chain members that are critical to the business, the company can also nominate someone who would serve the link full-time with these partners. Firms with a transaction-oriented network strategy do not necessarily need common training. However, it can still be helpful for all employees to understand the standards that govern their relationships with other employees, even when standards minimize communication and person-to-person contact.

- **What is the effect of the company's HR strategy on the total cost of ownership?**

A company's human resources strategy has a significant impact on total cost of ownership. This approach suggests that management should base logistic management decisions on all costs associated with acquiring, using and maintaining a good or service, and not only on cost related to each of these elements [19, 20]. This question of total cost can be examined from two different angles. First, management must consider the effects of the company's HR strategy on the costs of interacting with upstream and downstream supply chain members. Second, and more importantly, management should consider the effects of their human resource strategies on the overall cost of the supply chain. For example, if the transaction costs with a supply chain member increase, they can be offset by lower costs within the company. A company that has a transactional HR strategy may find it profitable to outsource certain activities to other members of the circuit. In addition, studying the HR strategy of supply chain members can lead to the decision to take on board transaction costs with some members of the circuit as this result in lower total supply chain costs.

9. The necessity of using a multi-criterion approach

On the basis of the above, it is clear that seeking for an harmonization between HRM strategies and those of supply chain management as well as the adaptation between the resulting practices is no longer easy to identify. Hence a multi-criteria approach for decision-making is highly appreciated.

9.1. Multicriteria analysis for decision-making

Analysis is a technical science dedicated to clarifying the understanding of a decision problem and solving it. It becomes multicriterion when the problem has several objectives, often contradictory. It is therefore an analysis that aims to explain a coherent family of criteria for designing, justifying and transforming preferences within a decision-making process. Multicriteria analysis is often called because:

• Because single-criteria optimization is often not reflective of reality
• For some problems, it can be sometimes dangerous to treat them in the optics of the optimization
• It helps to make a decision or evaluate several options in situations where no possibility is perfect
• It reconciles economic, design, technological, environmental, social aspects ...

Multicriteria approaches can be divided into three categories depending on how judgments are aggregated [21]:

- **1) Comprehensive aggregation (top-down approach):** We seek to aggregate the n criteria in order to reduce them to a single criterion. We suppose that the judgments are transitive exp: a> b, b> c then a> c
- **2) Partial aggregation (bottom-up approach):** We seek to compare potential actions or rankings and establish between these elements outranking relations. We must then respect the incomparability.
- **3) Local aggregation:** We look first at a starting solution. Thereafter, an iterative research is conducted to find a better solution.

9.2. Analytic hierarchy process applied to supply chain management

The Analytic hierarchy process (AHP), presented by Saaty [22], is an effective tool for dealing with complex decisions that can help the decision maker to prioritize and make the best decision. By reducing complex decisions to a series of two-to-two comparisons and then synthesizing the results, the AHP helps to capture both subjective and objective aspects of a decision. In addition, the AHP incorporates a useful technique for verifying the consistency of the decision-maker's assessments, reducing thereby partiality in the decision-making process.
In connection with the theme of our article, it has been proven that AHP applications can solve SCM problems. Indeed, Salomon et al [23] conducted a study where they presented two real different cases to which AHP brought important conclusions. Thus, the application of an AHP that takes into account the human resource management strategy that derives from the company culture will be an effective tool for decision making that aligns HR and SCM strategies.

10. Conclusion

HRM plays a key role in the success of supply chains. Directly involved in achieving the fundamental objectives of internal and external coordination of physical and information flows, reactivity to hazards, primacy of logistical imperatives, HRM allows the logistics project of the chain to be realized, both at the points of operational and strategic views.
As part of this, a company must consider the interaction between its human resources policy (relationship or transaction), and its logistics strategy (relationship or transaction) while taking into account the organizational cultures of other companies belonging to its supply chain. Failure to achieve this strategic alignment satisfactorily can lead to a reduction in the efficiency of the chain as a whole.
Thus, logisticians and practitioners of HRM have as many optimizations as arbitrations to find. They will therefore gain from mutually questioning their practices to make the supply chain more reliable. This collaboration can be geared towards improving the adequacy of HRM practices to logistical requirements. It can also, upstream, lead logisticians to think about the difficult conditions for implementing HRM
From a more practical point of view, hierarchical process analysis is a useful mathematical tool to take a decision that respects the company culture, the ambitions of supply chain management as well as the orientations of human resources management.

References

[1] P. Childerhouse, W. Luo, C. Basnet, H. Ahn, J. H. Lee, G. Vossen "Evolution Of Inter-Firm Relationships: A Study Of Supplier-Logistical Services Provider-Customer Triads", *International Journal of Industrial Engineering: Theory, Applications and Practice.* 20(1-2): 126-140, 2013.
[2] A. N. Shub, P. W.Stonebraker "The human impact on supply chains: Evaluating the importance of "soft" areas on integration and performance" *Supply Chain Management: An International Journal*, 14(1), 31-40, 2009.
[3] E. Schein, "Organizational culture and leadership" San Francisco: Jossey-Bass, pp. 83-89. And 1992, 2e éd; 1985.
[4] D. Blancero, L. Ellram," Strategic supplier partnering: A psychological contract perspective", *International Journal of Physical Distribution and Logistics Management*, 27 (9/10), pp. 616-629,1997.
[5] Cohen A: The traits of great sales forces. Sales & Marketing Management. Octobre 2000, pp.67-70, 72.
[6] A. L. Wilkins, G. William, Ouchi,"Efficient cultures: Exploring the relationship between culture and organizational performance"; *Administrative Science Quarterly*, 28(3), pp. 468-481, 1983.
[7] Weitz, Barton A, Sandy D, Jap: Relationship marketing and distribution channels. Journal of the Academy of Marketing Science. 1995, 23(4), pp. 305-320.
[8] Porter, E.Michael," Competitive strategy: Techniques for analyzing industries and competitors", New York: The Free Press. pp. 27, 124, 1980.
[9] Q. Elmortada, A. Mokhlis, S. Elfezazi, C.E. Mokhlis, "Evaluating the HR function as being a factor of supply chain performance: Case of industrial companies in Morocco", *MATEC Web of Conferences.* Vol 105. DOI : 10.1051/matecconf/201710500014, 2017.
[10] J. T, Mentzer, W. DeWitt, J.S. Keebler, S. Min, N.W. Nix, C. D. Smith, Z. G. Zacharia, "Defining supply chain management. Journal of Business Logistics", 22(2) 2001.
[11] J.Chen, L. Liang, D. Q. Yao, S. Sun, " Price and quality decisions in dual-channel supply chains", *European Journal of Operational Research*, 259 (3): 935-948. DOI : 10.1016/j.ejor.2016.11.016, 2017.
[12] A. Akacum, B.G. Dale, "Supplier partnering: Case study experiences", *International Journal of Purchasing and Materials Management*, 31(1), pp. 38-45, 1995.
[13] X.Wu, Y. Zhou, "The optimal reverse channel choice under supply chain competition", *European Journal of Operational Research*, 259 (1): 63-66. DOI10.1016/j.ejor.2016.09.027, 2017.
[14] A. Aktepe, S. A. Ersoz," Quantitative performance evaluation model based on a job satisfaction-performance matrix and application in a manufacturing company", *International Journal of Industrial Engineering: Theory, Applications and Practice*, 19(6):264-277, 2012.
[15] E. K. Choi , H. W. Joung, " Employee job satisfaction and customer-oriented behavior: A study of frontline employees in the foodservice industry", *Human Resource Hospitality and Tourism.* 16 (3) : 235-251. DOI: 10.1080/15332845.2017.1- 253428, 2017.
[16] S. Claye-Puaux, " Le succès des chaînes logistiques amont tendues : Le rôle de la GRH ", *Logistique & Management*, Vol. 12 – N°1, 2004.
[17] H. Mahé de Boislandelle , " Gestion des ressources humaines dans les PME", Economica. 1988.
[18] Stewart-Allen, L., Allyson, "Onion' a fine approach to Euro Alliances", Marketing News. 35(4), pp. 2, 2001.
[19] Z. Degraeve, F. Roodhooft, "Effectively Selecting Suppliers Using Total Cost of Ownership", *Journal of Supply Chain Management*, Vol. 35, pp. 5-10. 1999.
[20] Ellram, M. Lisa, "Total Cost of Ownership: Elements and Implementation", *International Journal of Purchasing and Materials Management.* 29(4), pp. 3-12, 1993.
[21] Schärling, Alain, "Décider sur plusieurs critères, Presses Polytechniques Romandes, 304 pages, 1985.
[22] T. L. Saaty, "The analytic hierarchy process: planning, priority setting, resource allocation". New York/London. McGraw-Hill International Book Co. 1980.
[23] V.A.P. Salomon, L.T. Claudemir, F.A.S. Marins; "Analytic Hierarchy Process Applied to Supply Chain Management. Applications and Theory of Analytic Hierarchy Process Decision Making for Strategic Decisions", INTECH, http://www.intechopen.com/books/applicatio ns-and-theory-ofanalytic-hierarchy-process-decision-making-for-strategic-de cisi ons; 2016.