

Linking Ergonomics with the Human Resources Management

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“The quality has two sources: the management and the Ergonomics and their complementary provides the dynamics in the context of the controlled disequilibrium”

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Abstract

During the last years, ergonomics became one of the reference domains in the managerial theory and practice. Ergonomics is a major component of the human resources management and also, it is an important factor of performances.

Ergonomics is the link between efficiency, effectiveness, security and health and in this context it is necessary to approach the ergonomics and its impact on the process of the organizational development and on the employees.

The links between ergonomics and Human Resources Management are important not just from the methodological perspective; it is necessary to analyze its impact on the organization. So, in this context we could say that ergonomics contributes to the development of Human Resources Management in many ways. Therefore, ergonomics must become one of the major interests of the managers.

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JEL classification: M12, M10

1. Assumptions

Understanding and studying the link between ergonomics and human resources management [8] requires knowledge about the evolution of the organizations, about the organizational design and the evolution of management, especially about the evolution of the human resources management.

According to the specialists, the human resource management is a major component of the management, and the ergonomics is a major component of the human resources management. Therefore, it is necessary to study and to understand the links between ergonomics and management and the links between ergonomics and human resources management. Hereby, the organizational management, the

human resources management and the ergonomics, represent the decisive factor that is influencing the behavior of the employees for performance.

It is important to note that during time, the interests and the practices in the human resources field required to set up new requirements and principles for the organizational design and work, both to design the jobs and products, also [6].

Also, the development of the human resources management is a process which its temporally and spatial coordinates and characteristics are influenced by many objective and subjective factors and we have to underline the fact that the evolution of the interests in this field had many different stages and their main characteristic is **the way that the man and its duties and activities were studied and understood**.

Even if not always, the human aspects of the work were observed and understood, the new and the **modern era of the evolution of the human resources management is characterized by the fact that it brings ergonomics in the forefront**.

Ergonomics can not be ignored for a long time.

FRANZ SCHNEIDER

This statement must be taken into consideration because, moreover many specialists, like **S. R. Bridge** [2] believe that the **negative consequences of breaking the requirements of ergonomics are still persisting today in some modern organizations**, where few managers are feeling responsible for the ergonomics requirements of their activities or of the organizational designing. Additionally, according to the specialists, sometimes a manager could face with some difficulties trying to understand and to apply the ergonomics requirements in its organization, because he just don't know about these kind of requirements or these requirements are not applied on his workplace.

Therefore, according to the ergonomics literature [3], some specialists are underlining an important trend in the human resources management which is showed by **the major role of the ergonomics in designing the workplace environment** and this it will have **some major consequences for the managers, who should try to make the work more pleasant for their employees**, which should be motivated to do their work better and more effectiveness and to increase the work productivity.

The motto of **The 17th World Congress on Ergonomics of the International Ergonomics Association, Beijing, 2009** is promoting a very closely point of view and it was inspired from the economic, social and political facts, because they are generating many **changes** in the organizational processes and activities, **new challenges** which must face on and **new opportunities for the transition of the ergonomics research into practice** [5].

Motto:

“Changes, Challenges and Opportunities”

The 17th World Congress on Ergonomics of the International Ergonomics Association, Beijing, 2009

These assumptions are representing the first step **to show the links between the ergonomics and the human resources management** and for this, many specialists are asking the following **questions**:

“What’s the **future** of the work?”
“How is the future of the **people** in organizations?”
“What **price** must they pay?”

FRANCOIS HUBAULT

Some specialists in ergonomics like, **Francois Hubault**, who are studying the importance of the human value, for the organizations and people, both, consider that the matching between the ergonomics and the management or between the ergonomics and the human resources management is well argued and justified, and it brings new **professional challenges** [9].

2. Interactions between ergonomics and human resources management

There is no future for an organization that has a policy based on the exhaustion of only one kind of resources.

The man has a plasticity that is missing to the lifeless substance, but it can’t be, as some specialists note, an inducement for a chaotic use of human spirit.

Although, the man has large adaptive possibilities which allows him to develop his sensitive, perceptive and intellectual abilities, he has never really adapted to the exigencies of his work. Ergonomics launched, from the beginning, some debates and analyzes that are continuing today too, defending some points of view and promoting a **way of thinking** or “**the culture of safety**” which could assure a successful management [10].

That is as much as to say that de referential used to explain the performance is considerable modified because it aims at the procedure for the performance appraisal that allows to the organization to define and to be managed not only by its objectives and products, but by analyzing how those objectives and products are achieved, respectively the people’s works and efforts. Much more, some specialists are saying that **in fact, working means to manage** [9] a stress caused by a **double exigency**:

- **the effectiveness and the efficacy** of the organization (the rate task-performance);
- **the security and the health** of the employees.

In our opinion, we are sustaining the specialists that are saying that the work could not be reduced to those two mentioned exigencies, because **ergonomics is concerned, specially, by the link between effectiveness, efficacy, security and health** and this link could show a key perspective for the human resource management.

Thereby, the development of the organizations and of their employees should allow **having effectiveness, safe and health work**.

We must pay attention to some **principles**, derived from the **health of the organization concept** [1], for example:

The organizational health is influencing the health of its members.
The personal health is influencing the organizational health.

Some specialist like **C. Anyaeche and K. M. Oluwanimifise** who participate to **The 17th World Congress on Ergonomics of the International Ergonomics Association, Beijing, 2009**, underlined:

A healthy employee could obtain the expected performance if he is working in a **healthy environment**.
The 17th World Congress on Ergonomics of the International Ergonomics Association, Beijing, 2009

From this perspective, **the health of the work** represents a **result** of the activity, **a success** of the organization, specially when it is approached a global perspective or **a total quality of the well done work** beyond the economic criteria.

Thereby, the **psychological contract** is encouraging the continuous development of the relation between the organization and the employees, and according to **Spindler** (1994), this relation is bearing feelings and attitudes that are influencing and controlling the people's behaviors.

For some specialists, like D. Guest (1996) "a positive psychological contract must be taken seriously because it is influencing the organizational engagement and the employee's satisfaction on a higher level.

At the same time, **breaking the psychological contract** will show that the organization and its employees never shared or are not sharing the same values or objectives.

In fact, the link between ergonomics and the organizational management could be described taking into consideration the content or the components of these two scientific domains, and not least, the functions of management, because they are essential for the ergonomics, as **Waldermar Karwowski** said [8].

If we are taking in the first place one of the functions of the management, e.g. the **controlling-evaluation function**, which, according to the specialists in management, must respond to the question: "What are the results of the work" [7], but we must underline that this function must **become a real way to ensure the convergence of the results and the behaviors (Fiol & Lebas, 1992)**. That is as much as, the human being has its own structure, culture and mentality, and become a **biological entity** and it is always "**the big unknown**" that could break or sustain the organizational processes.

These arguments sustain the idea that **ergonomics is part of the human resources management**, needed to analyze, to design and to evaluate the complex

organizational systems within the employees interaction with the modern technologies, but, according to **Alvaro D. Taveira** and **Michael Simth** it is necessary a high level of integration of the organizational design and of management.

Otherwise we are assisting to the attempt to modify an **outlook that ergonomics is trying to correct it** and at the same time ergonomics is bringing a change of matter (**Francois Hubault**).

Actually, some specialists in ergonomics [9] are saying **that ergonomics** represents a challenge for the **human resources management**, because **ergonomics is a way to manage oriented to work**, and this is one of the major interests of the managers.

The link between **ergonomics** and **the human resources management** has a big importance not only from the conceptual and methodological perspective, mainly due to its direct effects generated at the organizational level. Managers are accepting, without doubt, that their affairs are flourishing on the long term, only if the interests of the employees are integrated in the organizational and strategic decisions.

In many organizations, the human resource function, support of organizational management, is developed like a system with its own objectives. Most of the performed human resources managers are focusing to ensure the balance between the need for the economic performance and the need for the social performance, otherwise between the work productivity and the work satisfaction. At the same time, the human resources managers are trying to attract, to develop and to retain the human resources in the organization to perform the targeted objectives. This way, they put into practice the principles of ergonomics.

Most of the researches about using the ergonomics in the human resources management are related to job design, due to the need to obtain economic results, due to the need to ensure the comfort in work and due to work legislation. During the time, the effects of the ergonomics are extended to the other domains of activity, for example:

- to approach a large perspective and dynamic vision in establishing the strategic and tactical objectives of the organization and integrating the objectives of the ergonomics at the organizational level;
- to establish and determinate the different type of the labor processes (functions, activities, attributions and tasks) by using ergonomics;
- to increase the role of ergonomics in the process of the organizational design for each department and job;
- to use ergonomics to ensure the congruence or the correspondence between the official authority (the competence of the job) and the personal authority (competence of the job holder);
- to respect the requirements of the ergonomics' principles in the decisional process;

- to recruit & to select the candidates using criteria like: the individual competences, abilities and qualities, to ensure the right people in the right place;
- to diversify the training programs so that the employees should acquire the needful knowledge for their work;
- to retain the employees for the long term into the organization, by ensuring the ergonomic work conditions;
- to sustain the investments to improve the working conditions;
- to develop some programs to ensure safety and healthy working conditions;
- to adapt the working programs based on the work capacity and personal needs of the employees, without influencing negatively their results;
- to establish and to use the working rules, that allow to the employee to perform the targeted objectives;
- to design the career tracks based on the scientific principles that are not ignoring the biological evolution of the man and its potential to perform some targeted results.

Although all these evolutions approach ergonomics and human resources management, the options that the organizations have to put in practice the ergonomics concepts and principles are too expensive and this explain why not all the managers are seeing these things in the same way; so the budgets used for this are very different from one company to the other.

At the same time, the human resources management is necessary when the manager has cleared all the technical solutions to resolve the working problems, because the human resources management approaches the working problems in key terms, for example, “**behavior**” or “**compatibility**” in an extended way, **Llory** (1996).

The main difficulty regarding all the previous problems is that between the specialists in human resources management and the specialists in ergonomics, is missing the understanding of work from the ergonomics requirements and the understanding that **facing on the work** is allowing to the organization to satisfy their own encounters with the market.

In the specialized literature, most of the authors are thinking that **to work** means to concern about the possibilities to see some **real events and problems** and this means that the **real work** is regarding what the worker is doing, but at the same time what the worker can't do, what he is not doing and what he must do.

Accordingly the ergonomist could demonstrate that there are some imperceptible tasks that, according to **Javier Llana Alvarez**, weren't taken into consideration in the process of the job analysis and design by the specialist and these imperceptible tasks require additional efforts from the responsible with the work place safety and security. The main aim is to prove to the managers of the organizations that they must take into consideration the ergonomic requirements no just because it is compulsory, but because it is important for their organizations.

This means that the ergonomics **should have an important contribution to the improvement of the human resources management** from the perspective of the real work and of the role of the human in the modern organization.

Therefore, the link between the ergonomics and the human resources management should base on the organizational analysis to facilitate general denominator for the interests of the stakeholders.

In the ergonomic literature, the specialists are saying that **ergonomics** should exceed the false similarity with the working conditions that limits its content.

It is necessary that **ergonomics** should be known, understood and expanded more and more as a **prevention discipline** that has the **natural trend and intention to integrate in the management of the organizations** and this means that **ergonomics** should be studied from the **global perspective** [1].

J. Cristhol has a similar opinion and he is underlining that **ergonomics must be translated globally**, because there are many similarities between the quality of the working conditions and the quality of the products, between the effectiveness and comfort of the tasks performing and this way we are trying to show the transcendental aspect of the speech of the organizations, namely **quality is a factor of competitiveness**.

In his papers, **Javier Llaneza Alvarez** underlines that if we are talking about quality we can not neglect **the quality of the working conditions** or **the quality of the professional life**, because this way of thinking means to recognize the evolution of the human outlook about work and its modern mentality, too.

From this perspective, the human problems don't have to be taken into consideration only when we are facing with specific problems to resolve (employment, working accidents, professional illness, unemployment) and even when we are facing with disturbances in the production process, **it is necessary to treat the human problems continuously and preventively, not episodically and curative**.

If we promote this conception in the organizations, ergonomics will be understood as a **preventive discipline**, not as an obligation imposed, rather one of the human resources activity that contributes to the promotion of the **total quality management** and **total safety management** [1].

Ergonomics plays an important role in the process of organizational improvement: on the one hand, ergonomics improves the quality and the work effectiveness and on the other hand, ergonomics improves the integration process of the new employees.

The ergonomic applications do not have to be understood as a stand-alone problem, rather from the organizational strategy perspective and as a key factor of the competitiveness.

J. I. LOPEZ DE ARRIORTUA

Other specialists, like **J. Dul and P. W. Neumann** [4], have similar conceptions about the role of ergonomics and at the World Congress on Ergonomics, they declared:

At the present it is necessary to **integrate ergonomics in the business strategy of the organization.**
 The 17th World Congress on Ergonomics of the International Ergonomics Association, Beijing, 2009

Conclusions

All the problems debated in this paper are based on the conception regarding the organizational reality and the aim is to achieve the convergence of the production, effectiveness, security and safety criteria. Hence, **ergonomics is linked to the quality needs.**

In conclusion, it could be underlined **the contributions of ergonomics to the achievement of the total quality** [1] (figure 1).

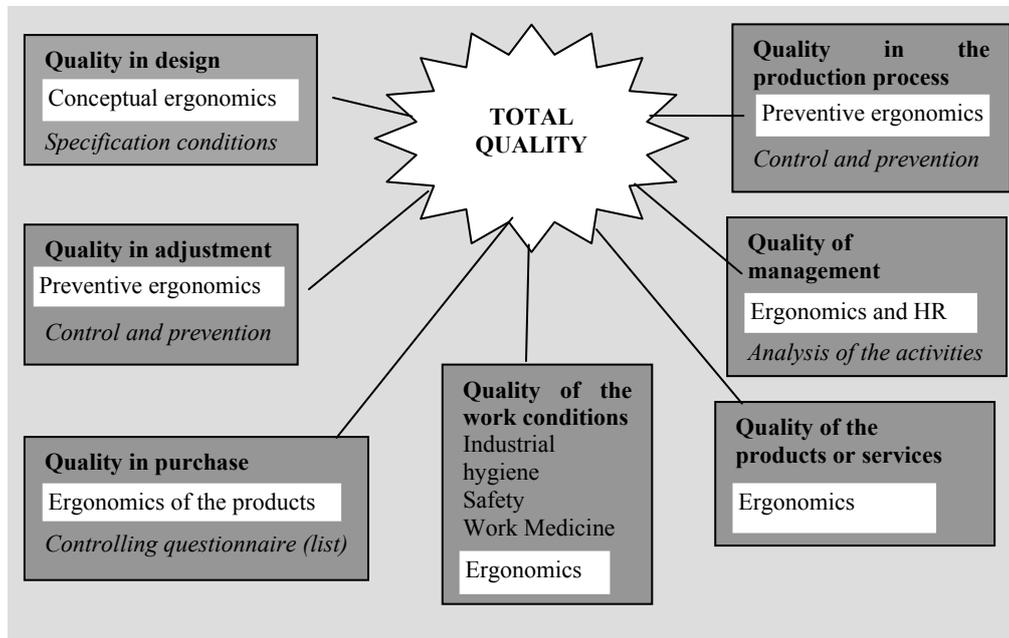


Figure 1 Contributions of the ergonomics to the achievement of the total quality (after Javier Llaneza Alvarez)

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