

MANAGEMENT AND THE HUMAN RESOURCES INFORMATION SYSTEM – A TANDEM TO PERFORMANCE

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ABSTRACT

Most management specialists have delineated the manner in which information science has supported human resources structures in their emancipation efforts, regarding it as a factor for progress given its positive effects upon productivity, enhancing services and decision making, strengthening connections, assigning competences throughout the entire enterprise and on increasing their forecasting capability.

The evolution of the interconnectedness between human resource management and its corresponding information systems on the path to achieving organizational performance enables a clearer retracing of their past, a better understanding of their present and the anticipation of certain developments that are beneficial for companies in responding adequately to the new challenges posed by the concepts of quality, social responsibility and sustainable development. The goal of this paper consists in drawing up such a course of action, which sets out to mark out the path to emancipating the human resources function and the way in which its involvement can make a difference, as well as quantifying and enhancing added value for the enterprise.

KEYWORDS: *human resources, information system, newly created value, performance, measurement*

JEL CLASSIFICATION: *M 12, M 21, M 50, M 51*

1. INTRODUCTION

HR function should, in the new competitive environment, to prove its effectiveness. At his disposal is an information system more or less computerized to support it. The evolution of this system depends on the richness of its components and the way in which specialists in human resources management and informatics know how to structure it. The use of this system in activities with transformational character offers greater participation in decision making and strategic processes. One of the main purposes of the paper seeks compatibility of human resource information system with one of the basic tools of the strategic process, namely the Balanced Scorecard.

The methodology of research includes general and specific approach regarding the concepts, tools, models and methods of enhancing the contribution of human resources function to the organizational performance. With an exploratory character, this paper proposes also the identification of new ways that human resources information system can meet information requirements of the Balanced Scorecard.

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Computerization is generally perceived as an organization action that corresponds to a particular inventory and management objective. In management, the same set of tools can produce different results, depending on the ways they are set into practice. The quality of an approach is just as crucial as the tools that are being used. Therefore, from the perspective of the inventory specialist, it is not information science, but computerization that matters the most, namely the action of automating the set of operations of a particular activity in the aim to achieve better efficiency.

Any information system consists in both formal and informal components. The formal information system is visible by means of the documents it generates by applying explicit rules and procedures. As far as the assignment of organization roles, functions and tasks are concerned, the information system is less dependent on the individual. The informal information system, which is just as crucial for the enterprise, leaves less visible traces and focuses on looser rules and implicit procedures.

Should the expansion of information science within a particular field of inventorying face any difficulties, this is due to the efforts of extending the formal portion of the information system. This extension involves reflecting carefully upon the best ways in which to organize, and more importantly, to clarify and access information and the operating rules. However, this clarification of and access to information are never straightforward and easy to achieve (Pichault, 1990). Automation also involves promoting an action of change. The automation of human resources activities has a specificity of its own, in the sense that the information on individuals cannot be treated the same as information on objects given the existing rules of confidentiality that protect them.

3. THE HUMAN RESOURCES ACTIVITIES AND THEIR CORRESPONDING DATA PROCESSING APPLICATIONS

The tendencies observable in the recent years reveal the pursuit of enterprises to achieve the highest level possible in human resources management, owing to a more intensive integration of its activities and functions and to the contribution of new information and communication technologies (Gilbert, 2003).

Typical human resources programs integrate aspects such as financial bookkeeping, recruiting, selecting, training staff and the relationships with and between employees, as well as financial compensation. However, not all these programs entail multiple activities, and the human resources activities can be classified into three basic categories: transactional, traditional and transformational (Wright, McMahan, Snell and Gerhart, 1998).

Transactional activities refer to day-to-day transactions that mainly deal with bookkeeping – i.e. running in salary data, monitoring status information throughout the staff and managing employee benefits. Traditional activities include human resources programs such as planning, recruitment, selection, training, wages and performance management. From a strategic point of view, these activities can bring increased value for the organization if their results are congruous to the strategies goals of the organization. Transformational activities refer to those activities with a direct contribution to boosting organization value – i.e. implementing cultural or organizational changes, structural realignment, strategic redirection and enhancing innovation.

This way, transformational transactions enhance the strategic importance and the exposure of an organization's human resources function. As illustrated in figure 1, this gradual change becomes gradually more apparent as one follows the historical evolution of the operation and the human resources management throughout the five stages of the industrial advancement in the USA.

Figure 1. The historical evolution of human resources management

The role of human resources management	
The beginning of the XX century	The XXI century
Decision maker	Strategic partner
Focused on the employee Recordings	Cost efficiency Staff development

Wright et al. (1998) estimated that the majority of human resources departments spend around 65–75% of their time carrying out transactional activities, 15–30% carrying out traditional activities and 5–15% carrying out transformational activities. The major advantage of designing, developing and implementing a human resources information system consists in the ability to save time when handling transactional activities, thereby allowing the employed staff to allocate more time to traditional and transformational activities.

As far as the mission of human resources management is concerned, Ulrich (1998) assigns to it four fundamental roles: strategic business partner, administrative expert, champion employee and exchange agent. Ulrich, Younger and Brockbank (2008) emphasize the fact that in the XXI century the human resources function should operate as a business within another business. To achieve that, it becomes necessary for the said function to place its activities in the background in order to focus on results, capabilities and its own structure so that it can achieve the most accurate projection possible for that particular business.

Gilbert (2003) considers that the procedure of automating the processes specific to the human resources function remains within the reach of traditional and transactional activities, while the efforts to involve it in the realm of decision-making, although intensive, have failed so far to produce the anticipated outcomes. When describing the applications characteristic to management automation and human resources administration, the author accounts for three distinctive groups, namely the generic ones: the internet, the intranet and the decisional instruments.

General applications and their recent development. The core of the information science market for human resources management is always centered on products that cater to the crucial administration requirements in a basic manner, for instance the administration of staff and wages. Enterprises and even organizations in the public sector have been turning increasingly more on standard information technology programs that, thanks to their convenient purchase prices, are much more affordable than their customized counterparts are.

The most prominent packages are the ones aimed at integrated management, which address the entirety of functions within an enterprise. They are intended for managing an assembly of functions, connected in real time, based on a unique referential. The data is interconnected and any modification automatically triggers a chain reaction.

Internet and Intranet. A better coordination of human resources activities is achievable using information technology instruments that are more advanced and focused on conviviality, communication and processing power. In this context, program package designers propose a new approach to human resources administration and management, based on harnessing the internet network, sometimes also referred to as e-MRU. This translates to the setting up of internet booths within the enterprise, particularly of interactive databases dedicated to managing staff data. For the human resources structure, this free access authorizes the constant renewal of staff data. The enterprise staff can also access the data that concerns them directly.

When it comes to managing human resources, the Internet is used increasingly more for the recruitment activity. The largest part of today's enterprises have intranet. Gilbert (2003) already

distinguishes between three types of intranet throughout the enterprise: informational intranet, professionalization intranet and production intranet.

The informational intranet is aimed at showcasing generic or specific data, either recurring or marking out specific events, that is dedicated to the large public and, most often, to the staff assembly of an enterprise. Recurring data, such as the presentation of an enterprise, only requires little maintenance, with a predefined periodicity and less frequently, while event data have, by their nature, a shorter lifespan and require a more frequent generation, since they are only interesting while they are fresh.

The effects that this type of intranet has on the organization are minimal, since it tends to preserve the structure of the enterprise and to reflect the preexisting function. However, it is possible to use it to speed up certain work processes if the data reaches the employees more quickly.

Professionalization intranet is destined for a particular segment of the staff, namely the one operating within the human resources structure, and is aimed at highlighting knowledge and rules that are specific to the function of human resources management and administration. Unlike the informational intranet, it entails laying down a project for the targeted customers or the human resources specialists in advance. The objective can be to set up a network if there currently is no such network in place, one that enables its members to know one another and to exchange new information, to expand an older existing network and to enhance its function by achieving electronic data exchange instead of holding classic meetings, etc.

The list with specific applications includes the flow chart of the human resources function with the description of the roles and tasks of the respective specialists, the event calendar in which the latter are involved (nominations, relocations, structural modifications, congresses, conferences and so on), the specific rules and procedures, the presentation and technical description of available services and products, as well as on-site training.

The production intranet translates to making available the inline resources that enable collaborators to handle administration and management documents more efficiently, which can entail taking over an order, paid leave requests, training requests, processing expenses to fulfill the mission, etc. In the light of that, this type of intranet uses the workflow and groupware functions to contribute to formalizing, capitalizing, harmonizing and automating management processes. The direct effects include the reduction of costs and deadlines and enhancing the quality of administrative documents. The production intranet stands for a higher level of technical and organizational complexity, not only under the incidence of the prerequisite analyses it demands, but also through its constant need for maintenance. It encompasses the decentralized recording of payment variables, tracking paid leaves, manufacturing costs, workplace stock markets for the direct registering of applications, etc. Considering it offers cost-effectiveness for a large number of transactional information science services, the production intranet facilitates substantial financial gains.

Decisional instruments. Information science programs designed for establishing the social budget and a more thorough data analysis are currently being used on a large scale in human resources management. Some decisional instruments, including flowcharts, are adaptable to all the fields specific to the human resources function and enable simple or complex simulations with a role in testing staff forecasts, salary policies, tracking absence rates, or the costs of various social measurers by testing multiple different hypotheses.

Among the automated human resources activities, the provisional management of the staff and competences holds an important role, although not in the entirety of its sequences. Information science functions provide great support for study initiatives such as statistic measuring, multi-criteria selection, projections and simulations, comparative processing etc.

In terms of their actual outcomes, such instruments can handle data storage and the recording of data manipulation results. However, the decision-making and organization activities have little to gain from data automation, which has no sensible impact on this section (Piganiol-Jacquet, 1994).

4. THE EVOLUTION OF THE HUMAN RESOURCES – HUMAN RESOURCES INFORMATION SYSTEM TANDEM

An analysis of the studies conducted in the last 10 years reveals that a large majority of authors envision the different evolution stages of the human resources information system based on a similar temporal pattern. Just (2010) considers it possible to delineate the history of the human resources information system by means of two courses of evolution. The first one is the evolution of human resources management, the second one is the automation of the human resources function. To these two evolutionary branches, Silva (2008) adds the evolution of newly developed information and communication technologies.

Just further classifies the evolution of the human resources function into seven different stages, starting with 1870-1900 (it is the owner who exercises the function, which doesn't exist in its classic sense), 1900-1914 (the emerging of the function, Taylor), 1914-1918 (the development of social regulations, training, recruitment, apprenticeship), 1918- 1945, 1945-1960 (the thirty glory years), 1960-1980 (social legislation continues its development, other aspirations emerge among the population – communication and fulfillment, the pursuit of work satisfaction), after 1980 (an increasingly strategic function owing to the decelerated pace of the economic growth, the development of international competition and technological mutations; the function is perceived as being strategic and, in order to accomplish its goals, it needs to work with the operational responsible persons).

Just (2010) suggests drawing up a parallel between the evolution of the human resources function and the evolution of the human resources information system:

- ❖ *The stone age: the payment program.* In 1960, the computer replaces mechanography. Between 1970-1980, the users become better acquainted to information science and begin to orders. During this period, there emerge the first parameterizable applications and the payment package.
- ❖ *The bronze age: the human resources program.* In the mid 90's there emerge new problems along with the increasing complexity of handling payment. The payment has to be fed through other peripheral systems and the editors diversify their offers by enriching them with innovating processes. There emerge inquiry instruments and the era of information science culture begins. By the 1990's, payment handling has made significant progress, and so has the management of time and activities. The administrative management of the staff represents the driving force of the human resources information system. Training is the new resultant.
- ❖ *The iron age: the human resources information system.* Starting with the year 2000, there emerge two types of architecture within the enterprise: the individual program or the merging of multiple specialized programs by means of a common interface. These two architectures enable, either in the same manner or by different approaches, the managing of the integrality of human resources processes. This point in time marks the dawn of the "e-human resources" era, which opens up the access for new different actors. The human resources information system receives the letters of nobility. By the year 2000, new driving factors come to revolutionize the world of the human resources information system: the fear of the demographic shock and the uncertainty of resuming the activity. This last tendency drives the leadership of human resources to become involved in employee mobilization, which goes through a stage of better understanding competencies. Consequently, the difficulties posed by the recruitment render internal mobility as an important priority.
- ❖ *The gold age* is currently in progress, although numerous uncertainties arise. It seems as though the human resources information system has been explored and harnessed to its

full potential, technological breakthroughs still emerge, which will continue to unsettle the function. The new requirements are now connected to the communication possibilities through an increasingly complex interface. The answer to these requirements is likely to come from the service-oriented architecture (SOA), which consists in clipping the functionalities of an application or a system into "profession/position (job)" services that can be reused as part of other applications or systems.

New horizons for the human resources information system are brought about by its capabilities to open up to a multitude of actors. While the human resources information system was, at the beginning, accessible only by trained users, its "open" variant is on the brink of becoming a system that can be accessed by everyone.

Kavanagh (2013) offers a less dense retrospective in terms of the stages retained in the historical evolution of the human resource management and its information system. The analysis encompasses both the development of human resources and the means of information and communication in terms of their evolution and interconnectedness since the beginning of the XX century. She describes the way in which the information and communication technologies have played an increasingly important role in the management function and in managing human resources.

1. *Before the Second World War.* At the beginning of the XX century and the Second World War, the personnel function was limited to holding a basic inventory of staff information. The law initiatives in the field were scarce, so that the leadership departments of organizations drew up the employment terms and the work practices and conditions themselves. Some employers set the grounds for social work (labor welfare) and established administrative departments to defend the interests of the workers by recording information on healthcare and safety, but also on working hours and payments. It is interesting to note that the written bookkeeping represents one of the major functions of the human resources information system, since at that time there was no computer technology to assist in registering data. Script recordings (on paper), which many small companies still employ today, were widely spread.

2. *The period after WWII (1945-1960).* As a response to the need to categorize the large number of individuals in the military service during the war, there emerged occupational categories, undertaken to improve the process of recruitment and the selection of procedures. The central aspect of these classification systems was the job description, which could also be used to design adequate repayment programs, to assess the performance of each individual and to provide a basis in the event of a potential separation from the individual.

The labor unions, which were established as a response to the often abusive work practices before the war, led to the issuing of a sensible number of labor laws in the USA, so that the staff departments began to carry out more record and reporting work to satisfy the requirements of government agencies.

Along with the changing and extension of its role, the staff department began to maintain an increasingly larger number of employee records, and the information science technology was being considered as a potential solution to recording and gathering information about the employees.

In some cases, for instance in the defense industry, the job analysis and the classification of information were being compiled into computers in order to better understand, plan and make use of the abilities of each employee according to the needs.

During this period, the staff structures outside the defense industry usually only used electronic computers for billing and inventory control. These computers were rarely used inside the staff function, with the exception of setting up payrolls.

3. *The social problems era (1963-1980)*. The unprecedented increase in the number of law implementations for regulating the labor law in the USA led to a burdening of the staff structure with the additional responsibility of conformation, which involves efforts of collecting, analyzing and reporting huge amounts of data to the state authorities. Therefore, the need for automating the processes of data gathering, analysis and reporting become mandatory. During this period, the staff compartments were being gradually referred to as human resources compartments, which marked the emergence of the human resources management field. The growing need to comply to the large number of employee protection laws, whose evasion ensued substantial financial penalties, caused managers to acknowledge the true value of human resources management. At the same time, the breakthroughs in terms of computer technology were increasingly encouraging the use of automated systems that ensured a higher level of productivity and lower costs. These technological breakthroughs, along with the intensified activity in the specific market, have supported the development of an encompassing information management system (IMS) for human resources. The decreases in the costs for computer technology, as opposed to the increases in the costs for compensations and financial benefits for the employees, rendered the acquisition of automated human resources system as increasingly feasible. However, the pace at which the staff compartments were adopting computer technology was slow, despite their cost-effectiveness compared to the computation power they offered by storing and accessing information on the employees and their capability to generate efficient and effective reports specific to information management systems. Therefore, during this period the main obstacle in the development of information management systems for human resources mostly consisted in the need to identify an optimal method for the implementation of such systems, and less in the necessity of such systems or their technological capabilities.
4. *The age of profitability (1980 – the beginning of the 90's)*. On the premises of the intensified competitiveness of the Asian and European economies, the companies in the USA and other multinational companies focused increasingly on the reduction of costs by means of automation measures, as well as other measures aimed at boosting productivity. To enhance the efficiency and profitability in providing services through cost reductions and by using value added services, the human resources structures were compelled to harness the already existing information technologies that in the meantime had become cheaper and more solid. Additionally, at the managerial level there emerges a belief that the entirety of human costs represents a substantial segment of a company's budget. Certain companies estimated that their personnel costs rose up to as much as 80% of the operation costs amount. Consequently, there was a clear need for the human resources management to be able to justify effectively the costs attached to the human resources function. Cascio (1984) emphasizes the fact that human resources represent a key factor in running a business, and that the human resources managers need to consider this aspect. The managerial opinion on utilizing computers in human resources departed from the idea that their use could cause a decrease in the number of employees within the human resources departments and focused instead on the fact that the activities and time resources of the employees could be redirected from the handling of transactional bookkeeping to other activities with a clearer defined transformational character that could bring higher value for the organization. This modification operated within the human resources management could later be measured very clearly by reporting the cost-to-benefit ratios to the net profits of the company.
5. *The age of technological progress and the emergence of strategic human resources management (1990 to the present day)*. The economic context suffered radical changes over the entire decade of the 90's, on the grounds of the intensified globalization tendencies, technological progress (primarily in terms of network services provided through the internet) and hypercompetition. From that point on, organizations have become aware of the fact that innovative and creative employees, which hold the key to the organizational expertise, represent a sustainable

competitive advantage. This is because, unlike other resources, they represent a type of capital that is difficult to replicate by the competition.

As a result, human resources management become strategic owing to its importance and to the perspectives that opened up for it, and focuses on attracting, maintaining and using professional talent. These breakthroughs led to the creation of balance scorecard-based performance assessment systems (Becker, Huselid & Ulrich, 2001; Huselid, Becker & Beatty, 2005), which greatly emphasize the importance of the return-on-investment factor in human resources and its corresponding programs (Cascio, 2000; Fitz-Enz, 2000, 2002).

The ever more frequent use of information and communication technology and the shift in focus of human resources management, which, over the years, has been focusing a lot on monetizing its services, has led to the transformation of the human resources structure into a strategic partner.

The increased awareness of the importance of the individual and its management within the organizations of today and their increasing recognition, respectively, have caused the strategic resource management to assume a crucial role in the field of management, both theoretically and in practice. The theoretical background of strategic human resources management is in perfect harmony with the resources-centered vision of the enterprise, which utilizes human capital as a strategic asset, perceiving it as a competitive advantage in the efforts to improve the organizational performance (Becker & Huselid, 2006).

Reflecting this perspective centered on resources, Becker and Huselid (2006) point out to the importance of the human resource structure and its system, as well as "the systems, methods, competences and the performance-centered conduct of the staff, which reveals the development and management of the company's strategic human capital" and its importance in achieving organizational performance.

The present context constitutes a crucial element in human resources management. Because of that, researchers have been focusing increasingly on the "best-fit" approach in the strategic human resources management as opposed to the "best-practice" approach. The success rate of the strategic human resources management depends on a number of factors, including the national and organizational culture, the size of the organization, the type of industry, the occupational category and the business strategy. Becker and Huselid (2006) are of the opinion that "the main prerequisite for the human resources management to contribute in achieving competitive advantages consists in the agreement between the human resources architecture and the strategic abilities and processes that translate the business strategy into practice".

5. ASSESSING HUMAN RESOURCE PERFORMANCE – THE CONTRIBUTION OF THE HUMAN RESOURCES INFORMATION SYSTEM

Another crucial issue pertaining to strategic human resources management consists in adopting and using business performance measuring systems in the field of human resources (Cascio, 2000; Lawler & Mohrman, 2003). Every department of an organization (production, marketing, financial, etc.) has been using performance measurement systems for decades due to the nature of their business transactions.

As far as the human resources management is concerned, however, the focus on measuring the cost-efficiency of programs is a relatively new issue. Although business performance assessment systems have only been used in recent years, they have been spreading widely and have gained a lot of importance in the field of business, as organizations are becoming increasingly preoccupied with competing efficiently on a global level.

Kaplan and Norton (1996) have contributed to the popularization of the concept of BSC performance assessment, which is not limited only to the traditional financial measurements for assessing the performance of the company, but also cover for internal and customer-oriented processes and for the prospect of building professional abilities.

Integrating the criteria of the approach centered on BSC performance measuring instruments, Beatty, Huselid and Schneier (2003) have developed assessment instruments that are specific to the field of human resources, in order to achieve turnkey deliverable products for the specialized structure (workforce mentality, technical knowledge and workforce behavior) by aligning, integrating and precisely classifying the human resources systems.

Furthermore, Lawler, Stevenson and Boudreau (2004) have identified three types of business performance measuring systems with a crucial role in assessing the human resources function. The first type refers to systems for measuring efficiency, which are aimed at assessing the specific "time to fill" tasks – the time resources needed to fill existing job vacancies. The second type refers to systems for measuring effectiveness, which target the human resources practices with a direct influence on the costs involved by filling existing job vacancies. The third type refers to system for measuring the impact of human resources programs and practices focused on fulfilling the general objective of developing and optimizing workforce abilities and competencies. For instance, a company might decide to assess the costs of hiring staff by contrasting the current costs against the costs registered in the past years, or by contrasting the costs sustained due to operating major changes at the level of the recruitment practices.

Corroborated with the knowledge base and information science application base, performance measurement systems in the field of human resources provide organizations with an important tool in using human capital as part of those organizations.

The latest development in terms of measuring systems pertaining to the role of human resources as part as strategic human resources management consists in deploying Six Sigma information systems processes.

In general, the Six Sigma method refers to streamline the operations through business process, and it's structured on five key-process- define, measure, analyze, improve and control (DMAIC). DMAIC approach uses a diversified set of statistical tools to improve the upgrading processes, the decision-making function, i.e the customer service.

Information technology is a key component of the strategic management of human resources (Haines & Lafleur, 2008). According to the authors and Bsath Beckers (2002), the list of the advantages offered by human resources information system includes:

- to provide a comprehensive array of information through a single database; this enables organizations to ensure structural connectivity between centers and the activities to accelerate information transactions (Lengnick-Hall and Lengnick-Hall, 2006);
- to increase competitiveness by improving operational and administrative processes characteristic of human resources;
- to collect relevant data and turn it into information and theoretical knowledge to improve the quality and increase the speed of decision making;
- to provide a more comprehensive and varied human resource reports accurate and in real time;
- to stream and increase the efficiency and reliability of human resource functions of an administrative;
- to change the accent within human resources from the processing of transactions on the strategic management of human resources;
- to re-upgrade the processes and HR functions;
- to improve the level of customer satisfaction by providing human resources services in a prompt and accurate manner.

In terms of estimating the benefits and the impact of SIRU on an organization, traditional accounting methods are not compatible with the function of human resource management (Becker et al., 2001; Cascio, 2000; Fitz-Enz, 2000, 2002; Huselid et al., 2005; Thit, 2004; Ulrich & Smallwood, 2005). Although implementing a SIRU entails a number of tangible benefits, such as a high degree of efficiency across from the employment and a reduction in labor costs due to

automation, there is also the intangible or hidden benefits (Roberts, 1999). These include customer satisfaction by rationalization and efficiency of HR processes, i.e the exemption of human resources department from the routine administrative issues to focus on strategic goals.

In addition, human resource practices can assist organizations to remove stiffness and inertia characteristics of enterprise resource planning mechanized type. Enterprise resource planning software is a set of integrated database applications or modules that take over and meet common business functions, including human resources, general ledger, tradespeople accounts, receivable balance, order management, inventory control and management relations with customers.

To measure the efficiency and effectiveness of human resource management information system are several options are available. This measurement can be done either after the implementation of the system, in order to verify what has been implemented, to verify that what has been put into effect is in accordance with the application users and respond to their problems, either on a regular basis, in the form of the Audit Board, in order to ensure the durability of its compatibility in relation to the needs of users.

Haines and Petit (1997) proposed a model to measure the success of such a system using two criteria, namely user satisfaction and its mode of operation. Kostova (1999) proposed a measurement method based on the degree of implementation (level of acceptance of the system by users) compared to standard rules and practices defined by the instrument (A. NVo, 2008). This model is particularly suitable for the transverse system within a multinational enterprise or a group. Kostova has identified four modes of for the adoption of practices in subsidiaries. Active mode represents a high level of implementation and a recognized practice, missing mode is synonymous with a significant faith practices implementation, but a poor implementation. Regarding the ceremonial level, it is characterized by an implementing high, but with a low internalization. Minimal mode means that both the level of implementation, as well as the internalization are reduced.

Just (2010) proposes another method, which is based on return on investment, a purely financial approach, often used to validate a project by comparing project costs with revenues and future productivity gains. If case of human resource information system, however, is particularly difficult to assess certain elements, such as productivity gains, some qualitative aspects (improving confidence and motivation, human resource function image, increase opportunities for communication, employee retention) that can have a direct positive impact on organization's activity or some quantitative aspects, such as low input.

As part of its activity of social audit, Meignant (2009) offers a very structured approach, based on two main components, namely original model of human resources management of Ulrich's and the approach used in the procedures of quality, known as "Deming's wheel" or the loop for continuous improvement (PDCA) ".

To allow to HR professionals to participate in creating value for an organization and be a true "business partner" is not enough to install the latest technologies and features offered by the market. First, it's necessary to define the human resource policies and practices and to see how IT solutions can best meet these expectations.

Human resource management issues are numerous. In addition to the visible aspects, such as process optimization, data access, empowering stakeholders, reorienting human resource professionals to function with real added value information, the information system must allow to human resources function to be more effective and persuasive as "business partner" and to provide the right place assigned within the organization.

Wacheux and Blanchot (2002) warn that getting the new value created by human resource management through NTIC is not implied. Essential for the human resources function is "to question the overall coherence of human resource policies by introducing new IT instruments" in an environment in a continuous change.

6. CONCLUSIONS

Fast economic development in most industrialized countries also led to an increase in costs of employment. Under conditions of more restrictive competition, the personnel managers have been more constrained than ever to strike a balance between the increase in costs and increases in productivity. High complexity of labor law has also contributed for the managers to focus attention on their human resources function, which needs to prove its economic and social efficiency.

The major advantage of the design, development and implementation of a human resources information system is time saving in the development of transactional activities, thus allowing to staff to spend more time on traditional and transformational activities.

If the expansion of informatics in a particular field of management has difficulties, this is due to the efforts of extension of the formal part of the information system. This extension requires several reflections on the organization and, above all, a clarification and access to information and rules of operation. Or, this clarification and access to information never go by itself and is the restrictive element of development (Pichault,1990).

Information system contribution to the creation of value is achieved by new programs designed to achieve social balance sheet, management and forecast management of staff and skills and deeper analysis of the data and information in the industry, which are much closer to the results that matter in the decision-making process.

Its potential to participate in the creation of value depends on the quality of the strategic procedure and the support to offer to some management tools like Balanced Scorecard.

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