

Human Resources and Information Technology: Business Strategies for Sustainable Human Development

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Abstract: Research on human resources, information technologies and strategies for sustainable human development, which was highlighted in a special way that companies must adjust to new changes considering human resources as the most valuable was held aims to achieve greater productivity in changing and more demanding markets from the perspective of sustainable human development; methodologically it is based on a literature review based on the approach of the Latin American Integration Development and Cooperation; It was divided into four parts: strategic human resource factor for sustainable enterprises; challenges for sustainable human development; dimensions for sustainable development; information technology and human resources and sustainable business strategy; it was concluded, on the need for companies must rethink their organizational philosophy based on the postulate Brundtland in which sustainability depends on maintaining a database of resources: physical, human, financial, social and environmental; taking into account the technology also requires that development be integrated focusing on human resources, whose responsibility is implicit in business and social organizations.

Keywords: Human resources, information technology, strategy, sustainable human development.

1. Introduction

Advances in information technology in this century, represent significant contributions to society in the social, economic, political and environmental, in order to meet challenges or challenges of different magnitudes; but most especially it highlights companies need to adjust to the new changes in all its aspects for which they should consider supporting its human resources as the most valuable, in order to achieve greater effectiveness and efficiency; In this sense, companies and organizations must also consider its mission, vision and objectives, its strategies to higher productivity in more changing and demanding markets.

Consequently, it requires focus on establishing human resource management strategies for their performance from the perspective of sustainable human development; in this respect the present study is methodologically based on a literature review, considering the focus of the Latin American Center for Development, Integration and Cooperation to address the issue of sustainable human development articulated to advances in information technology, human resources they need to be perceived as a business strategy to face various challenges and responses to social, economic and political problems. The same was structured as follows: A) Strategic human resource factor for sustainable enterprises; B) Challenges for sustainable human development; C) Dimensions for sustainable development; D) Information technology and human resources as a sustainable business strategy.

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2. Strategic human resource factor for sustainable companies.

The rapid changes that are evident in the world in political, economic, cultural, technological and environmental social order, are among the last decades of the twentieth century and so far this century, perceived progress and development in some countries but stagnation and other delays; from this perspective it is important to note that companies with the passage of time have led to changes in their structures, investments, technologies, markets, and others to become more efficient and competitive in globalized environments; but human resources as expressed Moreno, F and Godoy, E. (Moreno,2012) "... human resources as dynamic business center has been little considered and evaluated before those changes, even though the vast literature of administrative sciences over more than a century state that human resources are the most valuable asset ". Therefore, as a valuable asset should be part of strategies in organizations.

Consequently, it is necessary that the human resource is a key strategic factor considered not only in the environment of the company, as stated Chiavenato I in his model “Organization, Working Environment and Scope General”, in which considers strata macro and micro environment, but also should extend beyond the company, a layer of supra environment according to Moreno, F and Godoy, E (Moreno,2012) consists of all the environmental features that surround it, reaffirming what De Cenzo and Robbins(De Cenzo, 2006) defined as Global Village,. “... the state of trade relations in the world”

From this context, UNDP (PNUD,2011), companies must grow and develop articulating these commercial, financial, and production with the premises of sustainable human development and the central focus of the global development agenda; for which an important aspect of corporate social responsibility is that according to Mello, Jeffrey (2014) is “Understanding the challenges facing organizations in diversity management, strategies to do so, and the fundamental role played by human resources “; indeed, the challenges of sustainable enterprises are expanding diversity for which strategies should focus on the performance of their most valuable talents from the perspective of sustainable human development.

Therefore, social responsibility as stated Ventura, B. and S. Delgado(2012)“... should cover three areas: social responsibility, economic responsibility and environmental responsibility; in this sense, such responsibility refers to the idea to account; hence “The current technological revolution means that companies are becoming more transparent information society offers ...” Consequently, their focus on human resource strategy contributes s accountability to its stakeholders.

Based on the foregoing, it is essential that organizations articulate their philosophy, mission, vision, objectives and strategies throughout with sustainable human development, understood as “... the expansion of fundamental freedoms of present generations while performing reasonable efforts to avoid the risk of seriously compromising the freedoms of future generations. “UNDP (PNUD,2011)

As strategic factor human resources are the key to the company according Mathis and Jackson (2008) cited by Moreno F, and Godoy, E (Moreno,2012) “... reflect the thought or intelligence, knowledge, creativity and decision-making to help the organization”. Based on this meeting can be deduced that human resources as a strategic factor is achieved when investing in each talent to improve the quality of their products or services; therefore, current advances in information technology (IT), electronic systems require strengthening the

human resource as part of their intellectual property, which represents the intellectual capital of individuals in organizations. Based on what wielded before, we can say that advances in IT are major challenges for human resource management and demands due to rapid technological changes in terms of sustainable human development.

3. Challenges for sustainable human development.

The development should generally be considered in the context of integration, in which all parties are articulated, and mainly in humans; in this sense, the Latin American Center for Development, Integration and Cooperation (CELADIC) (Centro,2009) considers “In a new human, comprehensive, inclusive and sustainable synthesis of human rights and humanity must be simultaneous and inseparable ...” At Therefore, we assume the position of CELADIC, in addressing the issue of sustainable human development, linked to advances in IT, human resources need to be perceived as a strategy to address various business challenges and responses to social, economic, political, ecological and environmental problems, from local to global context.

Paraphrasing CELADIC (Centro,2009) can be considered human resource, vital center and purpose of development as a society builder that transcends business community and able to conceive sustainable development, using IT as strategic tools. This statement we could consider three key elements. Business - Information Technology - Sustainable Development (Fig. 1), to be integrated around human resources in organizations.

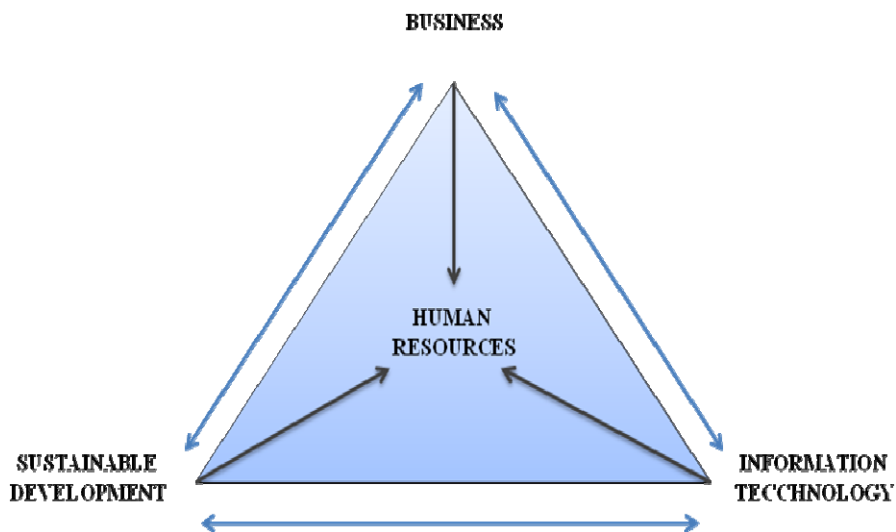


Fig. 1 Key elements integrators human resources in organizations.

Source: Prepared by the authors (2015)

In figure 1 is shown as human resources in an organization should be the center of all activities and the successful integration of the three elements contributing to highlight what in essence [1] "... is the most important asset and therefore the demand that more attention "; perhaps the challenge for most companies in the development are financial, economic capital, however, the challenge must be based on the integration of its innovations through new technologies and the demands of sustainable development, as expressed Cabrera , R (Cabrera,2013) "In the context of today's knowledge society, sustainable development of a region requires the presence of such conditions that facilitate and promote the scientific and technological development for sustainable socio-economic growth." Based on the aforementioned it is important for companies to focus their investment towards human talent or intangible capital Bernardez (Bernárdez, 2008) considers "The accumulation of intangible, human and social capital is both a feature and a cause of economic development."

Designated by the same author corresponds with the arguments of the OIT (2007: v-vi) [10] who say in relation to the promotion and strengthening of sustainable businesses, which should "... ensure that human, financial and natural resources are combined equitably and efficiently in order to promote innovation and increased productivity way.

From this perspective companies should take appropriate steps to train and develop human resources in terms of IT not only in the application of computers or telecommunications equipment to store, transmit and operate in the general context of business strategies, but rather the development of clean technologies, technological innovation, biotechnology, adoption of new technologies, generation of new knowledge, as stated Mehruz K. (Mehruz,2015) the "information and communications technology (ICT) can lead to adopt social, economic and human development if ICT is based on the framework of information management for sustainability of the company and its environment."

Therefore, for a sustainable company assumes adequate training strategies for human resources, you must develop those capabilities and include sustainability in formulating their strategies; in this sense, it means having the knowledge of human talent and resources involved in production with IT related, from the

perspective of sustainable human development processes services; therefore, it is essential to consider the relevance of the impact of IT and business strategies.

C) Dimensions for sustainable development.

Sustainability which refers Mehruz K, (2007) based on the adoption of social, economic and human development should be broader in that context that companies play an important role, the most valuable resource is the human resource, through which it must invest in its human talent that allows boost an economy with a human face “adoption of shared values and principles of a human face to the global market”, Alonso, J (2007) helping companies define their strategies and actions.

Based on the foregoing, we believe that companies should assume their foundation of sustainability an integral vision regarding its human resource. The CELADIC (2009) considers “... companies should be trained to effectively make it serve the needs and human progress ...” in this regard, he emphasizes “... with a clear centrality in the human person and in all its dimensions: ethical-cultural, economic, social, political, environmental”, which should be seen in coordination with the fundamentals of the company and information technology, but considering the sustainable human development as a strategic resource consists of five dimensions. (Fig. 2)

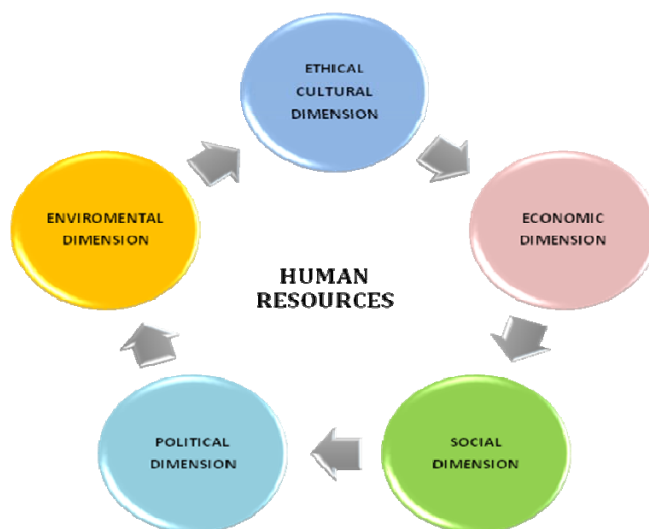


Fig. 2 Five dimensions for integrated sustainable development of human resources in companies.

Source: Prepared by the authors (2015)

Ethical dimension cultural.- Companies as a group of people must assume ethical commitments on its members to respect its principles and values in their activities to prevent the degradation of their environment, fight corruption, inadequate labor practices, among other things, about Caldas M., William L. Reyes C. (2012) expressed referring to business ethics as "... all activities that fall outside the scope of direct management and control of the company, but which can influence somehow through his activity. "

Consequently, the corporate culture is the complement to ethics as an ideological benchmark consists of beliefs, principles, values and standards which must be assumed by all human resources of a company, which according to M. Caldas, William L., Reyes C. (2012) "... it is the personal spirit of enterprise". The Culture is a strategic factor in the company to link progress on IT and sustainable development policies. From our perspective we must not only strengthen individual and organizational culture, but also an environmental culture that responds in its activities, processes, and allow you to take an entrepreneurial approach to environmental responsibility.

With regard to ethics at the enterprise level, it is a relatively new topic, as assert Camacho, I, Fernández, J and Miralles, J (2005) "... just some of the latest guides on business ethics include the implicit treatment this issue." However, the ethical conduct of human resources expressed Guédez, V (2006) "... works by taking ethics and human quality taken in groups and organizations.", in this sense both are complements to this dimension.

Economic dimension.- For a company this size represents the key element in productivity, however to achieve high standards of quality, efficiency, effectiveness and productivity, it is necessary "... involve staff; it is imperative that this improves their knowledge." Fernández, R (2013). In assuming the position of that author, we should mention in this dimension human talent as Intangible Capital, which for Bernardez M (2008) is "The accumulation of intangible, human and social capital is both a feature and a cause of economic development." Therefore, improving the skills of human resources in the company it is acquired over time in the organization becoming the same value, demonstrating the quality of their services and products.

Companies like social system, made by individuals, groups, structures and technologies, should guide their economic activities whose interaction fosters sustainable development, in this respect, continuous improvement in training, training and training of its human resources to achieve effective, you must respond to the progress of IT in terms of respect of the micro, macro and supra environment above companies, so that their economic performance image and

transform it into a company with a human face.

Social dimension.- This dimension is closely integrated with the human elements of the individual in the company represented by all assets in which the organization invests and evidence in health, housing, productivity, ethical values, quality of work and education, on this (Schultz 1959, 1961, 1963, quoted by Carmen Sevilla Forest(2004)states that the higher quality of the work comes from the education and training of human resources. In that sense, this social dimension, for Perez A, S. and Moneva Marcuello J18], is represented by “... set of relations established an organization, a group or network of people which mobilizes or access the various tangible and intangible resources available and considered feasible by these same subjects.”

It is important to add this dimension, both corporate social responsibility as an individual, as both are complementary, with regard to health and safety at work, professional development, equal rights, collective bargaining and opportunity to men and women, as respect for the environment. About Ventura, E and S. Delgado (2012) refer to the Internal Corporate Social Responsibility, as “... a cohesive, motivator and facilitator element of good working environment, generating, in the short term, higher productivity and commitment the workers ... “these authors added” ... can become an efficient human resources strategy as its management dimensions are closely linked to the management of HR processes. “

This dimension is close to what some authors call capital concept that has many meanings such as Kliksberg, B and the Institute for Latin American Integration (Kliksberg,2000)who considered the capital in his field has no consensually accepted definition, in which context, reality and delimitation are more widespread inaccuracies, however, we take as position in this dimension to the statement by Etkin, J (2007)who refers to potential and desired capacity for the organization in terms of its human dimensions and culture, these include: ability to collaborate and work together, trusting environment in behavior, climate of job security, respect for ethical principles, access to education. With regard to the latter it is necessary for companies to go at the pace of progress of IT, to foster sustainable human development.

Policy dimension.- Companies are required to develop a set of policies that facilitate their productivity, profitability and sustainability in order to make them more competitive in a global environment; however when referring to human resources usually do not respond to their demands and needs, in this sense, the political dimension from the perspective of sustainable human development and information technology, must be built on: human rights,

shared responsibility, quality of working life, training and learning, advancement and personal development.

Human rights are an issue that at the enterprise level have not been adopted in any treaty, only some initiatives and experiences by work group led by the United Nations in a report of the High Commissioner for Human Rights in the 2015, cited by De La Cuesta, M and Muñoz, M (2010) said “no need to put some instruments ready to help companies meet their responsibilities”, also recommended that a subcommittee be maintained in order to continue these initiatives on business and human rights.

For its part, shared responsibility is fundamental to the construction and development in the workplace that provides human resource make a commitment to their work and contributes to the success of your business element. The quality of working life is one of the main challenges of companies in the XXI century, which is related to health and safety that promote and ensure that human resources work in appropriate and safe conditions, both personally as materials and equipment, in order to maintain their health, established by the World Health Organization (WHO), as the total state of physical, mental and social well-being, or absence of injury or illness absence of injury or illness.

Training and learning should be a priority in every company that values its human resources as the Information Technology from the perspective of sustainable human development should be expanded in terms of their knowledge and skills, the basic sources of learning that will based on the experience in the workplace. Progress and personal development, represents the benchmark receiving human resources in companies, it is the feedback on their performance and objectives achieved in this sense, should be applied tools and processes such as performance evaluation guide of progress and development, and evaluation 360.

Environmental dimension.- While all the above dimensions constitute important aspects of sustainable human development, this dimension closes the circle (fig 2) shaping the business environment that Moreno F, and Godoy E (2012) regard it as the supra environment organizations, but integrated into the micro and macro environment, marked the beginning of this essay on the basis of the Model Organization Working Environment and General Scope Chiavenato I (2007), in this sense, expressed by these authors essentially comprises the administration of human resources in companies, aimed at the quality of working life, production activities or services, but obliged to follow rules for personal protection. Consequently, advances in Information

Technology but must respond to productivity, economic growth, improvement of services, simplification of procedures, development and innovation, it is also necessary for companies to become environmentally responsible, together with the partners, suppliers and customers.

Is conducive to emphasize that the environmental dimension relate to the enterprise level to sustainable business model established by Boons, F and Lüdeke-Freund, F (2013) as an emerging concept that includes sustainable innovation, in which each company of production, consumption, marketing or services differs according to sustainable development, there is considered a vague but new in business model. "For new businesses this may be unclear." In this context, a business model is used as a plan that specifies how a new company can become profitable."

Based on the above points urgent need for companies to consider its environmental dimension, including the relationship of the organization with their immediate environment (partners, suppliers and customers), fulfilling the fundamental rights of human resources in equal opportunities not discrimination, culture, education and the environment.

4. Information technology and human resources as sustainable business strategy.

In the first decade of this century, it has increased the development of Information Technology intensifying a new digital world, leading to advances in business and changes the limit to break their traditional processes in their activities; consequently, it is the human resource who has a strategic role to operate in different environments (micro, macro and supra). On the foregoing, we agree with those reported by Bharadwaj, The Saawy, Pavlou and Venkatraman (2013) who express "... business strategy digital beyond the chains tight supply partners in traditional industries to dynamic ecosystems loosely coupled they are still in emergency is a much more complex task."

In this sense, these authors considered "... this requires rethinking how to standardize IT infrastructure and business processes around, and also need a digital converter, agility to respond to ecosystem conditions rapidly changing." Consequently, to changing conditions and environment organizations, which require rethinking IT infrastructures, it is ratified human resources as strategy to these new challenges, especially when it requires promote sustainable human development; in this regard, notes Saboori, F (2003) "Most efforts have focused on physical infrastructure and connectivity, resulting in insufficient attention to users, content and relevance without technical factors to exploit the information

sustainability ...”

Therefore, as we say Heir, C and Lopez, J and others (2008)“... the organization must devote efforts to the proper management of change promoted by the incorporation of information technologies; from this perspective knowledge management of human resources in companies it corresponds as one of its new strategic challenges; accordingly, (Ob cit: 10) says one must start “... the enhancement of information as a resource in the business context ...” analyze “strategic alternatives for implementation and development ...”; consider “... the safety aspects of corporate information systems which not only depends on the proper advancement and improvement of trade relations, but some of the fundamental rights of the people ...”

Based on the foregoing, it also stresses that IT has shown its negative role for environmental sustainability through rebound effects, related to increased energy consumption, material consumption, satellites, fiber optics among others; in effect, it is necessary that the human resource companies are trained for development in technological innovation, clean technologies, biotechnology; therefore ratify expressed by Cobon, J(2009) “The uses and applications of new technologies in the various fields of human and social activity, demand and recognize the impacts that cause changes and see how these new technologies are harnessed to achieve continuous learning, distance and under the control of learners”.

It is important to emphasize the recognition of environmental impacts of IT, not only in the production and use of infrastructure, in which companies must take on this challenge and demands, but something more delicate as is the increased amount of waste electrical and electronic equipment, coupled with the marked by Saboori, F (2003) “Computer products contain substances that are dangerous for the environment and human health, such as halogenated organic compounds and heavy metals, and are difficult to remove, recycle or reuse.”

Finally, the progress of IT in the digital age from the perspective of sustainable human development requires rethinking starting from the premise Brundtland cited by Gonzalez A.(2006)“... the sustainability of human opportunities depend on maintaining a database of resources: physical, human, financial, social and environmental.” Therefore, the technology must be integrated into the development focused on human resources, whose responsibility is implicit in business and social organization.

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