

ETHICS, INTELLECTUAL CAPITAL AND INTELLIGENT COMPANIES

Carlos Fernández-García, Mario Arias-Oliva, Rubén Fernández-Ortiz, Jorge de Andrés-Sánchez

University Rovira i Virgili (Spain), Complutense University of Madrid (Spain),
University of La Rioja (Spain), University Rovira i Virgili (Spain)

carlos@cruam.com; mario.arias@ucm.es; ruben.fernandez@unirioja.es; jorge.deandres@urv.cat

INTRODUCTION

Today, intellectual capital (IC) is considered the knowledge and experience that a company has, giving its operation the generation of value. In such a way, that the IC is based on the contributions made by its human talent in organizational productivity linked to the relationships that the company maintains with its commercial context. From this perspective, IC relates the knowledge and experience of people with the technology, productivity and competitiveness of an organization, that is, it is an internal and external relationship of the company with the people involved (employees, customers, suppliers, among others) that generates value through knowledge and experience (Azofra, Ochoa, Prieto and Santidrián, 2017; Gómez, Londoño and Mora, 2020).

Due to such appreciations, the existence of IC in companies is considered permanent because it is articulated with productive activities since its creation and it is considered an intangible asset because it adds value to organizational operations by optimizing production processes and business relationships. Under these arguments, the use of CI leads to the strengthening of the company in its position in the competitive market and its financial profitability, in other words, it points to the intangible asset of the company because it means the existence of knowledge attributable to all people belonging to the organization being its strategic nature.

INTELLECTUAL CAPITAL AND KNOWLEDGE MANAGEMENT

Articulated with the above, the relevance of IC in intelligent organizations is given by the factors of knowledge and innovation that add value to the entire organizational structure, the performance of human talent and the competitive environment, therefore, IC is identified as a added value element that contributes to knowledge management (KM) as an asset of the company. In accordance with this, CG provides the intellectual capacity of the organization through human talent, involving different sources of knowledge in the business environment, for this reason, people contribute various abilities, skills and knowledge valued as the imperceptible capital that is becomes the relevant element that raises organizational capacity, dividend producers and strategic positioning (Docasal, 2016, Farah y Abouzeid, 2017).

In this regard, IC is identified as a path for QA and organizational development because it explores and uses the most important value: human talent and the knowledge that talent possesses and contributes to the organization. Therefore, IC is made up of consciously integrated structures, methods, and interactions, introduced to produce value to an organization's body of knowledge and experiences. So, promoting the increase of IQ in a company means strengthening its corporate and managerial functioning centered on the individuals who work and interact with the internal and external business environment. From these considerations, the IC is composed of: Human Capital (CH), Relational Capital (CR) and Structural Capital (CE) (Gómez, Londoño and Mora, 2020).

In relation to CH, it can be pointed out that it is constituted by the knowledge and experience of the working personnel within an organization, perceived in the performance of their functions in the workplace, showing: competences, abilities, skills and work capacities to achieve the Business success. Under this argument, the CH is considered particular being in the capacities and knowledge of the worker, differentiating one from another in the action and performance within the organization. Therefore, CH is characterized by knowledge (technical, academic and experience), skills (know-how), attitudes (disposition, effort and behaviors) and values (ethics, responsibility, collaborative work, among others) that people have and that are managed as an advantageous knowledge of the organization (Villegas, Hernández and Salazar, 2017).

From this position, human talent has its own bio-psycho-social characteristics that are manifested in the search for well-being and self-realization, in harmony with the personal potentialities of the current environment: economic, political, environmental, social and legal. Approaching CH in its entirety means transcending the traditional dualism and beginning to see the company from the contributions of training, training and permanent and continuous development of its staff. Under this approach, CH management in an organization focuses its main purpose on developing a workforce of committed, responsible, qualified, motivated and aligned with organizational objectives. In this way, the CH for its internal promotion, considers: results, efficiency and proactive attitude in its time of permanence within this company.

The aforementioned position allows orienting the achievement of the mission, vision and organizational objectives based on the culture and development of proactive human talent, modifying procedures and techniques to adapt to the business environment. In other words, the CH links the company's capacity for results with the aspirations and perceptions of the individual (their objectives and goals, possibilities for growth and group construction). For this reason, in CH, the worker develops the ability to lead action in a specific direction, promoting action values and foreseeing scenarios for improvement. His behavior shows a transforming, competitive, committed, entrepreneurial being and with values within a changing social context and with serious tensions and uncertainties.

In this sense, the CH involves employees in the demands of responsibility and high performance in work relationships, being able to guide the achievement of the mission, vision and organizational objectives based on and the surrounding culture, of the dialogic communication and the development of proactive human talent, modifying procedures and techniques to adapt to current social realities. Their communicational, functional and self-referential relationships allow the recursion of their basic operations and social cohesion (Chiavenato, 2015; Contreras and Rodríguez, 2018).

Now, in intelligent societies and organizations, CH is associated with the innovation and technology of the organization, because the information that is developed is the product of the knowledge and experience of human talent, therefore, the inventiveness of the company it is related to the skill, practice and creativity of the workers. For this reason, innovation and its relationship with CH is given by: 1. The digitization of companies, 2. Globalization and mobility, 3. Aging of the workforce, 4. New job markets and 5. New models of deal. Hence, it follows that the strategic improvement of organizations, CH and their adaptation through ICTs respond to the forefront of the virtual world and the new needs of the competitive market, influencing labor relations and the flexibility of employment with the least social and environmental impact.

In correspondence with Relational Capital (CR), it is based on the position that companies do not have isolated systems, meaning the exchange of knowledge between individuals within the company together with the external relationship. In this sense, the CR adds the assessment of the social interactions of the organization with all the stakeholders (clients, suppliers, workers and shareholders).

Under these arguments, the CR constitutes the valuation of customers when they carry out commercial transactions with their suppliers (Jiménez, 2018; and León, 2020).

From this perspective, the CR is made up of a system of relationships and knowledge that add value to the organization, which are incorporated into the company as a result of its own performance in front of market agents and society. For this reason, the CR links the organization with the knowledge raised in the analogy with: customers, suppliers, shareholders or partners, competition, other companies, entities and government agents and with the corporate image of the organization. In such a way, that the knowledge and information produced are implicit in the relationship system (Carrillo, Bensusán, & Micheli, 2016).

In CR, the knowledge product of the fabric of relationships that the company generates with other organizations (public and private) and people (clients, entrepreneurs, others) is valued through its operations and daily activities. The management of this knowledge is oriented towards the benefit of the company, reflected in market strategies, efficiency in business development, technological and innovative environments, exchange dynamics, among others.

Regarding Structural Capital (CE), organizations have information systems, work procedures, management systems, research and development (R&D) for an effective performance of their operations, therefore, these assets are part of the company and they are legally protected (intellectual property, copyright, among others).

Indeed, the CE represents the knowledge developed in the work routine contributed by human talent and collaborators, therefore, it is linked to the facilities, processes, business policies and technological innovation. Seen in this way, the CE is interpreted as the knowledge transmitted in the internal processes for the continuous improvement of the company using technology as a support tool for its operational activities. This capital incorporates into the organization aspects such as: innovation of products and services, organizational culture, management systems, ICT, intrinsic collaboration and the improvement of productive, functional and operational processes.

For this reason, CE is part of the set of intangible values linked to the agreed methods, acquisition, organization and transfer of knowledge. It is for these appreciations that the knowledge acquired in the intelligent organization is an experiential teaching and a learning instrument. This means that a company that aspires to endure in the current reality must be competent to decipher the demands of the environment and to anticipate them. Hence, the relevance of IC and its three components within a company (Carrillo, Bensusán, & Micheli, 2016).

Now, the organizational culture also belongs to the CE because it depends on the values and norms that intervene in the transmission of knowledge and work interrelationships. This point of view secures the credit of policies and institutes the practice of innovation and productivity. Therefore, the management of ethical values in the CE tends to base decision-making including communication channels (Alarcón, Álvarez, Goyes & Pérez, 2012).

In this argument, an individual who learns in an organization requires ethical values that identify him with the organizational culture. Certainly, the ethics in human talent produces the empowerment of work, strengthens collective habits and influences the interior and exterior of the organization by developing various relationships with the socio-productive context. The relevance of ethics in organizations is given by the attitudes that people assume towards their functions, relationships and responsibilities, influencing the productive activity and the strategic management of the organization (Gómez, Londoño and Mora, 2020).

INTELLECTUAL CAPITAL, ETHICS AND SMART SOCIETIES

So, that relationship between ethics and IQ in the organization transcends social and cultural elements because morality, ethics and values are also part of the intellectual formation of the people who contribute to the development of the company. IC from the intangible asset approach is built based on knowledge and training, based on ethical values for progress in the organization connecting with the CR, CH and CE (Axtle and Acosta, 2017).

Articulated with the above, the analogy of ethics and IC are elements that create value for the individual (endogenous) and the organization (exogenous), reflecting themselves in the productive processes and in the business results. The increase in ethical values and IQ favors the transfer of knowledge simultaneously with the combination of technological resources, emerging an interactive process of exchange between the company and people for the production and commercialization of products and services. This knowledge created within the company expands towards external relations, enhancing its competitive value and leadership position (Jiménez, 2018; and León, 2020).

In such a way that the management of ethics and IC has the purpose of guaranteeing ethical behavior, the development and innovation of processes and the correct decision-making to achieve business objectives in complex productivity. From this point of view, the organizational culture influences the behavior of people, positively affecting the productive system, corporate image and learning capacity, considering an analogy of capacities between people, the organization and society, generating opportunities to learn (intelligence) and act (practice and experience) using Information and Communication Technologies (ICT) (Carrillo, Bensusán, & Micheli, 2016).

Due to such appreciations, the management of ethics and IQ in intelligent people, organizations and societies is developed in the continuous strategies and actions based on the generation and transfer of knowledge. It is at this point, where ethics and IC are in a constant dynamic of transformation and adaptation to generate business results and socio-economic growth of society, because its influence on organizational management incorporates the internal and external environment of the company. Itself and the use of ICT, signifying the progress of society (Bakhsha, Afrazeh and Esfahanipour, 2018).

In particular, ethics, IC and the use of ICTs have currently fostered a significant innovative digital economy for business ethics in its generation processes (training) and in its implementation (organizational culture). This interrelation is visualized in the interaction between economic entities, the production and commercialization processes of companies and the people linked to them. This is how transactional ethics (Corporate Social Responsibility), participatory ethics (democracy in decision-making and implementation of ethics policies in the organizational culture) and recognition ethics (corporate image of the company based on values) emerge (Carrillo, Bensusán, and Micheli, 2016).

Undoubtedly, the increase in IC management capacities and the generation of values depends on the use of knowledge in the organization. If this is positive, business results improve the leadership position and sustainability of the organization, but if it is negative, the organization becomes unproductive isolating itself from its objectives and goals, closing its doors quickly. It is for this reason that companies implement training, training and development policies associated with the mission, vision and values of the organizations, spreading the corporate culture inside and outside the company as a strength of entrepreneurial capacity (Gómez, Londoño and Mora, 2020).

Then, IQ is characterized by the productivity of its human talent and its relationship with knowledge, skills, qualifications, values and experiences. The generation of IC value is reflected in the contributions of training and in the performance and productivity of people, producing positive results (strengths) and reducing negative results (weaknesses) of the organization. In addition to this, ethical values, habits and social skills within the corporate culture and practices produce the knowledge to work

effectively, under a harmonious interrelation that allows quality and good service among social actors (workers, clients, suppliers, shareholders, others) linked to the company (Axtle y Acosta, 2017).

Therefore, IC and ethics are recognized both in people and in the organization, affecting: the corporate image, management systems, production and marketing processes, market positioning and internal and external relationships of the company. In line with the above, knowledge within a company is valued from its IQ and ethics is appreciated in the development of the organizational culture, which is why it is a valuation of tangible assets for their effects on business results and results. prospective returns (Gálvez, Borrás, Abadía, 2020).

This connectivity between ethics and IQ in the dynamism of learning organizations has built the complex interconnection of intelligent societies. Indeed, the development of the ability to learn from human talent throughout the organizational structure and the construction of a company based on that knowledge to expand new capabilities is what the notion of intelligent organizations means. The foregoing merges learning, knowledge transfer and the innovative and transformative capacity of people and the organization (Hernández, Muñoz and Jiménez, 2015).

This is how the path towards intelligent societies (IS) is opened, constituted by a community that generates advanced information where organizations develop their ethical values and IC using ICT to essentially prosper in society, that is, the development of People and organizations optimize the quality of life of the population because it increases the value and productivity of their work and their skills in society. It is because of these indications that intelligent societies base learning on people, organizations, governance (harmonious interrelation between the State, citizens and the market) and on the lifestyle with the use of ICT (Jiménez, 2018 y León, 2020).

Therefore, the term intelligent is associated with the adoption and use of automated learning technology, where organizations develop their productivity through ICT and the social actors that interact with them maintain a dynamic of interaction taking advantage of the potentialities and benefits technological. Thus, an IS benefits from the potential of technology to obtain productive citizens, allowing access to resources, applications and networks of interest, increasing their well-being and quality of life in society (Ovalles, Carvajal, Chaustre, Espinoza, Sepúlveda and González, 2018).

All these aspects are related, because societies are made up of people and productive and social organizations that develop and transfer knowledge, transforming the social well-being of people who live and work, that is, this interrelation is a physical and virtual circle of the daily life of people with their social environment. An example of this is the teleworking boom in Europe that has been noticeable for the last 10 years representing 4% of the working population, increasing slowly until this year, expanding sharply to 34% due to confinement due to COVID - 19. Certainly, in Spain teleworking has represented an innovative alternative for companies to meet the demands of the competitive market, enhancing marketing, sales, customer service, advertising, among others.

However, this new working modality has brought with it the need for preventive measures to mitigate health risks, due to the physical and psychological stress to which people are exposed. This critical knot has revealed the existing link between the activities and functions carried out in teleworking and the potential risks associated with it. In other words, the new work environment of preserving the health of the worker and in turn generating the adaptation and optimal functioning of their functions related to communication through the use of high technology communication systems.

In correspondence with the above, there are studies that confirm the existence of health risks in the tasks performed by the teleworker related to: ergonomic conditions, natural biorhythms and work hours, potential distractors, indifference in social relationships, among others. The above has

generated endless effects on the physical and mental health of the worker, evidencing work stress, insomnia, eating disorder, changes in moods, sedentary lifestyle, among others.

As can be seen in the example, the IS transforms the way of life and evolves to the extent that IC is managed efficiently. The promotion of new representations of connectivity and interrelations in the digital environment, together with the possibilities of technological interconnection in people's daily lives, promote IS. This use is generated in technology, digital equipment, social networks and connected devices, meaning the fundamental pillars in communications, applications and services, e-government, connection of systems, among others. (Alarcón, Álvarez, Goyes y Pérez, 2012).

Given these assertions, the formation of a technological culture, learning and knowledge of people in relation to ICT; the potential of government organizations to implement digital leadership; the transformation to technological adaptation of organizations and the incorporation and expansion of digital platforms in competitive markets has made the IS to develop jointly with the IQ and ethical values.

The IS include the use of technology in various areas: political, administrative, economic, social, public services, health care, industrial processes, education, among others. Therefore, KM, organizational culture and people are also part of IS development because they participate and adapt in it. They are involved from the IC perspective because knowledge is promoted for the development of society and all that information is transferred by digital means for the political, economic and social progress of a country. A second example would be the strong growth worldwide, both in the volume of Internet users and in the number of commercial websites and the advertising investment in the network, which is why it is currently considered a mass communication medium (Hernández, Muñoz and Jiménez, 2015).

Precisely, electronic commerce represents a new way of doing business on the Internet without the need to make large investments and to be able to do it directly from the site where the user is (seller and buyer), as long as they have an internet connection. For this reason, collaborative work within an organization and the transactions carried out between online communities allow the increase in sales and the use of communication channels based on the social web and the different platforms, mobile devices, marketing and e-commerce.

In this sense, organizations can simultaneously access their audience and, in turn, adapt their offer to the individual characteristics and needs of their potential customers. The foregoing involves in the process of distribution and online marketing the ability to focus, monitor and measure, which will facilitate a whole learning process for the organization regarding the way its current consumers interact in the digital environment (access to web pages, time spent on it, searches performed, preferences, among others), allowing strategic decisions to be made adapted to the potential market.

From this point of view, the digital environment offers applications and opportunities for the strategic, operational and functional development of marketing, which when combined with electronic commerce reveals a digital scenario of commercial interaction between companies and their potential customers. From the foregoing, it follows, a direct contact between the company, the workers and the client or public interested in the product or service, where the distribution and marketing channel is carried out without intermediaries, allowing to mitigate costs and improving the final sale price. . This implies a CI, that is, an individual (CH), organizational (CE and CR) knowledge of interactive communication that allows communicative bidirectionality between the company and the consumer (Hernández, Muñoz & Jiménez, 2015).

So, for societies to develop intelligently, it is necessary for citizens and organizations (public and private) to integrate their demands and needs into learning and knowledge of technological

innovation, to transform products and services, promote responsibility and social development. , and increase productivity and social welfare. For this reason, societies are currently reforming their technology investment policies towards the use of technology and digital tools for socio-productive purposes, encouraging their adoption and use in organizations and individuals (International Telecommunication Union, 2019).

Seen in this way, the use of technology in societies facilitates sustainable development and its use will depend on the intelligence of organizations and people to enhance technology at the service of progress. It should be noted that management systems and efficiency in the use of resources, the transfer of knowledge and the exchange of information; Organizational strategies and collaborative learning have made it possible to mitigate the digital divide in societies.

In fact, ICTs have influenced the population so much that job opportunities require technological skills in qualification and training programs are currently developed on technological platforms for conducting distance studies. In this sense, the maintenance, transformation, updating or increase of ICT in a country is associated with the characteristics of the development of society, organizations and their citizens (Jiménez, 2018 y León, 2020).

Under all these arguments, knowledge in organizations becomes CI when it understands their social, productive and technological environment. Therefore, it becomes intelligent when knowledge is productive, useful and a generator of value in the organization and in its social environment. For this reason, IC returns to an intelligent organization when it produces, generates and transmits knowledge to be properly applied in society together with technological development, generating social transformations and possibilities for progress and social welfare.

From this viewpoint, IC, ethics and IS are interconnected in a single learning generator of information, interconnection and competences, which involves all parts of society, as a means of development and progress of the citizens of a country. This perception requires an awakening in societies, in citizens and in collaborators and actors inside and outside organizations.

CONCLUSIONS

An intelligent society must be nourished by technological interconnection in all phase of its creation process. In addition, this technological connection is endowed with human talent that generates knowledge (skills, abilities, values...) that can be used to generate differential competitive advantage. This human talent (intellectual capital) is in charge of discriminating the management of ethics, social and business values; all this, counted in turn with the growth of the organization.

KEYWORDS: intellectual capital, knowledge management, endogenous, exogenous, technological connection.

REFERENCES

- Alarcón, M; Álvarez, S; Goyes, J y Pérez, O. (2012). Estudio y Análisis del Capital Intelectual como Herramienta de Gestión para la Toma de Decisiones. *Revista del Instituto Internacional de Costos* (10), 49-65. Retrieved from http://www.revistaiic.org/articulos/num10/articulo3_esp.pdf
- Axtle, M y Acosta, J. (2017). Measurement And Management Of Intellectual Capital In Higher Education Institutions. *Dimensión Empresarial*, 15(2), 103-115. <http://doi.org/10.15665/rde.v15i2.1306>

- Azofra, A; Ochoa, M; Prieto, B y Santidrián, A (2017). Creando valor mediante la aplicación de modelos de capital intelectual. *Innovar*, 27 (65), 25-38. <https://doi.org/10.15446/innovar.v27n65.64887>
- Bakhsha, A., Afrazeh, A., y Esfahanipour, A. (2018). Identifying the Variables of Intellectual Capital and its Dimensions With the Approach of Structural Equations in the Educational Technology of Iran. *Eurasia Journal of Mathematics, Science and Technology Education*, 14 (5), 1663-16882. <https://doi.org/10.29333/ejmste/85037>
- Carrillo, J., Bensusán, B y Micheli, J. (2016). El Debate Sobre Innovación Y El Progreso Sociolaboral en Covarrubias, S; Sandoval, B; Bensusán, B y Arteaga; J (Eds.), *La Industria Automotriz En México: Relaciones De Empleo, Culturas Organizacionales y Factores Psicosociales México: Am Editores*.
- Chiavenato, I. (2015). *Comportamiento Educativo. La Dinámica Del Éxito En Las Organizaciones*. McGraw-Hill.
- Contreras, J., Y Rodríguez, T. (2018). Capital Intelectual Y Ética Gerencial En Las Organizaciones. En Moran, L. (Ed.), *Memorias Arbitradas. Jornadas De Investigación Transdisciplinarias* (pp. 384-392). Universidad Nacional Experimental Rafael María Baralt.
- Docasal, M. (2016). Un Procedimiento Para Medir El Capital Intelectual Y El Desempeño Superior Del Capital Humano En Empresas Hoteleras En Cuba. *Revista Ciencia Y Tecnología*, 11, 32-41.
- Farah, A., y Abouzeid, S. (2017) The Impact Of Intellectual Capital On Performance: Evidence From The Public Sector. *Knowledge Management & E - Learning: An International Journal*, 9 (2), 225-238. Retrieved from: <http://www.kmel-journal.org/ojs/index.php/online-publication/article/view/373>
- Gálvez, A; Borrás, F & Abadía, J (2020) Indicadores de Gestión del Capital Intelectual para la Banca Comercial Cubana. *Revista Retos de la Dirección* 2020; 14(1), 310-336. Retrieved from: <http://scielo.sld.cu/pdf/rdir/v14n1/2306-9155-rdir-14-01-310.pdf>
- Gómez, L., Londoño, E., y Mora, B. (2020). Modelos De Capital Intelectual A Nivel Empresarial Y Su Aporte En La Creación De Valor. *Revista Cea*, 6(11), 165-184. <https://doi.org/10.22430/24223182.1434>
- Hernández, H, Muñoz, D, y Jiménez, A (2015). Gestión de la Información Empresarial en las Organizaciones Inteligentes. Universidad Autónoma del Caribe.
- International Telecommunication Unión (2019) Un Enfoque Holístico Para Crear Sociedades Inteligentes. Comisiones de Estudios. Retrieved from: https://www.itu.int/dms_pub/itu-d/oth/07/17/D07170000020003PDFS.pdf
- Jiménez, L (2018) El Capital Humano e Intelectual como Catalizador de la Gestión Organizacional. *Revista Mundo Fesc*, 15 (1), 83–89. Retrieved from: <https://www.fesc.edu.co/Revistas/OJS/index.php/mundofesc/article/view/255/416>
- León, A (2020) Las Dimensiones del Capital Intelectual y la Cultura Empresarial en las Microempresas del Sector Manufacturero. *Revista Universidad, Ciencia y Tecnología*, 24 (100), 04 – 10. Retrieved from: <https://www.uctunexpo.autanabooks.com/index.php/uct/article/view/297/528>
- Ovalles, L; Carvajal, P., Chaustre, D., Espinoza, S., Sepúlveda, Y y González, J. (2018). Contribución De La Ética Ambiental Y Empresarial A Las Organizaciones. *Mundo Fesc*, 8(15), 62-72. Retrieved from: <https://www.fesc.edu.co/revistas/ojs/index.php/mundofesc/article/view/253>
- Villegas, E., Hernández, M y Salazar, B (2017). La Medición del Capital Intelectual y su Impacto en el Rendimiento Financiero en Empresas del Sector Industrial en México. *Contaduría y Administración*, 62(1), 184-206. <https://doi.org/10.1016/j.cya.2016.10.002>