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## Types of competencies of human talent supported by ICT: definitions, elements, and contributions

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### Abstract

The recent turbulent global changes have highlighted the advancement of generic and technical skills, as responses to the comprehensive challenges of the environment. This is how in the present investigation constructionism and hermeneutics are used as a methodology to achieve contributions of scientific rigor, conceptualizing the variables; with a positivist approach, using literary study, to generate theoretical reflections based on contemporary and disciplinary foundations, and thus understand literature, build concepts, and generate reflections. The findings show that ICT-focused skills condition the employability of human talent and its effect on resources, elements, and capabilities in generating value. It is concluded that the generic and specific skills of people currently prevail as indicators of achievement, resulting in the actions performed and sustainability.

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## 1. Introduction

Currently, organizations require specific profiles to perform efficiently in their different areas, these have characteristic processes that require the collaborator to have sufficient skills, for their employability and appropriation of challenges, therefore, a training process is carried out, where the staff development is empowered to provide greater benefits in their lives, likewise there are minimum required skills that are impacted by ICT to perform the functions and achieve the desired productivity, given this premise each process needs rigor at the time of being executed people count that their work situation will enable experience, commitment, fidelity and identity, attractive indicators that predict employability from the social sciences [1]. In Latin America, the behavior of using competency-based management systems is intensifying, there are agreements between nations, calls and programs that allow the development of human resource competencies, this interaction between countries promotes professional growth by deepening specific skills that provide greater weight in the resume, the current needs of the continent respond to changes in logistics, service provision and monetary policies, for which the workers of public or private companies must comply with skills that allow them to provide sustainability, [2 and 17] state that there are education centers that do not implement training by competencies, for which there is a deficiency in the differentiation of the types of competencies, due to this South America has little appropriation in competency models, being the cause of soft knowledge deficiencies.

In Colombia, companies are changing their classic management model towards management by competencies, because it proves to be more competitive in a time of few professionals with sufficient skills to face the challenges of the market [11], [14] and [16], the requirements of the selection process in organizations is focused on the competencies requested for each profile, thus providing a clear response to the need, whoever has these requirements is a guarantor of good development in their area of work, allowing organizations to position themselves by providing greater optimization of its internal resources in favor of the sustainability of the human talent that constitutes the organization, in the Caribbean region the lack of systematization of the competencies required for organizations is evident. Given the description, the problematic reality lies in the lack of knowledge of the minimum skills required to perform efficiently in any situation, this causes dispersed profiles, little competence to fulfill functions and break up processes, for which this project allows to establish definitions, identify elements and the contributions regarding the types of competencies supported by ICT, answering the following question: What are the definitions, elements and contributions of the types of competencies of human talent supported by ICT? This is an advance of the research project framed in the call No. 907 of young researchers and innovators of the Ministry of Science, Technology, and Innovation.

## 2. Generic and technical skills supported by ICT

Competencies are decisive to fulfill functions in organizations, people today need higher requirements to be competitive in the market, information and communication technologies (ICT) allow promoting, developing and training employees [2], these are derived from generic and technical skills, the union of both allows leading areas, strengthening processes, innovating procedures, proposing teamwork plans, generating synergy in organizations, reaching a peripheral vision of the current situation, focusing on the use of ICT, as tools that interconnect employees with the organization, generating contributions to society, for sustainability over time, generic and specific skills are the set of innate skills, abilities, skills and performance and improvement of each individual, these include fundamental activities, both of being and of acting.

### Generic skills

Based on the disciplinary literature, the universal skills that improve human performance are conceptualized, present in commercial acts, as well as procedures in each area of the company, in environments where human resources must be autonomous, generic skills [3] and [16] allow people to be competitive when facing unforeseen situations. From now on, the competencies will be listed by dimension: (1) Assertive communication is important towards human talent to maintain a pleasant and positive work environment, focused on respect, (2) from the marketing area they

allow to enhance the corporate image of organizations, (3) digital knowledge is fundamental, it allows position growth and recognition, as well as a clear identification of the collaborator's profile. For [4] they are conceptual, universal skills that human beings develop to adapt to various situations and environments, they are considered useful in all areas of the organization, to increase productivity, they are considered situational skills, because they are generated in a specific context, and according to trends they tend to change.

In this sense, they are useful universal skills to face unexpected situations, they arise to provide answers to support functions, they allow knowing the adaptability and conflict resolution capacity of the collaborators, they are known for their constant updating due to the transformations of the industry and the technological changes implemented are considered soft skills characteristic of the areas in which the collaborator works, they go hand in hand with the management model implemented by the company, in decentralized models the collaborator has greater autonomy for which he needs better communication skills that allow taking advantage of teamwork and the freedom to perform their functions, the orientation of these competencies is focused on the organizational culture of the organization, the competencies promoted by the welfare department from the human resources area are mostly present.

*Communication skills*, the communicative ability is the ability that each person has to interact assertively, this learning occurs throughout the day, it is expressed in different ways through speech, signs, gestures, these are part of the information provided, for [5] it is to share information in an assertive, precise way, framed in respect, being supportive, bearing in mind the circumstances of other people, in the same way, for [6] those who have these skills are skillful in their relationships: interpersonal, labor, family, circumstantial, affective, they demonstrate knowledge of their abilities, they know how to relate to their colleagues, they are media professionals of a pleasant work environment. For [13] and [15] it is conceptualized as communicating correctly, the thought expressing the message to contribute positively to objective decision-making, bearing in mind the context immersed in the very act of communication, assertiveness is fundamental. in communication skills, it strengthens the bond between workers, transmits the message pleasantly, facilitates the understanding of information, encourages teamwork, and characterizes those who exercise it as a leader.

Therefore, it is inferred that the organizations that promote these competencies have a pleasant organizational climate, solid work teams, collaborators use an appropriate language to communicate their disagreements, the implementation of ICT for the development of this competency allows finding more dynamic methods. of learning improving the implemented pedagogy taking advantage of the technological tools that support the development of human capacities at work to form a more competent profile in the labor market, allowing better interpersonal relationships, one of the main causes of retention of organizations is quality of labor relations together with the affective ties that are generated at work which cause motivation and trust.

*Technological skills*, is a distinctive competence of human resources [6] focused on the use of new technologies, seeking organizational empowerment, innovation, competitiveness, and dynamism in processes, seeking to strategically manage the resource, thus improving organizations [7] is used to optimize processes, through digital knowledge, impacting the areas: operations and marketing, facilitating innovation, management, and process development. Therefore, it is conceptualized as a differentiating ability of competitive personnel, makes the company more competent in the knowledge of technological means, provides greater capacity to manage information to guide plans that allow the development of minimal learning of office automation, use of institutional software, communication technologies, monitoring tools for human resources, this type of competence is valuable, because it encompasses digital knowledge, information management, data analysis, who possesses this competence, manages to adapt to technological changes in organizations.

## **Technical skills**

Starting from the investigations of contemporary authors, they are conceptualized as [11] specific skills required to fulfill functions of technical knowledge, performing functions of high rigor, for which knowledge of technical issues that allow guiding the mission of the organization is necessary. present in companies, each area is characterized by concretely requiring missionary functions inherent to the position, from the financial area technical accounting knowledge is needed, financial indicators, tax management, decision making, to maintain financial utility, in resources human resources the staff must have leadership skills, customer orientation, emotional intelligence, to manage human resources [12] the specific skills to fulfill the missionary functions of each position are considered technical skills, they are conceptualized as the functional capabilities that allow the compliance of specific tasks, which require technical and practical knowledge.

Characteristics present in the conceptualization are identified, for which it is concluded that they are specific oriented to the position, they arise due to the need to fulfill the missionary functions of the position, they are defined as hard skills that allow the collaborator to carry out his position, the elements that systematize it are knowledge, experiences, values and skills, these are used to create technical skills with a practical professional approach [19 and 20] explain that in order to develop these skills, self-regulation of learning must first be improved to develop better skills.

*Specific competences*, are known to be dependent on the area, position, functions, and processes to be executed, conceptualized as [13] the pertinent skills according to the tasks to be executed, for which they improve the competitiveness of the organization, through the technification of its procedural cycles, to make improvements, guaranteeing quality in human resources, the use of specialized skills is a complement to the competency profiles. The skills that are explicitly required to reach high-level positions are strategic, management, and leadership skills. In the same way, every company needs collaborators with specific qualities, for [14] they are manifest skills to effectively fulfill the technical commitments established in the companies, they are acquired by carrying out exercises, studies, experiences, it is defined as those such as specialized skills or those useful characteristics to demonstrate knowledge through the fulfillment of functions, when participating in each area, it should be noted that they are particular or specialized depending on the area.

*Management competencies*, according to the review, are found at strategic and managerial levels of organizations, [15] they are conceptualized as the skills, aptitudes, perspectives and information that an individual possesses, articulating with behavior, which improves process management, documentation and streamlining; are useful for optimizing response time, managing risk efficiently, management skills are important for deciding assignments or tasks [11] it is the combination of skills, mental qualities, coherent reasoning and hypothetical information, which they provide to the collaborator a holistic development, allowing management of operational and administrative risks through the application of strategies. It is thus defined as the conglomerate of skills, knowledge and experiences that provide an individual with the management capacity in order to solve needs with a view to achieving the objectives set by the company, department or area, arise to integrate processes, through from the creation of work plans, they rely on ICT to increase their scope, from which various skills are derived, such as document management, information management, financial management, among others.

### 3. Methodology

It was completed using reflection and developing previous studies of disciplinary, classic, current authors, who use the variables under review, to present them from a constructionist - positivist approach to assess the experience, and practical contributions of the investigations that allow the generation of reflections [18] through the hermeneutical method. The execution of the procedure was applied based on the investigations [8], [9] and [10]. It begins (a) with the knowledge of the global context immersed in the study variables and the realization of the problem question (b) high-impact research is sought, belonging to classic, disciplinary, contemporary authors, an order is given, where it is grouped the one written by the work plan, dissecting and understanding the behavior of the variable under review, (c) the conceptualizations and contributions of the authors are analyzed through hermeneutics, providing greater rigor of the reflections in their entirety, for last (d) the reflections and contributions of the article are synthesized.

### 4. Final considerations

The reflections resulting from the analysis and synthesis of the revised theories allow us to conceptualize (1) generic competencies as universal skills, useful to enrich the profile of each collaborator, they are useful in all areas of the organization, they emphasize human resources and marketing, are tied to psychological factors that mark dominant traits in individuals, are effective in enhancing teamwork, optimizing time to achieve designated goals, always oriented towards the sustainability of the organization, (2) technical skills are skills that characterize each area of work, they need more dedication to be developed, differentiating in organizations according to the reason for being of the position, they provide positioning in the market, (3) the generic and technical skills supported by ICT are divided into communicative, technological, specific and management skills, these improve the profile of people because they increase their contributions and/or value reaching competitiveness, (4) both generic and technical skills are shared, going from the specific to the general, it is understood that they respond to technical requirements that are generalized in systems and subsystems.

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