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Soft Skills in the Information Technology career

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Professional success is defined not only by skills that can be measured with tests and test scores, but also by personality-related skills. The influences of these socio-emotional skills on a person's professional life have been demonstrated several times.

An individual's skills are usually classified in hard skills and soft skills where the first group is related to the technical aspects of performing a job while the second is related to the individual's interpersonal and behavioral skills. Some of the common hard skills for the information technology professional are: proficiency in a foreign language; software development using specific programming languages; ability to use a specific operating system; and ability to manage a computer network.

Soft skills are essential not only to ensure employability but also to maintain employment, as they encompass several common dynamics within a company such as: interpersonal skills; self-management skills; and even capacity for leadership and management.

Companies do not always seek professionals for the hard skills they need for the job. Of course the company expects some of these skills when hiring, but specific hard skills are easy to train within the company itself. Soft skills on the other hand (such as openness to criticism) are much more complex to develop.

Human resources expert Regina Hartley says in her experience, "hiring the candidate who has a less technically impressive resume and hiring the candidate with different life experiences leads to better results for the company." This comes from the fact that these

life experiences shape some soft skills like perseverance and ability to act creatively.

In a quantitative study conducted with information technology companies, questions using a Likert scale with grades 1 to 7 were applied to assess what employees' perceptions were about different soft skills. The list contained 107 soft skills and was designed in such a way that skills were assessed at random.

The list combined soft skills into several categories according to their likeness. The

categories were: interpersonal skills; self-management skills, communication skills, organizational skills, decision-making skills, and problem solving; analysis and creativity skills; sales skills; political skills, leadership skills; and management skills.

The questionnaire was answered by 30 information technology companies operating in Brazil and the results of this questionnaire reinforce the idea that these skills are fundamental for professional development.

Of the 107 skills questioned, none was considered irrelevant to an information technology professional, even for those starting a career in the field. However, some skills were considered less relevant, such as the ability to "make others take responsibility for their actions" that was considered the least important of the abilities analyzed.

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In an analysis of the skills considered most important, it is possible to note the importance of ethics within the company. The skill considered extremely relevant by all respondents to the questionnaire was “Do not harm others” which can be read as the ability not to take actions that will intentionally harm colleagues.

Other skills related to interpersonal ethics such as “acting with respect and courtesy, cooperation and showing interest” were considered extremely relevant to a professional, demystifying the myth that the information technology professional is usually solitary and antisocial.

Some skills traditionally related to information technology professionals such as “being able to propose solutions to problems and researching information independently” were also related among the main skills, but with less relevance than interpersonal skills.

Looking more broadly, interpersonal skills of self-management and communication were the most relevant skills for those who are starting a career in information technology. And, as expected, management and leadership skills were considered less relevant in this specific case.

Problem-solving, analytical, and creative skills did not appear among the key skills needed for a person in early career in information technology.

Although companies realize that it is necessary for employees to have soft skills developed, in general, the curriculum of a higher education course in information technology focuses on hard skills and rarely tries to work on the less technical side of people. The focus on the development of these hard skills ends up developing professionals with difficulties to live in the work environment.

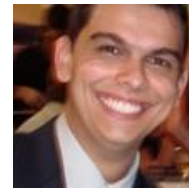
The survey was also able to perceive some differences between the results of companies with different amounts of employees. Smaller companies rated items as “being direct” as one of the main elements, while in large companies “not making inappropriate comments” appears as one of the main ones, suggesting a shift in the focus of the relationship as companies develop and grow in size.

Another result that appears in both large and small companies is related to self management. Skills of this group appear as the most important and this can occur due to the increasing adoption of agile development methodologies within information technology companies.

The philosophy of agile development encompasses, among other things, concepts of team division into small teams that are self-managed, facilitating communication and closeness of team

members. Agile practices are more in line with soft skills than traditional software development.

Software development teams not only need developers capable of programming 10 times faster than regular developers, they also need developers who are able to understand customer needs, empathize with their team members, and understand how the world works outside of computers.



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This article is a result from the author's ascertainment and analysis, without compulsorily reflecting CEST's opinion.