



## **EDITORIAL**

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Technology, since its emergence, has influenced human behavior, inspiring the creation of products and services that bring, among other things, more comfort, health, and leisure possibilities for all society. In the world of organizations, Information Technology describes and organizes the set of information resources available, enabling more accurate decision making to reach the proposed objectives. Sectors of a company benefit from systems for organizing and analyzing data. The information systems present in these organizations transform the available data into information and knowledge, enabling the transfer of knowledge representation processes to the computer.

The computer, in turn, uses the knowledge obtained to develop tasks or solve problems, making use of associations and inferences to solve problems that simulate real world situations. Since classification is a natural human task when searching for knowledge organization, automating this process is a challenge in the search for understanding real processes. To perform classification, algorithms are trained to identify a pattern that associates a set of records to a particular class. Thus, the algorithms create an internal representation, a model, capable of identifying the class of the new records from their characteristics.

These models are used in various areas of knowledge. The health system can be used to exemplify this idea. The available data can be used as information in decision making and can be converted into actions for intervention and improvement of the current health situation of millions of citizens. Computational intelligence solutions can be used in the risk classification of patients when they are submitted to evaluation in the Emergency Room, in diagnostics to monitor patients with serious diseases and in infection control. In all cases, it is important to identify the classifier model that best fits the researched context, using the available databases in the training of algorithms. Tracking and identifying this data can assist health professionals in their decision-making processes and benefit patients who are at risk and require intervention.

Information Technology offers numerous opportunities in different sectors of society and provides automatic devices that can increase the safety of the population. But it is important to discuss both sides of these changes. The technological pressure associated with information overload cannot be ignored, which imposes the need to identify useful information. Also important is the need to evaluate the ethical aspect

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related to information processing practices in scenarios where the use of misinformation, spread through social networks, can negatively affect people and organizations.

Fortunately, science continues to play a leading role in the construction of mathematical models and, as Rubens Alves has already mentioned, "intelligence is directly related to our capacity to invent and operate models. With their help, we simulate situations which have never happened. This allows us to adjust our behavior". Therefore, all that remains for us to do is to expand scientific knowledge, making it possible to create more resources made available by technology and, thus, make the necessary adjustments that lead society in the direction of a life of higher quality.