

Editorial

Technologies to improve efficiency

How to do it better is a question that holds a special interest for the human being. It is not enough to carry out a task, it is necessary to carry it out in an optimal way. Technology has played an important role in this search, generating tools to support the operations, analyze the data and automate processes. Technological development has permeated almost all areas of work, from the medical field, through the industrial and commercial sectors and even in the social sciences, seeking to improve current processes or creating new strategies.

In the industry, optimization is focused on saving time, resources, and costs. Historically the major evolutions in the industry have all been linked to technological change. The accelerated and growing changes in technology have ushered in the fourth revolution. Industry 4.0 is the digital transformation of manufacturing, production, and the industrial value chain [1].

In the business world to find the best technology solution, managers are thinking of introducing cloud computing, mobile technology, and computer networking to improve efficiency. Information technologies allow building business processes in a new way, namely, they provide automation of the working space of employees and business processes, reduction of production and service times, connectivity between employees and customers, inventory management, and others [2]. Concerning the management of quality control, the introduction of information technology increases the effectiveness of the information process of all stakeholders in the field of quality assurance.

In the environmental field, optimization is therefore very critical since this relates to environmental deterioration, economic expenditure, and human health. Green Technology Innovation Efficiency (GTIE) reflects the efficiency of an industry's use of resources in the green technology innovation process [3]. Studies have demonstrated that the efficiency of global Renewable Energy Generation (REG) is improving [4]. REG inputs are defined as the installed capacity of solar energy, wind power, geothermal energy, and bio-fuel production and define electricity from renewable energy as an output indicator. Then, the optimization, in this case, consists in maximize the electric energy with adequate use of renewable resources.

The application of emerging health technologies and digital practices in health care, such as artificial intelligence, telemedicine or telehealth, mobile health, big data, 5G, and the Internet of Things, have become powerful "weapons" to fight against the pandemic and provide strong support in pandemic prevention and control [5]. Likewise, advances in technologies have allowed the development of new treatments and drugs, the analysis of the human body from cell level to the physiological level, and the access to health services has improved.

Technological development has become a fundamental tool to improve efficiency in the processes implemented in different areas. It is important to preserve a balance in the elements that are being optimized, such as time, energy, precision, and speed, to get the best out of them. Researches in electronic and computational sciences are making a continuous effort to achieve greater efficiency with optimization of resources.

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