The ICT's as an alternative in times of Coronavirus

Nowadays, much has been written about coronavirus the known Covid-19, its social, political, economic and financial impact in the States over the five continents. We intend to synthetically analyze the relevance of Information and Communication Technologies as an alternative in times of coronavirus.

Its power is tremendously brutal when it affects the human person as a social being by nature. For this reason, the *modus vivendi* and *operandi* of various people, families and groups were transformed overnight and with it new forms of relationship were consolidated in time of confinement. The Covid-19 is imperative and alarming

Therefore, the human being is called to adapt and adopt new ways to be able to survive the so-called pandemic, which does not respect anyone, wherever we are, at what condition we are, social class, place of birth or origin.

However some alternative always exists, as a gateway or exit, of the situation in question. This is precisely, the ICTs. They offer human beings an opportunity to reinvent themselves, starting with forms of social relationship or *"being and being with"*. In the pandemic period of COVID-19, Tic's provides a dimension never experienced before by so-called classic societies, today technological societies.

ICTs have become the bone of social life, that is, the "*modus vivendi e operandi*" of the social, political, economic, financial and legal. Therefore, these have transformed the being and being of today's societies. With that, the ICT sector plays a key role in the search for solutions to prevent, combat and control the new coronavirus outbreak. Artificial intelligence, computer systems and mobile applications provide resources to determine or detect the epidemic and new cases of infection, as well as its control.

The use of technological resources such as robots, drones, digital media, including social networks, has brought a breath of fresh air in tracking, preventing and controlling the pandemic over the States. Furthermore, given the extension of Covid-19, it has been a real test for tools like *big data, analysis* and artificial intelligence. That's how the WHO. in April, he mentioned that artificial intelligence and *big data* are key in responding to the virus, having been able to control the expansion of the pandemic. The installation of thermal scanners at the train stations in the main cities made it possible to identify people who had a fever and activate the appropriate mechanisms to keep the situation under control. Through facial recognition, the temperature detection system was quite proficient.

Therefore, installing this technology at bus, train, metro and airport stations, as well as at taxi stops, would assist health and hospital authorities in controlling and fighting the new coronavirus. However, with Artificial Intelligence it is possible to predict the increase or decline of infected people in a given area, according to the sanitary and hospital actions carried out.

The drones are alternatives to combat Covid-19. While unmanned aerial vehicles from a certain height can control people's movements, interpersonal contacts in a community,

transport medical samples and other quarantine materials between the epidemic control center (quarantine center for the laboratory) without no human contact, which allows to reduce interpersonal contamination (between those who are infected and medical or health personnel). This is because some situations observed in Italy, Spain, United Kingdom, France, China, USA, Russia, South Africa, etc., contacts between nurses, doctors and infected people gave rise to contagions, resulting in the perishing of caregivers (doctors and nurses). For example, it can be used to monitor and alert citizens who walk on the streets with or without face masks, who do not disinfect their hands, etc.

Consequently, the use of Robots, in times of coronavirus, has been a great ally in combating the pandemic. Robots support medical services, both in and out of hospital, in the transport and distribution of expendable sanitary material, to be disinfected using UV light, vacuum disinfectant and vaporizer, as well as fans. Others are equipped to control people's temperature, as well as surveillance.

Therefore, ICT's provide a set of tools that gather useful information to track, prevent, control and combat the coronavirus pandemic and other endemic diseases. Technologies often anticipate the epidemiological picture of a country, region or community, and can even serve as an alert for an outbreak of diseases, alert health authorities and not only to take measures to prevent outbreaks or epidemics.

Another not less important aspect is based on taking attention and surveillance to contain the coronavirus. In this way, ICT's play a fundamental role, both in the use of artificial intelligence, as well as in Drones and Robots, which are driving forces for the prevention and control of the pandemic. The great example comes from China itself, as well as from Singapore, Austria, Taiwan, where technological resources support the mitigation, combat and control of the Pandemic.

The video surveillance cameras are used to determine, in the case of a sanitary fence, whether a particular resident has had contact with someone or not. If infected, the camaras will be able to indicate where he/she has passed and possibly been infected, taking into account the movement records of that person, having to combine several factors, above all respecting the dignity of that specific person. Concomitantly, the cameras installed in hospitals and health centers controlled by the computer system, allow the monitoring and follow-up of patients who are hospitalized there or receiving medical care, which greatly facilitates the work of medical and health personnel, as well as government authorities in terms of fighting the pandemic. All of this *allow to plan, manage and respond effectively to the pandemic.*

Therefore, with the use of video surveillance cameras, it is possible to control infected and affected citizens who violate mandatory quarantine. With the collection of facial images and with the help of facial tracking algorithms, it is possible to track citizens who eventually violated the rules of confinement or sanitary fence.

It should be noted that, with the *Geolocation System*, it is possible to map family houses with cases of Covid-19, thus having greater control of Pandemic in different areas. The geolocation system can also be used to monitor affected areas with Covid-19. Once the mapping of zones in different classes has been established (red zone, orange zone and green zone) - It is noticed that the *red zone* refers to the zone with an increasing number of infected, and *the orange zone* refers to the zone with a stable and reduced number of infected and, finally, the *green zone* refers to the zone without infected.

At the end, ICT's in times of coronavirus brought a new form of service provision, that is, the exercise of labor activity, teleworking, which has been increasing and has become, not an exceptional regime, but a rule, imposing on legislators to frame it. As someone said, it *is a reinvention in Covid-19 times.*

With the measures of confinement, social distance and the increase of cases of infection by Covid-19, institutions, organizations and companies closed the premises (the offices), having adopted teleworking for their collaborators, being that many tasks that were once exclusively in person, they started to be online, or with resources to ICT's.

In fact, teleworking makes it easier to carry out tasks outside the offices, maintaining productivity and improving the quality of employees, protecting them from possible contagion and with the effect of pandemic spread. Furthermore, teleworking includes the use of technologies to facilitate communication between the parties, without the need to be or maintain physical contact, such as meetings, teaching / classes, buying and selling goods and services, etc. The example comes from the great services provided by computer applications in banks, universities, colleges, food stores and beyond.

However, teleworking will provide a new organizational model, different from the traditional one, creating new challenges for organizations, institutions and companies. What remains for now is for each organization, institution and company to invest in this process, so that after the time of Covid-19, they can guarantee teleworking to employees who choose freely, creating equal and fair conditions among employees.

Last but not least, ICT's *must serve as support for the prevention, control and combat of the pandemic.* If not so, there is a risk of violating Fundamental Human Rights, giving rise to the *dignification of violence*. Furthermore, it is necessary that the ICT's in time of Covid-19 have a truly human face.

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