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Is Space R&D Truly Fostering A Better World For Our Future? (2)

Author: Ms. Sofía Andrea Huerta Ramírez
Universidad Nacional Autónoma de México, Mexico

Mr. Jhonatan Andrés Vázquez González
Universidad Nacional Autónoma de México (UNAM), Mexico

INDUSTRY 4.0 AND THE SPACE SECTOR: NEW MANAGEMENT MODEL FOR ANALYTICAL
INTEGRATION OF SMART CITIES WITHIN THE FRAMEWORK OF THE ACHIEVEMENT OF
THE SUSTAINABLE DEVELOPMENT GOALS IN THE 2030 AGENDA

Abstract

A smart and sustainable city uses information and communication technologies (ICTs) to provide a better quality of life for its citizens, improving the efficiency of services and sustainable development. This city serves today's needs without sacrificing the needs of future generations in terms of economic, social and environmental aspects." However, in the face of reformulation of meeting the Sustainable Development Goals in an irregular context of international reality in 2020, the concept of a smart city becomes even more crucial for the next decade, as constant connectivity identifies journeys of unprecedented behavior in all areas that condition citizens of any region. Thus, in order to develop new models of governance for the benefit of humanity, research was conducted to support the new pillars that lead to a new international order, leveraged by the application not only of ICTs, but also by remote sensing technologies within the space sector.

The smart cities are the right infrastructure to keep all digital services connected, so the space sector is a key part of this strategy, from both city urban planning to Internet of Things (IoT) management or the so-called Internet of People (IoP). In terms of information platform management, the type of urban development mode requires spatial support to supply the data flow the city needs. This is based on industrial practices, benchmarking studies in countries of similar conditions and new technological trajectories within Industry 4.0. The approach to addressing this problem condenses the principles of the Economic Commission for Latin America and the Caribbean (ECLAC) literature on technological capabilities, change management and technological co-evolution. These principles could be a reference point for international stakeholders.

Therefore, as a result of the integration of variables from various sources of information, a useful analytical framework would be generated for traditional and non-traditional actors of the new international reality, where there would be greater visibility, traceability of economic processes, as well as predictability and optimal management of financial events, political processes, demographics and natural disasters. This involves transforming the processing and interpreting of data that would be exported to smart boards determined by multiple end-user approaches. Specific boards for companies, financial systems, international organizations, academia and government, thus generating large volumes of data, key factor for the success of this proposal.