



Envisioning the Future and Leading A Digital Transformation through Smart Cities

By Anthony Weeks, US Virgin Islands Special Economic Envoy to Taiwan & Asia-Pacific Region

Smart City Technology and Internet of Things (IoT) is the Next BIG Thing according to Cisco! A Global Phenomenon. An Internet of Everything through connected devices. Trees will talk to networks, networks will talk to scientists about climate change, cars will talk to road sensors, which will talk to stoplights about traffic efficiency, the ambulance will talk to patients records, electronic medical records will talk to doctors about saving lives! All driven by Semiconductors, Artificial Intelligence and Blockchain, and Taiwan is a leader in this space of technologies, working alongside US States, Cities, Territories and other countries globally.

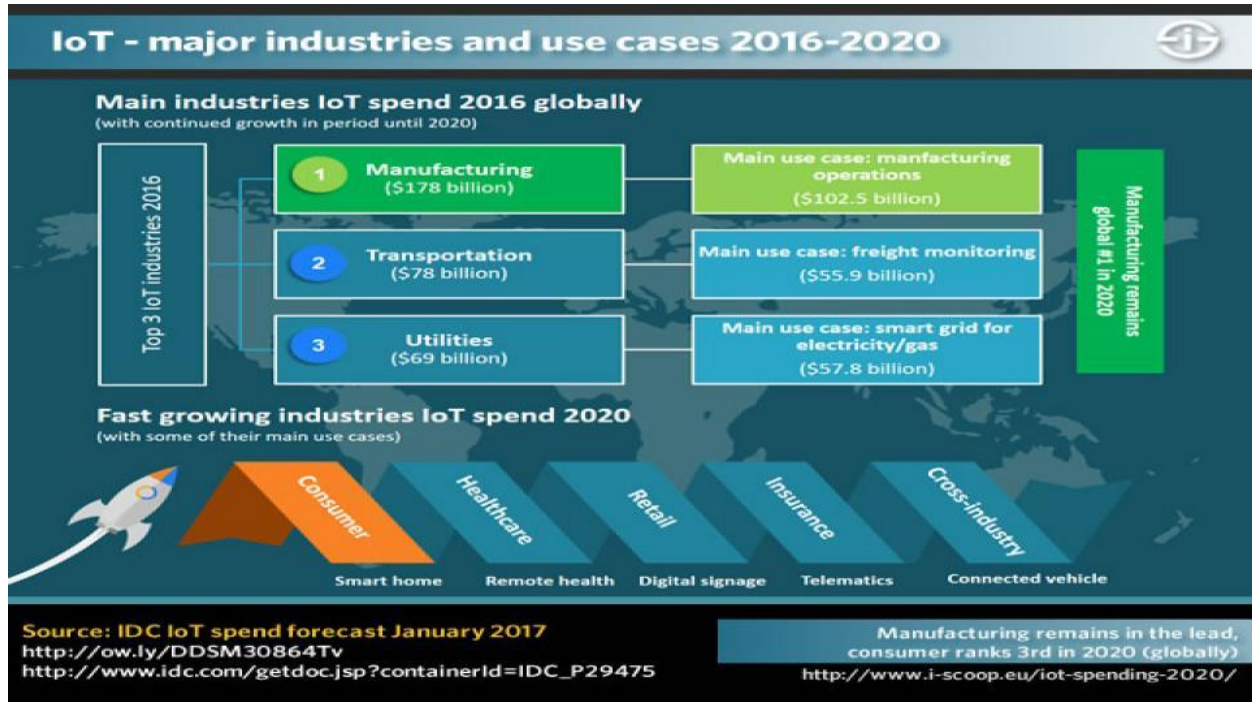
Is your city a smart city? What makes a city smart?

What are smart cities, and why do we need them? Smart Cities Council describes smart cities as “having digital technology embedded across all city functions.”

A smart city is one that leverages technology to increase efficiencies and improve the quality of services and life for its residents. Smart city initiatives can cover anything from power distribution, transport systems, street lights, and even rubbish collection. The idea is to use data and technology to make everyday life easier and better for the people who live and work in the city, while maximizing the use of resources.

More and more of us are living in cities – the UN predicts that 68 percent of the world’s population will live in urban areas by 2050. And this means our cities are facing growing environmental, societal, and

economic challenges. By making cities smarter, we can overcome some of these challenges and make cities better places to live. One report by McKinsey Global Institute found smart city technology can improve key quality of life indicators – such as the daily commute, health issues, or crime incidents – by 10 to 30 percent. (Source: Forbes)



It has taken less than two decades for the commercial internet to go from innovation to indispensable, from fun to fundamental. About 2.5 billion people are connected to the internet today, a third of the world's population; there are projected to be about 4 billion users by 2020, or more than half the global population. Continuous access to information, commerce, communication, friends, and entertainment – among myriad of other things – has become a daily fact of life for billions and will soon become a reality for billions more.

The internet makes its full weight felt in more high-impact areas such as healthcare, education and government services, access to digital services will only become even more essential for everyone in the years to come. Business consulting firm Frost & Sullivan projects that the global smart city market will be valued at \$1.56 trillion by 2020.

Taiwan was one of the first to invest in “smart” technology, while other countries are slowly starting to learn from their success story.

Taiwan's Taipei wins big at 2021 IDC Smart City Asia Pacific Awards

Taipei was a big winner at the 2021 IDC Smart City Asia Pacific Awards (SCAPA), taking the awards in the categories of civic engagement and public health and social services, according to the organizer, U.S.-headquartered International Data Corp. (IDC).

Taipei, the capital city of Taiwan, won the outstanding smart city for civic engagement category with its TaipeiPass: Digital Pass to Government Mobile Service, according to the IDC.

In 2018 the US Virgin Islands (USVI) Trade Delegation participated in Taiwan's Taipei Smart City Summit & Expo (SCSE). Taipei SCSE opened, showcasing the latest innovative IoT solutions for smart cities. It was reported that more than 30,000 professionals registered to attend the show.

The USVI Trade Delegation a 20 member delegation, comprising of stakeholders from both the public and private sector. Former USVI Senate President Myron Jackson led the public sector, to include the heads of the Water & Power Authority (WAPA), VI Next Generation Network (VINGN), and VI Bureau of Information Technology (BIT), and as the Managing Director of SEDI, Anthony Weeks led the private sector. Since 2018, the USVI Trade Delegation has been attending the annual Taipei Smart City Summit & Expo (SCSE) as an active participant sponsor by Taiwan. The USVI-Taiwan Smart City Collaborative Initiative is called Smart Island Development (SID).



The 2018 SCSE Summit was the site of an important agreement made between representatives of cities in the UK, France, Greece, the Czech Republic, El Salvador, Japan, South Korea, Australia, and Russia, who came together to sign a "Go Smart" initiative. The new alliance mission is to make the world a smarter place to live through exchanges and cooperation. Representing the US were Florida and USVI. The USVI was the only Caribbean island who participated in the historic "Go Smart" Initiative Signing Ceremony. (Source: Taiwan News)

Reimagining City Transformation

Cities around the world are reimagining the future, using the pandemic as an opportunity to come up with urban solutions that will make live better and more prepared for crisis. They are aspiring to create greener

spaces in their urban areas, improve connectivity, reduce congestion, focus on sustainability, be more adaptive and smarter with technology and materials.

As people have been forced inside, out of schools and workplaces as well as away from one another, new challenges have been presented. Life may not return to the way it once was. Cities will need to adapt to a new reality and there are no universal solutions. (Source: Cities 4.0)

Key themes of Cities 4.0:

- Rethinking Urban Development In A Post Pandemic World
- High Density Development With Low Density Activities – The Way Forward
- Edge-Computing-Enabled Smart Cities: Reshape The City Experience
- From Smart Cities To Connected Communities
- Harnessing Technologies To Transform Disaster Readiness
- Development Of Greener And Cleaner Cities
- New Traffic Patterns And Healthy Mobility
- Decoding The Low-Touch Economy
- Strategies In Developing Secondary Cities Into Smart City

The “Smart City Taiwan” Project

The Smart City Taiwan project utilizes all types of smart technologies (such as IoT, Big Data, and AI) to effectively integrate local, industry, and civilian needs. Support from the central government speeds up collaboration and integration between cities and towns and achieves local and industry innovation. The spread of smart applications in both cities and towns constructs a vision where people, companies, and government exist in harmony and drive local innovation.

Leading 295 businesses (including 70 startups) to invest and develop of 224 smart services across 22 counties and cities in Taiwan

Taiwan's three major smart cities hubs are Taichung, Taipei City and Taoyuan.

Applying smart applications in 6 major aspects of civilian life including food, healthcare, housing, transportation, education & entertainment, and governance, resulting in 3 major achievements: transformation in local digital governance, industry service models, and civilian lifestyles. (Source: Taiwan IDB)

Planning and Building Cities Infrastructure for the Future

Infrastructure does not get built without foresight, planning, investment, and innovation. Even though CSPs by themselves currently invest more than \$300 billion a year in infrastructure-related capital expenditure³, serious impediments are already constraining digital activity and interaction. Without new approaches, the constraints will not be relieved and could intensify.

Policy-makers, industry participants, and other stakeholders need to work collectively to do three things:

1. Commit to actions that promote the long-term growth of the digital economy 2. Remove impediments to the expansion of digital infrastructure 3. Modernize policies to encourage investment and innovation throughout the internet ecosystem.

Digital Economy Growing at Over 10% per Year across G-20 Countries and Select Other Countries.

Many Stakeholders Play a Role in Digital Infrastructure:

- Infrastructure - Networks, Devices, Data Protocol, servers/storage
- Policymakers/Regulators
- Industry Participants and End-Users
- Communication Service Providers
- Digital Service and Product Providers
- Hardware Manufacturers

Digital service delivery has the potential to revolutionize fields with huge social and economic impact such as healthcare and education. The degree and nature of the challenge vary by region, but the need for improved infrastructure to accommodate fast growing digital growth is global.

Taiwan is a global leader in Smart City Technology & Internet of Things (IoT)

Taiwan's annual Taipei Smart City Summit & Expo (SCSE) event serves as a catalyst, and an important conduit to building out the Smart City Technologies infrastructure around the world.