D-Link®
Smart Cities

Top 5 revenue opportunities for smart resellers

Resellers traditional revenue streams are drying up thanks to the cloud and the commoditisation of corporate IT solutions.

However, thanks to major advancements in technology and hugely ambitious projects, there is a major new opportunity for resellers that are quick and willing to adapt: The Smart City.

Smart Cities are connected cities that utilise technologies such as IoT sensors, M2M services, open data collection, advanced analytics and AI to improve the quality of life for all people who live, work and visit them. The aim is to more efficiently deliver public services, build business-friendly environments to encourage economic growth, and improve environmental conditions through green energy and reduced waste. As urban populations continue to grow, Smart Cities are increasing.

Smart Cities are no longer confined to the world of science fiction. They are a reality and growing quickly. In the public sector there is growing recognition of the value of Smart City innovations not only in improving public services but also in boosting the economy by helping businesses thrive.

The European Commission is supporting an innovation partnership on Smart Cities and communities that has hundreds of Smart City projects underway with many focused on environmental benefits.
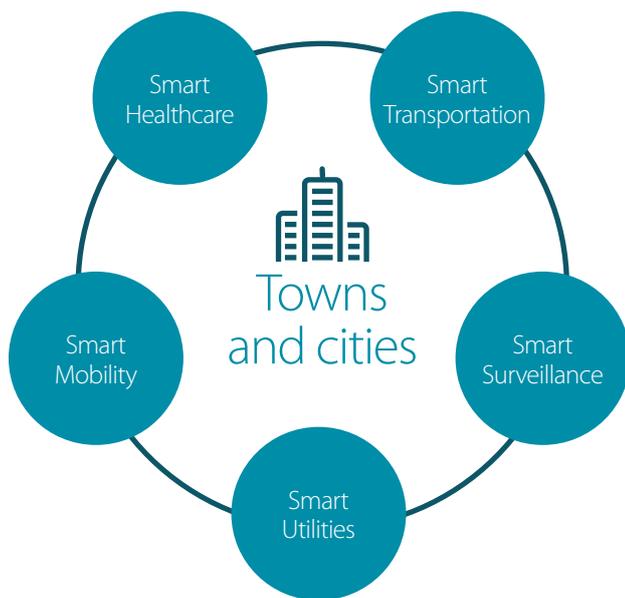
Major European cities, including London, Paris and Amsterdam, have Smart City projects up and running. Paris wants to reduce greenhouse gas emissions and address digital inclusion; London's Mayor has launched an initiative to make it the smartest city in the world; and Amsterdam has implemented a number of clean energy projects.

The Smart City industry is projected to be a $400 billion market by 2020, according to McKinsey research. Another research firm, MarketsandMarkets, expects growth to be from $308 billion in 2018 to $717.2 billion by 2023. Whichever way you look at it, Smart Cities represent a large potential market.

Wireless connectivity is THE key technology

Fundamental to any Smart City initiative is the infrastructure that underpins it: a robust public Wi-Fi network. A reliable wireless network is needed with the bandwidth to support the millions of IoT devices that are needed to constantly transmit huge amounts of data. Wireless is the key enabler for these projects and resellers specialising in this area have a major opportunity as deployments pick up pace.

In particular, the 5 key revenue opportunities that network specialists can take advantage of right now are as follows:

The benefits and problems technology is expected solve in a smarter city:

Smart Healthcare · Smart Transportation · Smart Mobility · Smart Surveillance · Smart Utilities — **Towns and cities**

Traffic congestion · Unreliable public transport · Citizen engagement · Outdated road systems · Unreliable connectivity · Risk averse · Strain on resources — **Towns and cities**

Smart Healthcare

Networked hospital campuses, connected medical devices and health apps Smart Healthcare

The Smart Healthcare market is one of the fastest growing, with some predicting annual growth at more than 40%. Research firm Technavio expects the global Smart Healthcare market to have a value of around $250 billion by 2022.

In Smart Healthcare, IoT and wearable devices are being used to collect real time patient data, saving money through better diagnosis, preventative measures and faster treatment. Smart Healthcare helps deal with the increasing healthcare burden by improving the monitoring of the health of a city's population, providing new tools to reduce response times for emergency services, ensuring defibrillators are ready for use, helping reduce overcrowding in hospitals and improving quality of life for people with disabilities and serious illnesses.

Smart Transportation

Intelligent traffic lights, smart parking, charging point data, smart street lighting.

Smart Transportation is an important part of any Smart City initiative and provides a fast return on investment for city administrators looking to reduce congestion levels, reduce pollution and cut the cost of parking enforcement.

The aim of Smart Transportation is to collect real time data about the movements of vehicles and people and use this data to provide a flexible transport system that is able to adapt in real time in a joined up and efficient way. Cameras are used to monitor traffic and intelligent traffic lights and digital road signs manage flow, drivers of electric vehicles are directed to the most suitable vacant charging points, street lighting only comes on when needed, and real time data from buses is used to provide accurate information on arrival times. Through intelligent traffic systems, Smart Transportation will, eventually, lead to support for autonomous vehicles.

The global Smart Transportation market size is estimated to reach $285.12 billion by 2024, according to Grand View Research, registering a CAGR of 22.5%.

Smart Surveillance

For security and safety; CCTV, connected fire hydrants.

Smart Surveillance is one of the most contentious areas of Smart Cities and involves the widespread monitoring of people using CCTV and sensors. Some feel that the levels of surveillance necessary to support Smart City initiatives are excessive and the law is changing and evolving in this area to try and strike the right balance.

There is no doubt that Smart Surveillance is a powerful tool that can be used to reduce congestion, fight crime, and improve public safety. The data collected is being used for crime prevention, traffic management and controlling energy consumption. There are even systems for real-time alerts when fire hydrants are in use or when a hydrant is broken.

HTF Market Intelligence is forecasting a compound annual growth rate of 15 percent in the global video surveillance market, which would reach nearly $106 billion by 2026.

Smart Utilities

Smart metering, solar panel sensors, telemetry, lighting.

Smart Utilities are helping the energy sector to meet the challenges of renewable energy, oil price volatility, climate change policies and changing customer behaviour.

Smart Utilities drive more efficient use of energy, reduced consumption, and optimise production from different energy sources by collecting and analysing usage data in both commercial and residential buildings. Monitoring energy usage in this way actively reduces consumption and costs.

The global Smart Utilities management market is expected to register a CAGR of 18.46%, between 2018 and 2023.

Smart Mobility

Ubiquitous public Wi-Fi – indoors and outdoors.

The connectivity that underpins Smart Cities serves two purposes. Firstly, to provide a robust, reliable infrastructure to deliver the collected data from throughout the city to enable analysis and resulting actions to take place. Secondly, to provide ubiquitous wireless connectivity for all. In a Smart City the wireless network is an amenity for residents and visitors.

Smart Cities will provide everyone with internet connectivity, bridging the digital divide and removing inequalities based on location or economic factors.

According to Allied Market Research, the global Wi-Fi hotspot market was valued at $1,766 million in 2016 and is expected to reach $5,198 million by 2023, growing at a CAGR of 16.9% from 2017 to 2023.

How to get more involved in Smart City initiatives

As with any rapidly evolving area, lessons are being learnt as the market grows. The success of Smart Cities and their future deployments are heavily reliant on collaboration and shared best-practice. A good place to find out more and start to get involved in the development of Smart Cities is The Smart Cities Association, a non-profit organization that brings together city administrators and technology solution providers to collaborate and work together.

The European Commission has a strong focus on Smart Cities and supports The European Innovation Partnership on Smart Cities and Communities (EIP-SCC). EIP-SCC brings together city policy makers with industry, financiers and others to increase and improve Smart City deployments. Another initiative that is partly funded by the EU is Smarter Together that brings together six European cities enabling them to work collectively with various technology providers.

The TM Forum, an industry body for communications service providers and their suppliers, has a focus on Smart Cities again aimed at stimulating Smart City developments around the world.

There are also, of course, a number of trade shows and events that focus on the Smart City area including, for example Smart City Expo World Congress, Smart City Expo and Smart Cities UK.

Choosing the right technology partner

There are a growing number of opportunities in the roll out of Smart City infrastructures.

Any Smart City infrastructure needs a wide variety of different networking devices from indoor and outdoor APs, to centralised management solutions and multi-Gig switches. Such devices need to be proven, reliable, cost effective and based on industry standards to ensure interoperability with the huge number of other devices that make up any Smart City network.

D-Link's ruggedised network equipment backed with industry leading 24/7 support and a whole host of technical tools and aids (such as Wi-Fi Planner, Surveillance Floor Planner, Product Selector and Bandwidth & Storage Calculator) is ideal for partners looking to branch into Smart Cities.

Find out more
eu.dlink.com/industrial

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For a smarter, more connected future