Smart Cities 101

Presented by Sandy Reeser
Session # 3

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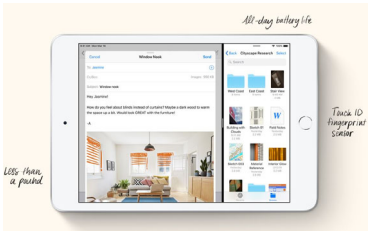
Information Technology

Grand Prize - iPad Mini



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What is a Smart City??

A smart city uses information and communications technology (ICT) to enhance its livability, workability and sustainability.

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Smart City Framework

In simplest terms, there are three parts to that job:

- Collect: First, a smart city collects information through sensors, other devices and existing systems.
- Communicate: Next, it *communicates* that data using wired or wireless networks.
- Crunch: Third, it *"crunches"* (analyzes) that data to understand what's happening now and what's likely to happen next.

What the heck is IoT?

Internet of Things

- Many complicated definitions, but simply put:
  - IoT means taking all the things in the world and connecting them to the internet.
  - These things can communicate with each other and even affect actions of other devices.
- What kind of things?
  - Things that collect information and then send it.
  - Things that receive information and then act on it.
  - Things that do both.

Smart Cities

Examples:

- Las Vegas, NV uses IoT sensors to manage its traffic congestion. If a driver is waiting at a red light at 1:00 am, sensors can gather carbon dioxide levels and ambient traffic conditions and determine whether it's safe to turn the traffic light green – rather than let a car sit at a red light generating exhaust.
- Grenada, Spain is connecting 14,000 waste bins across the city using sensors that will make garbage truck routes more efficient, given they have a serpentine system of one-way streets.
- Barcelona, Spain ran out of water a few years ago. As a result, they have developed a smart city sensor system for irrigation. Sensors in the ground analyze rain alongside the predicted level of rain forecasted to occur and will modify the city's sprinklers accordingly to help conserve water.
- San Franciso, CA leverages sensors to monitor parking spaces. They can access the level of occupancy for parking, which helps manage parking initiatives. Additionally, they have a dynamic parking system that adjusts the cost of parking based on whether spots are occupied or vacant. Low occupancy in one area will lower the price of parking.

Components of a Smart City

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How do you get there?

- DON'T just implement technology – expensive!
- IDENTIFY a problem, area of improvement, or data point that would benefit your municipality.
  - Examples: Traffic, water, parking, air quality
- FIND a technology partner that can provide solutions and guidance
- CREATE a roadmap – can contain multiple solutions
- PLAN and IMPLEMENT solutions that fit into the 3C's Framework

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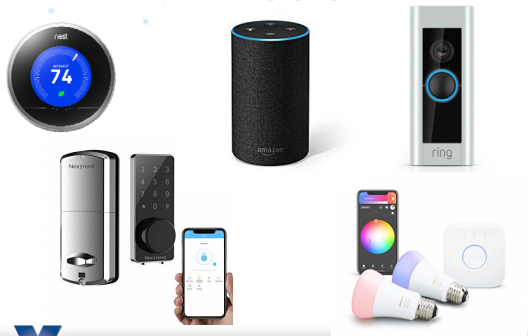
Smart Technology In Your Home



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Information Source

Smart Cities Readiness Guide
written by Smart Cities Council

https://kenosha.extension.wisc.edu/files/2013/11/SmartCitiesCouncil-READINESSGUIDEV1.5-7.17.14.pdf

https://smartcitiescouncil.com/

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Thank You!
Stop by our booth to learn more.

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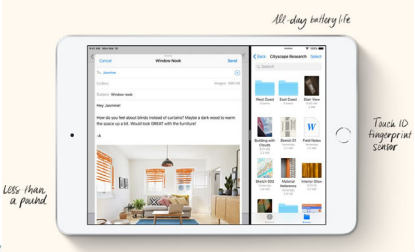

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