



When was the first car phone in use?

1946!



### Technology Adoption

### **NUMBER OF YEARS IT TOOK FOR EACH** PRODUCT TO GAIN 50 MILLION USERS:



**Automobiles** 

Telephone

Electricity





MTA



68угѕ

62yrs

50угѕ

46угѕ

28yrs

22yrs

18угѕ

Computer

Cell Phone

Internet

iPods

Youtube

Facebook

Twitter

Pokémon Go



14угѕ



2угѕ

12yrs

7угѕ

4угѕ

4угѕ

Зугѕ

19 days



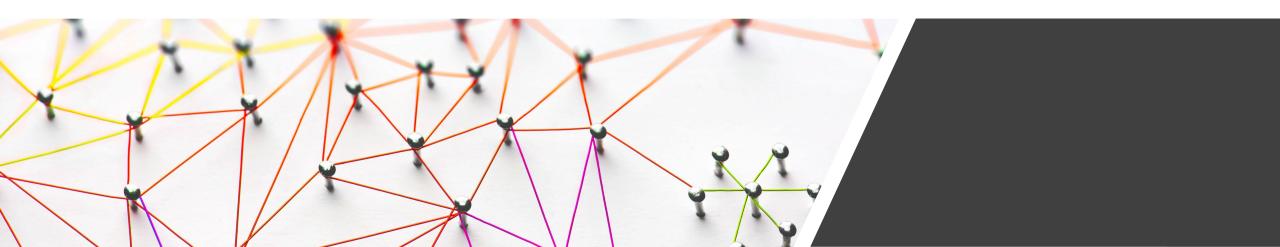
Introduction to Smart Cities

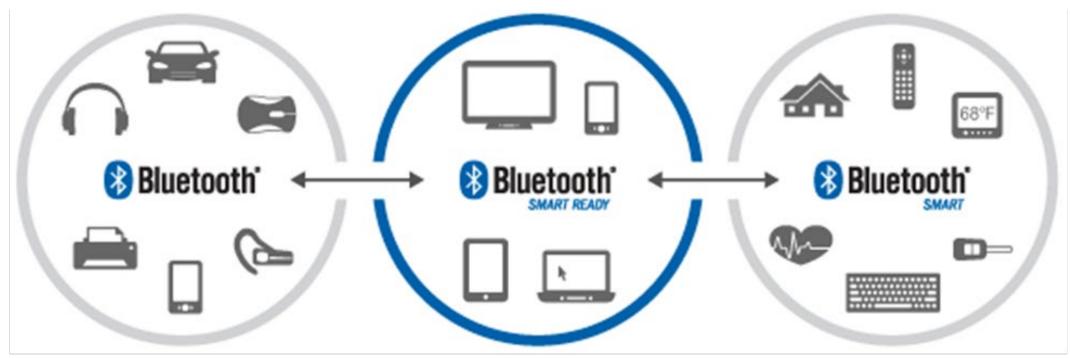
Enter...
the Smart City





## Everything is connected loT





Bluetooth BR/EDR, streaming rich content, like video and audio.

Devices that connect with both Bluetooth BR/EDR and BLE.

Low-power devices, sending small bits of data using very little energy.

### BLE - NFC - RFID - Smarter Signage Tech

# IoT Applications for Smart Cities

### E-Services

Transport Systems

Smart Traffic management

Health Cards

Water Level Monitoring







### Smarter Cities Smarter Signage







MAKING SMART DECISIONS ABOUT SURVEILLANCE













CAMPAIGN ZERO























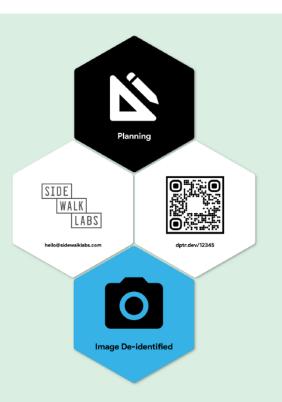
### Sidewalk Labs – Toronto, ON, Canada

### Numina

These icons convey the data collection activities underway for the Numina pilot.

De-identified data for planning and research purposes is collected in this area for Sidewalk Labs to measure how visitors move around and engage with our exhibits and prototypes inside 307. Images are collected which are immediately processed on-device to create non-identifiable pedestrian movement and count data, which is retained for five years. A low-resolution sample image is collected once every hour for calibration and data validation purposes, and are de-identified by blurring potentially identifiable information. Low-resolution sample images are not shared with anyone except Numina (the vendor) and are retained for 30 days.

If you have any questions contact hello@sidewalklabs.com









Technology



Data

**Process** 



Data

Type

(0)





\$

Access



Storage







(a)



(ÅI)



























### Social Regulation in Smart Cities

### Smart Cities & Smart Citizenship



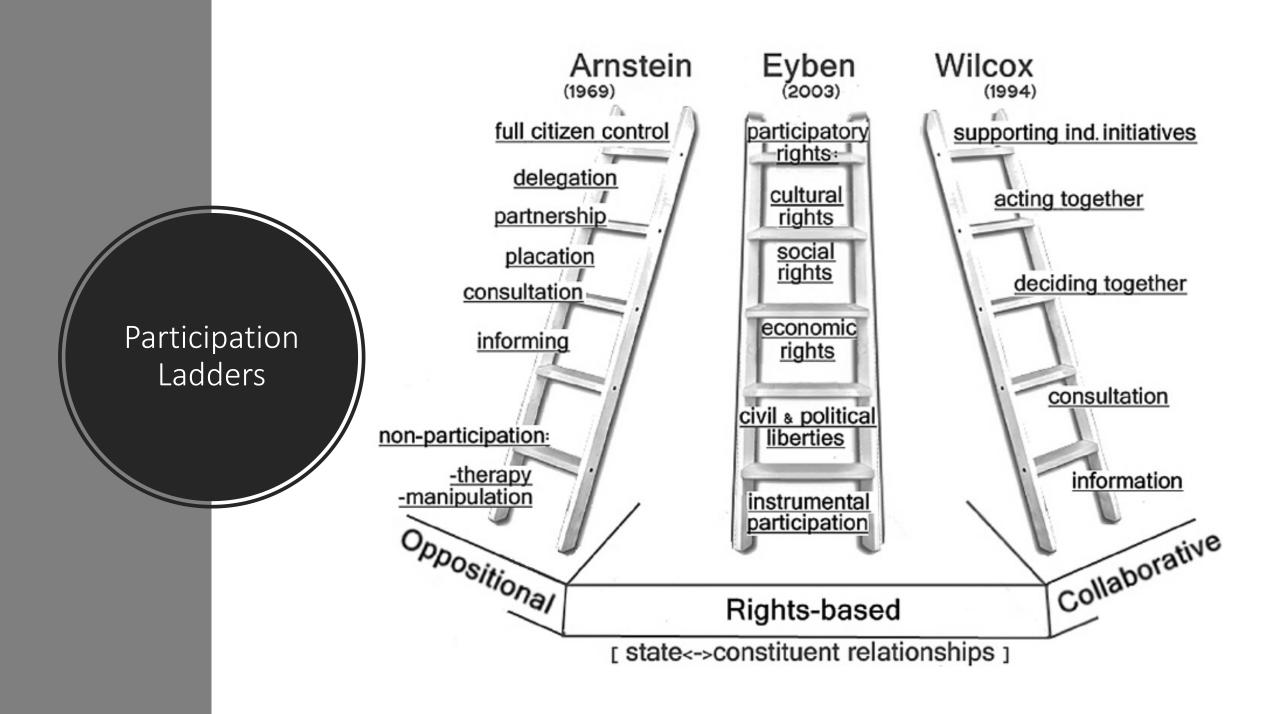


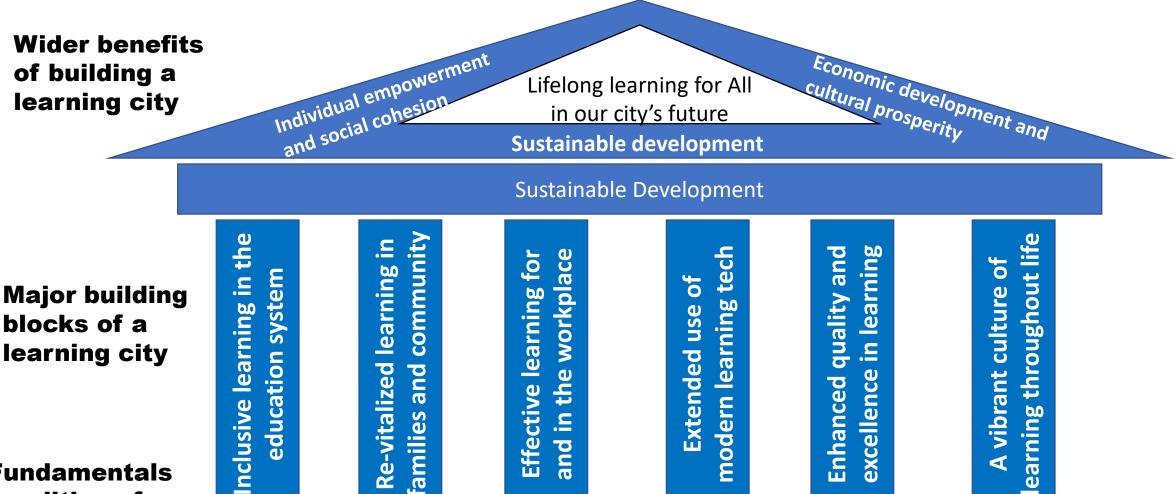












Fundamentals conditions for building a learning city

Strong political will and commitment

Governance and participation of all stakeholders

Mobilisation and utilization of resources

### Get S.M.A.R.T.

SMART-Specific Measurable Achievable Realistic Time-Centric

