Applications & Services in the Year 2021 –

Technology and Policy Implications

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We need to Measure, Monitor, Model & Manage data from multiple devices, in multiple scenarios, with end to end trust and security

- As the physical world becomes connected to the digital world, more "things" will be in play:
  - 2014: 13B+ Internet of Things devices
  - By 2020: 25B to 200B "things" will be connected
- Generating massive amounts of data
  - Zettabytes (10^{21}) by 2020
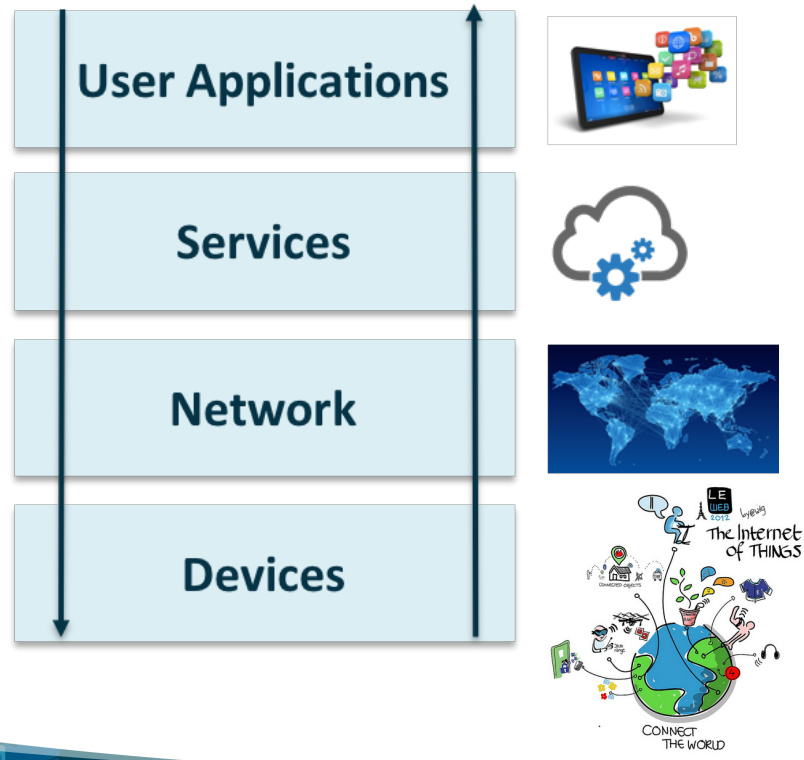 - Then Yottabytes (10^{24})
  - Then Brontobytes (10^{27})

Nearly all the "things" and associated Applications & Services in 2021 will be interconnected & need to work in harmony. Securely.
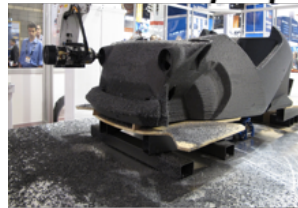
Smart Cities will be an inter-connected "system of systems" to improve efficiency, safety, quality of life, energy use, the environment

V2V, V2I, V2H, V2P

Smart Grid / MicroGrid

3D printing

Smart Homes/
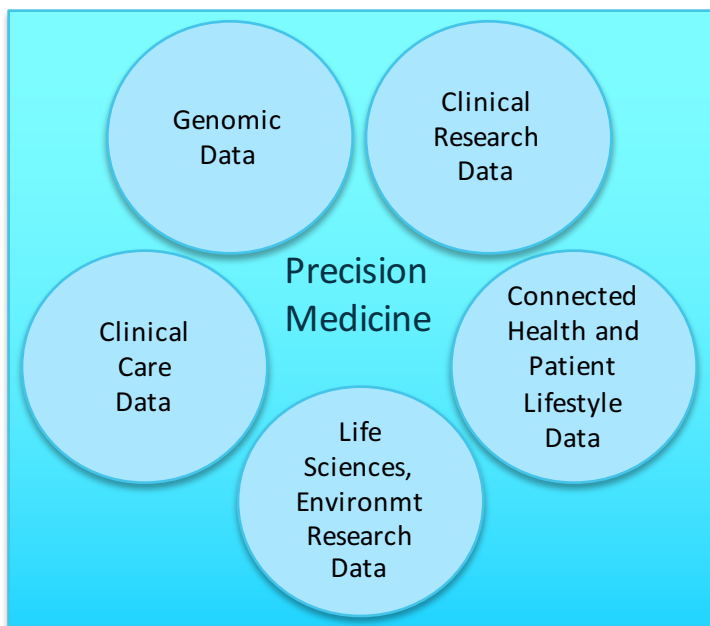Appliances/
In-home healthcare

Industrial M2M

Mesh Networks

Safety

POWERED BY COMMUNITY

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Precision medicine will become real leveraging data from genomics, clinical research, clinical care, IOT, environment & patient lifestyle data

Genomic Data

Clinical Research Data

Precision Medicine

Clinical Care Data

Connected Health and Patient Lifestyle Data

Life Sciences, Environmt Research Data

Connecting People to a Healthy Future (2012)

Glucose level   Weekly Trend
m t w t f s s

108 mg/dl

00:00   00:00

http://www.kp-itcomms.org/mm/digitalhealth/index.html

Addressing TIPPSS is essential to achieving safe, secure, scalable Applications & Services in 2021 – with technology and policy implications

Trust
Identity
Privacy
Protection
Safety
Security

Questions & Answers…
Thank You
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