

Designing a Smart Home infrastructure



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DIY products and the IoT

Multimedia
and the
changing
face of TV
viewing

connected Vs.
smart home



Connected Vs Smart



Right now we are really in the connected home space

The smart home might take a bit longer to be realised



Connected Home™

integrated



Adjective:

combining or coordinating separate elements so as
to provide a harmonious, interrelated whole

Smart home?

Smart home = 4 main subcategories

Safety and security

locks, cameras, motion detectors, fire/smoke/water/gas/intruder alarms, etc.

Infotainment

already here with Smart TVs and personalized streaming services

Environmental controls

also moving with “learning” thermostats

Metering

30 minute billing, time of use credit, budgeting & choice



Smart homes or technology should provide

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Time or money

Quality of life



Smart meters

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New tariffs

Customer choice

Time of use based billing



Smart use of energy

The Smart home needs to make smart choices for us

Surplus Production: Increase own consumption



Imported Energy: Reduce consumption



Integrated systems

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Heating
Cooling
Lighting
Security/CCTV
Renewables

Sensors for
occupancy
temperature
air quality
time of day
solar gain



Smart home



& the {IoT} Internet of Things

Smart Home, everybody wants a piece CEDIA™



tado°



Google



Nest set up screen

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Heating has changed

But

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Smart

Today

some things

talk to

some other things



The silo effect

A system, process, department, etc. that operates in isolation from others



Smart

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This will change



Smart

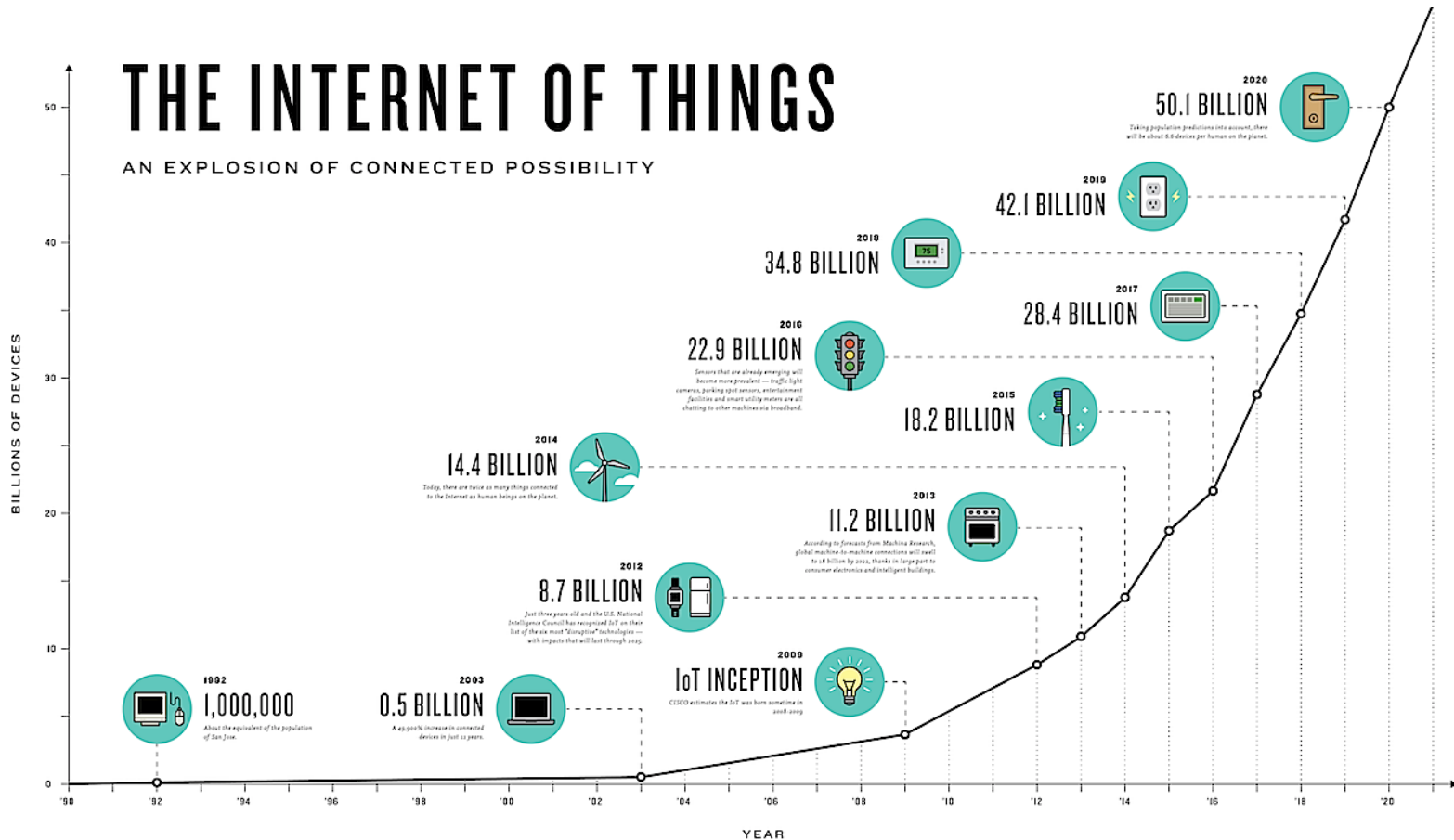


It all needs to work together in order
for it to be a smart home



THE INTERNET OF THINGS

AN EXPLOSION OF CONNECTED POSSIBILITY



Traditional devices

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Assisted living

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Modern technology is changing the face of assisted living

Enabling easy

Remote communications

Emergency calls

Health monitoring



Must work

Multimedia and the changing face of TV viewing







TELEVISION



COMPUTER

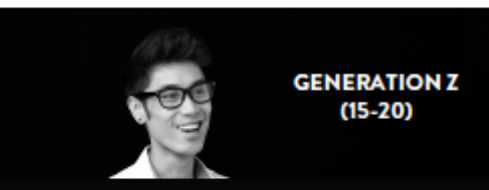


MOBILE PHONE

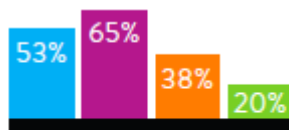


TABLET

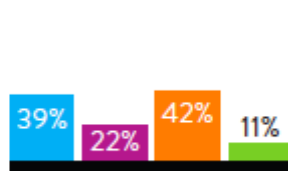
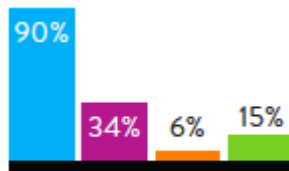
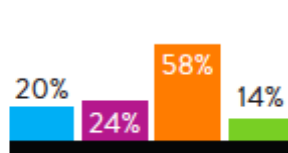
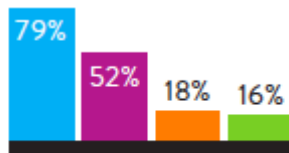
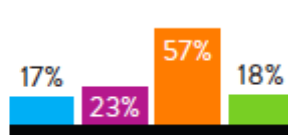
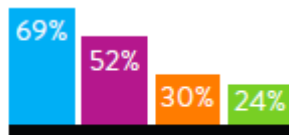
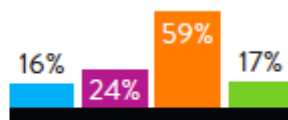
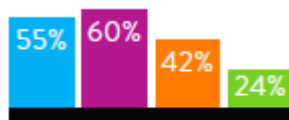
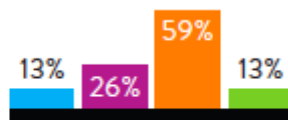
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**GENERATION Z**
(15-20)**MILLENNIALS**
(21-34)**GENERATION X**
(35-49)**BABY BOOMERS**
(50-64)**SILENT
GENERATION**
(65+)

IN-HOME



OUT-OF-HOME



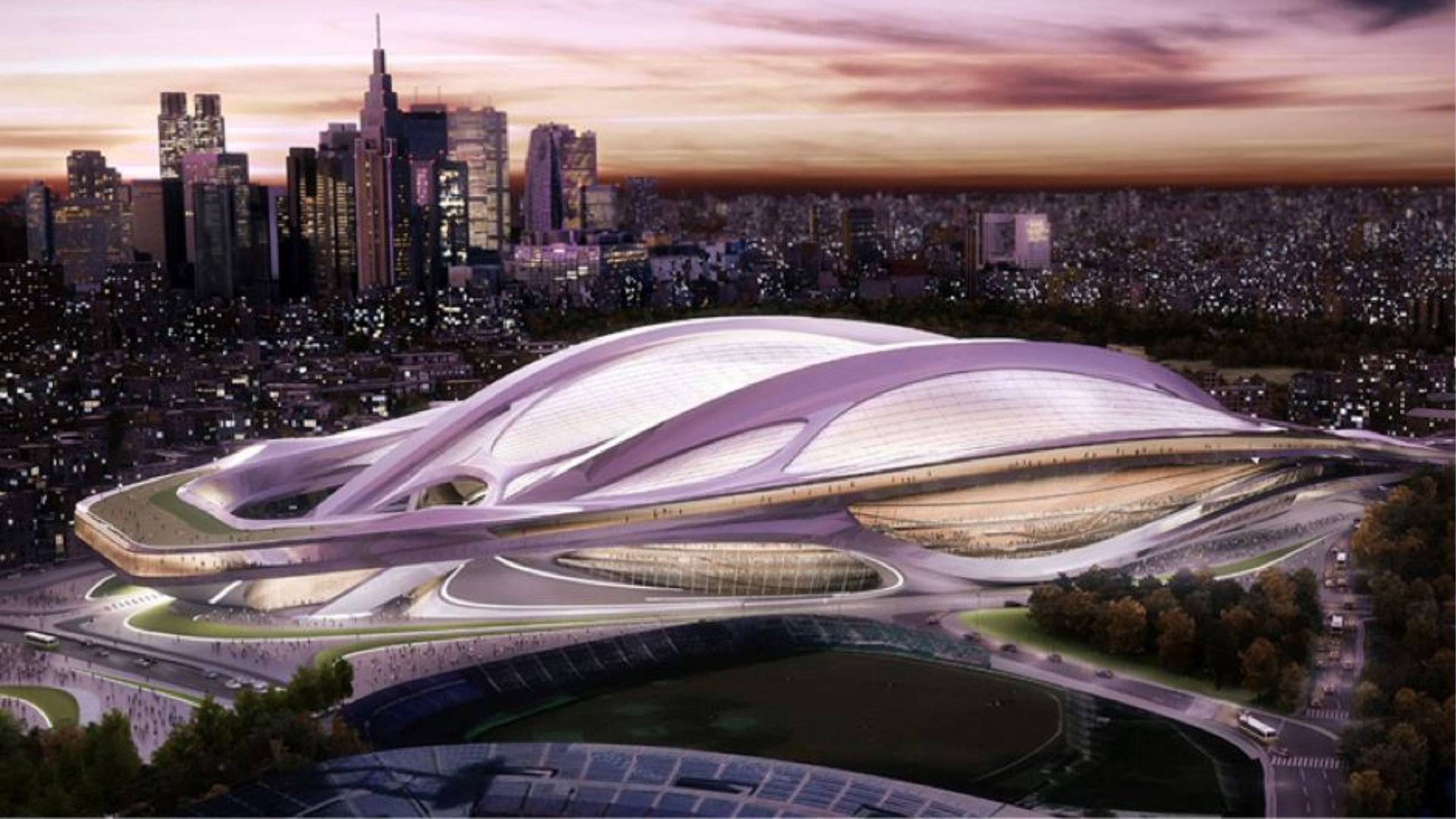
- Video goes mobile by generation
- By 2019 it is anticipated 80% of internet traffic will be video

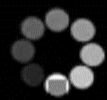
- Everything is streamed now
 - Social media
 - Internet browsing
 - Music
 - Film & TV

Even live TV is
streamed



Home Automation:
Wireless Streaming







What will the smart home of the future look like from a technical perspective?

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wireless

wireless

The solution?

The word "wireless" is rendered in a bold, rounded, sans-serif typeface. The letters are white and are surrounded by a thick, vibrant blue outline that follows the contours of the text, giving it a three-dimensional, bubble-like appearance.

Part of
but not the whole solution

Modern construction techniques

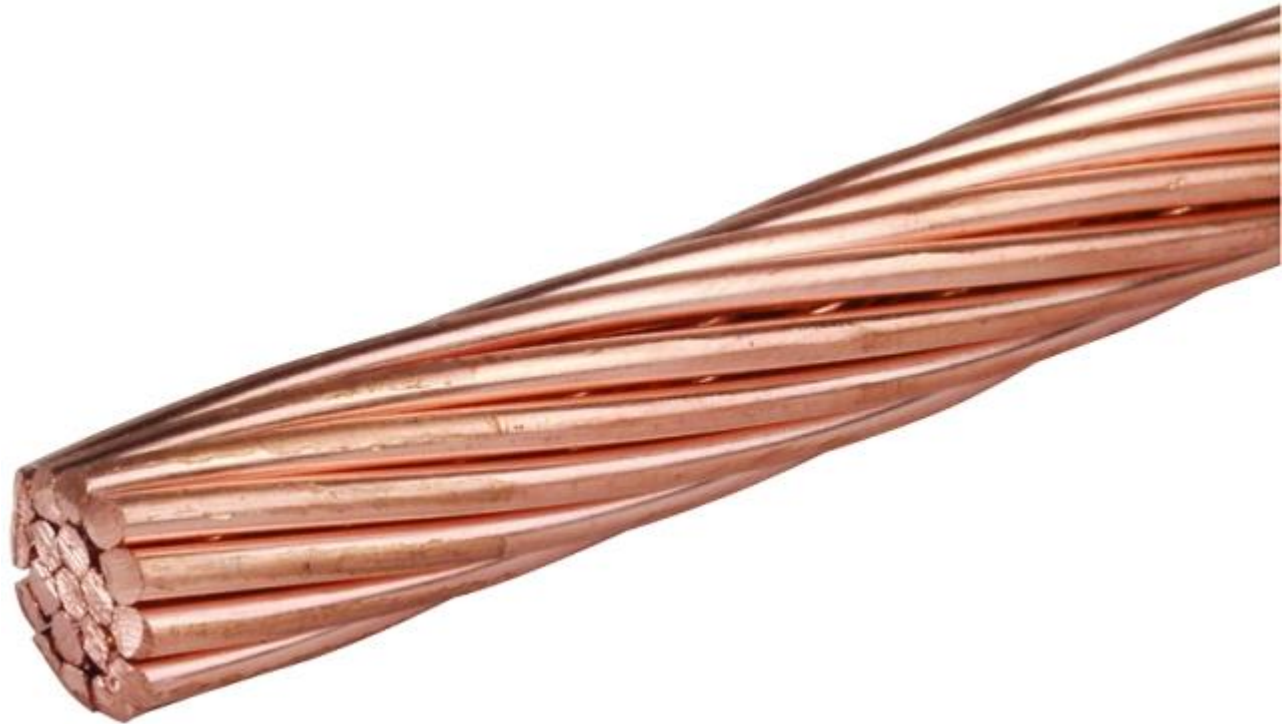


Faraday cage effect



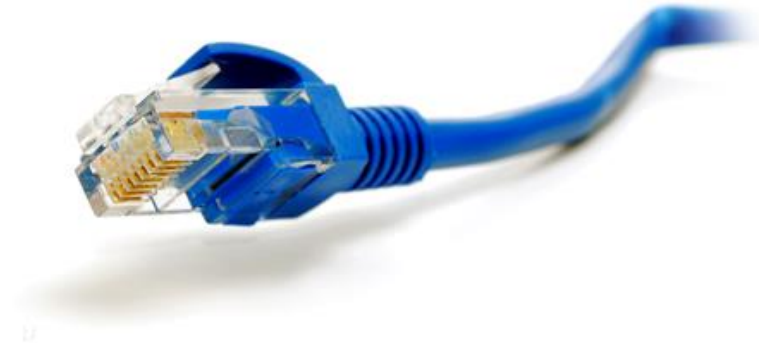
The case for copper

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The case for copper

- Smart meters increasingly looking for a wired connection
- TV viewing from aerial, satellite or internet
- Streaming services
- Location of wireless routers often an issue



Structured wiring for the home

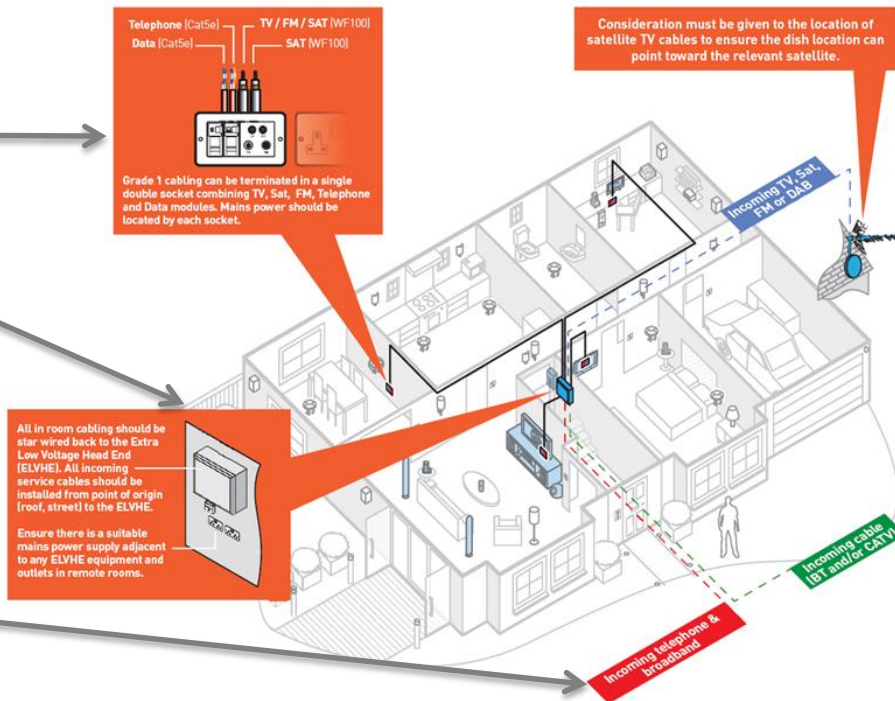
The connected home needs

A wiring infrastructure

Cabled to a central point

With all available incoming services wired to the same location (ELVHE)

Connected to the internet
And media services



Developers,
house builders,
home owners
need a simple,
scalable
structured
wiring solution
to facilitate the
needs of the
smart home



Thank you

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