MAKING CENTS OF NEW TECHNOLOGIES

BRUCE SANDERS
Moderator
Elauwit

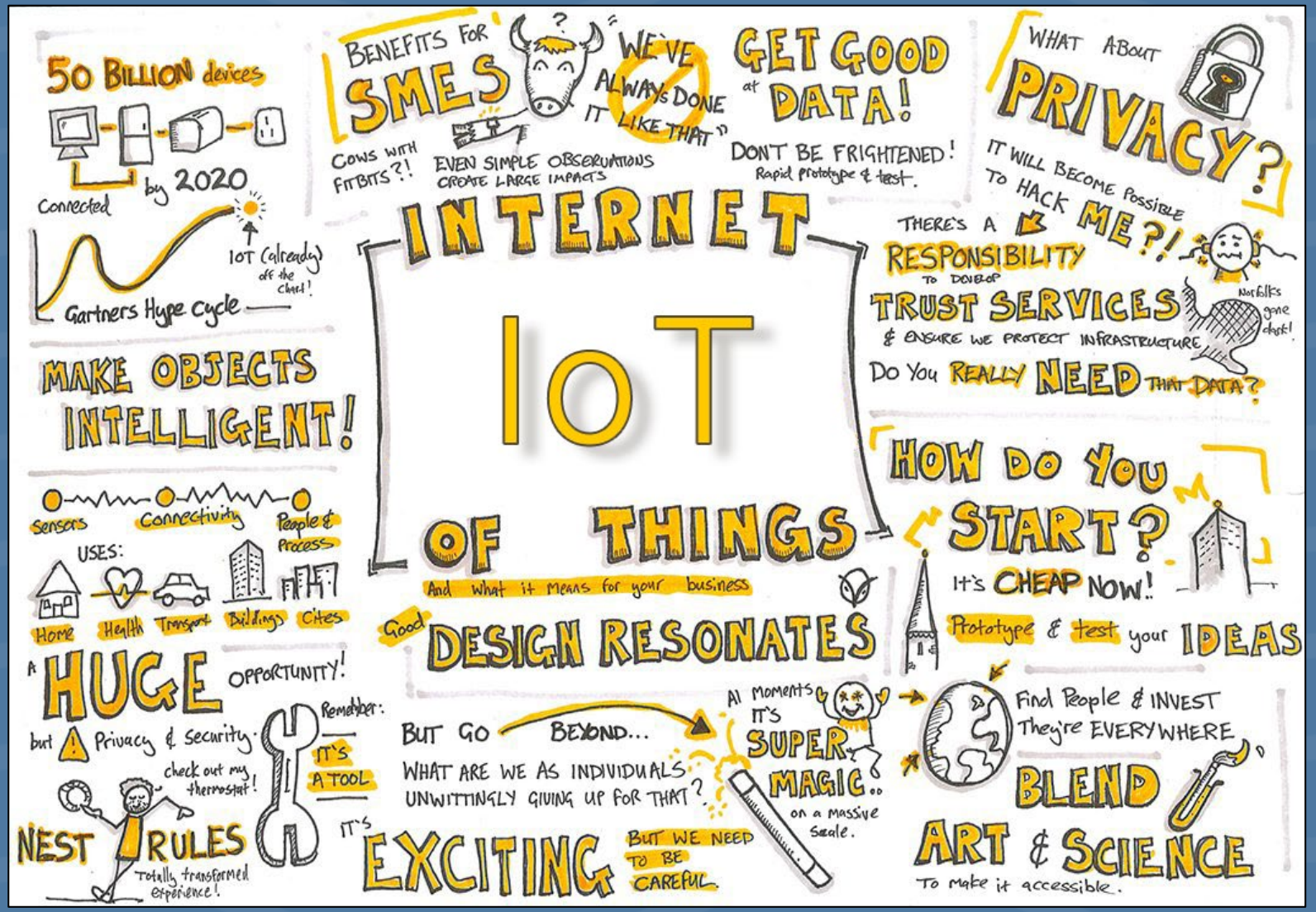
MARCO CEDRONE
Kayne Anderson
Capital Advisors

ROBERT GROSZ
Boingo
Wireless

NICOLE KANE
Property Connect
Advisors

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire



"[T]he Internet will disappear.

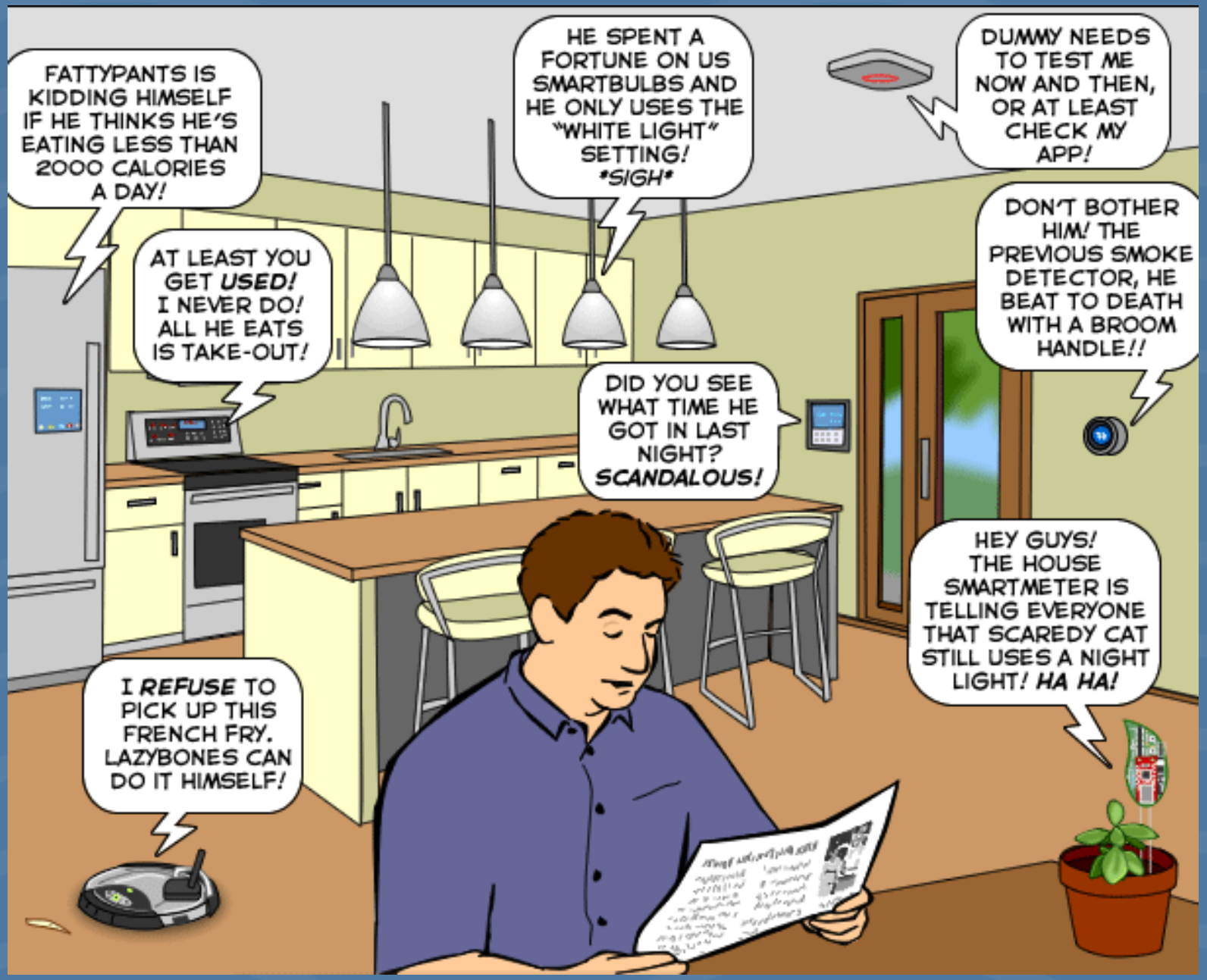
There will be so many IP addresses, so many devices, sensors, things that you are wearing, things that you are interacting with, that you won't even sense it. It will be part of your presence all the time. Imagine you walk into a room, and the room is dynamic. And with your permission, you are interacting with the things going on in the room."

— Eric Schmidt, Google chairman

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

WHAT YOUR INTERNET OF THINGS IS SAYING ABOUT YOU



NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

MAKING CENTS OF NEW TECHNOLOGIES

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

MAKING CENTS OF NEW TECHNOLOGIES

BRUCE SANDERS
Moderator
Elauwit

MARCO CEDRONE
Kayne Anderson
Capital Advisors

ROBERT GROSZ
Boingo
Wireless

NICOLE KANE
Property Connect
Advisors

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

MAKING CENTS OF NEW TECHNOLOGIES

RICHARD HOLTZ
InfiniSys Multifamily Technology

" I'm going to have to disagree."

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

MAKING CENTS OF NEW TECHNOLOGIES

BRUCE SANDERS
Moderator
Elauwit

MARCO CEDRONE
Kayne Anderson
Capital Advisors

ROBERT GROSZ
Boingo
Wireless

NICOLE KANE
Property Connect
Advisors

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

26+ BILLION
devices connected by 2020; 127 new devices connected per second; 80 billion 2025

$4 – 11 TRILLION
economic impact

54%
of top performing companies will invest more in sensors in 2018

Sources: Gartner, PwC, McKinsey

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

Multifamily Technologies

- Thermostats
- Locks
- Cameras
- Sensors (leak, sun, seismic, air quality)
- Wearables (residents or staff)
- Electric Outlets & Lighting
- Voice Control/Assistance
- Apps (residents or staff)
- Parking
- Trash management
- Electric Vehicle Chargers
- Amenity Displays (audio, visual, signage, scent)
- Clubhouses

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

Starting with a Solid Foundation

1. Excellent connectivity (both wired and wireless) everywhere on the property – controlled by the community

2. An analytical data-driven team culture – either on-site, off-site, or though a trusted partner

3. An objective decision matrix weighted to align with the owner's strategic goals (risk tolerance, revenue philosophy [bundle vs unbundle with rent], on-site operating expense reality, value placed on information)

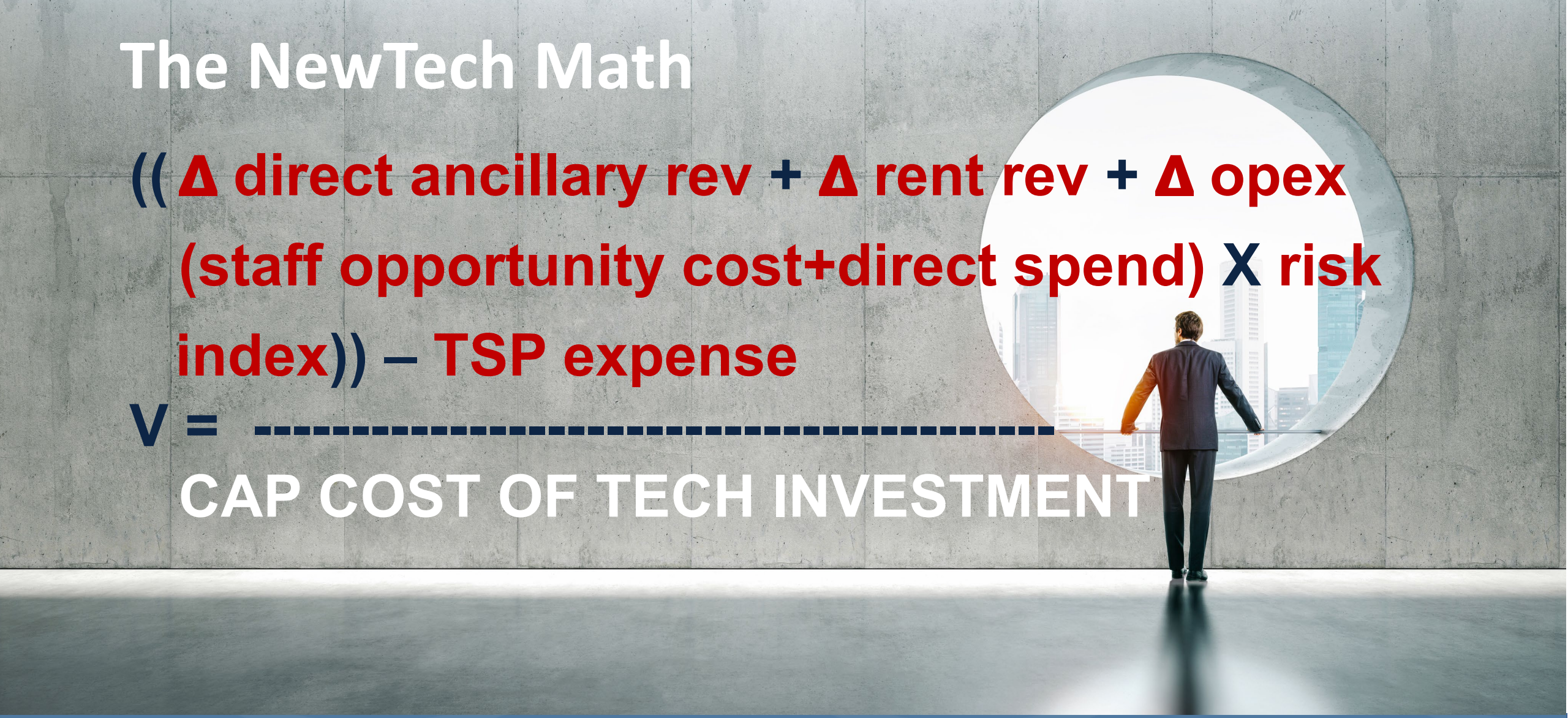
MAKING CENTS OF NEW TECHNOLOGIES

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

The NewTech Math

$$V = \frac{((\Delta \text{ direct ancillary rev} + \Delta \text{ rent rev} + \Delta \text{ opex (staff opportunity cost+direct spend)}) \times \text{risk index})) - \text{TSP expense}}{\text{CAP COST OF TECH INVESTMENT}}$$



NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

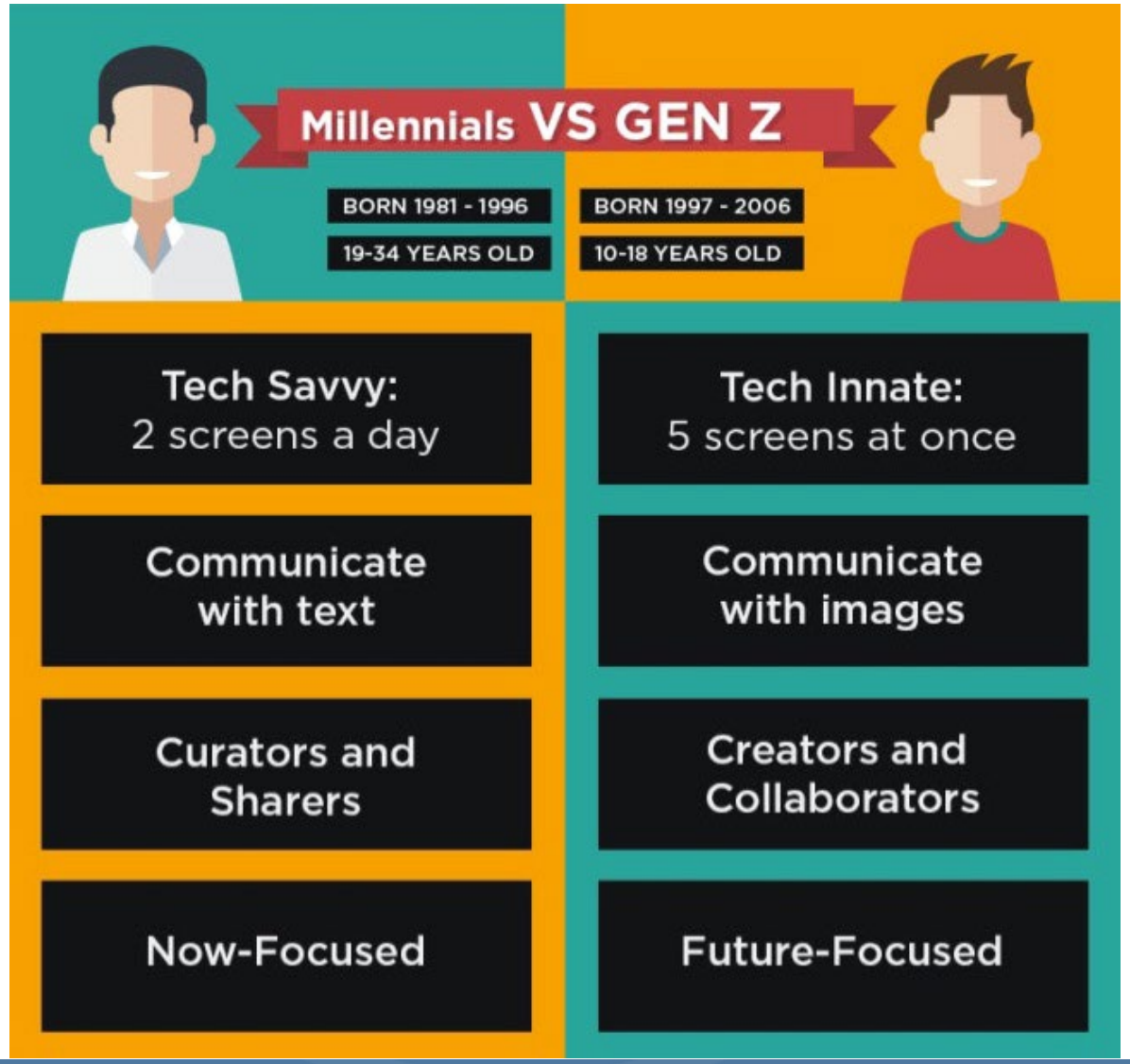
nest
72
ecobee
PHILIPS

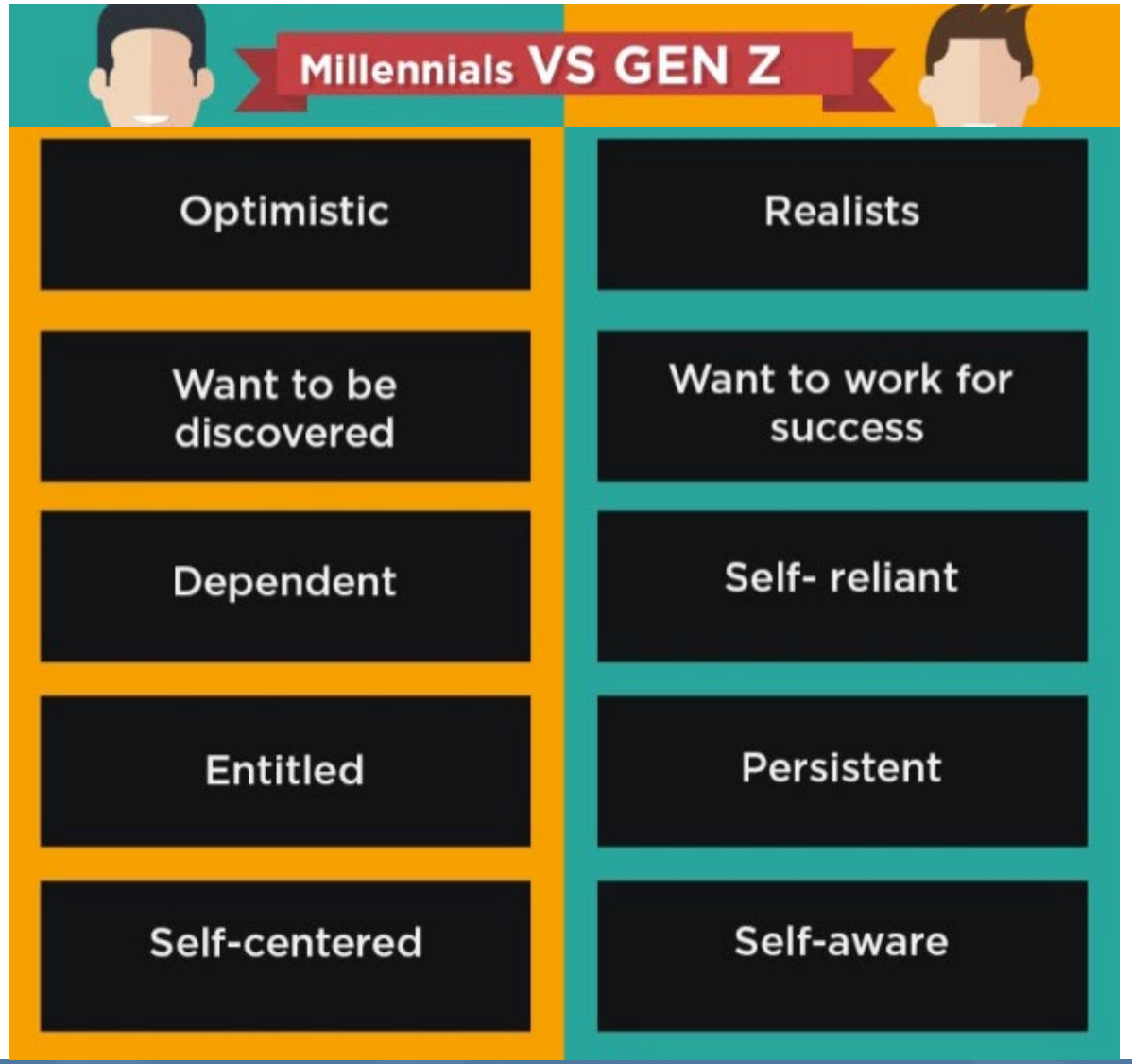
- 24 Hour Access for Residents
- Email Notification of Deliveries

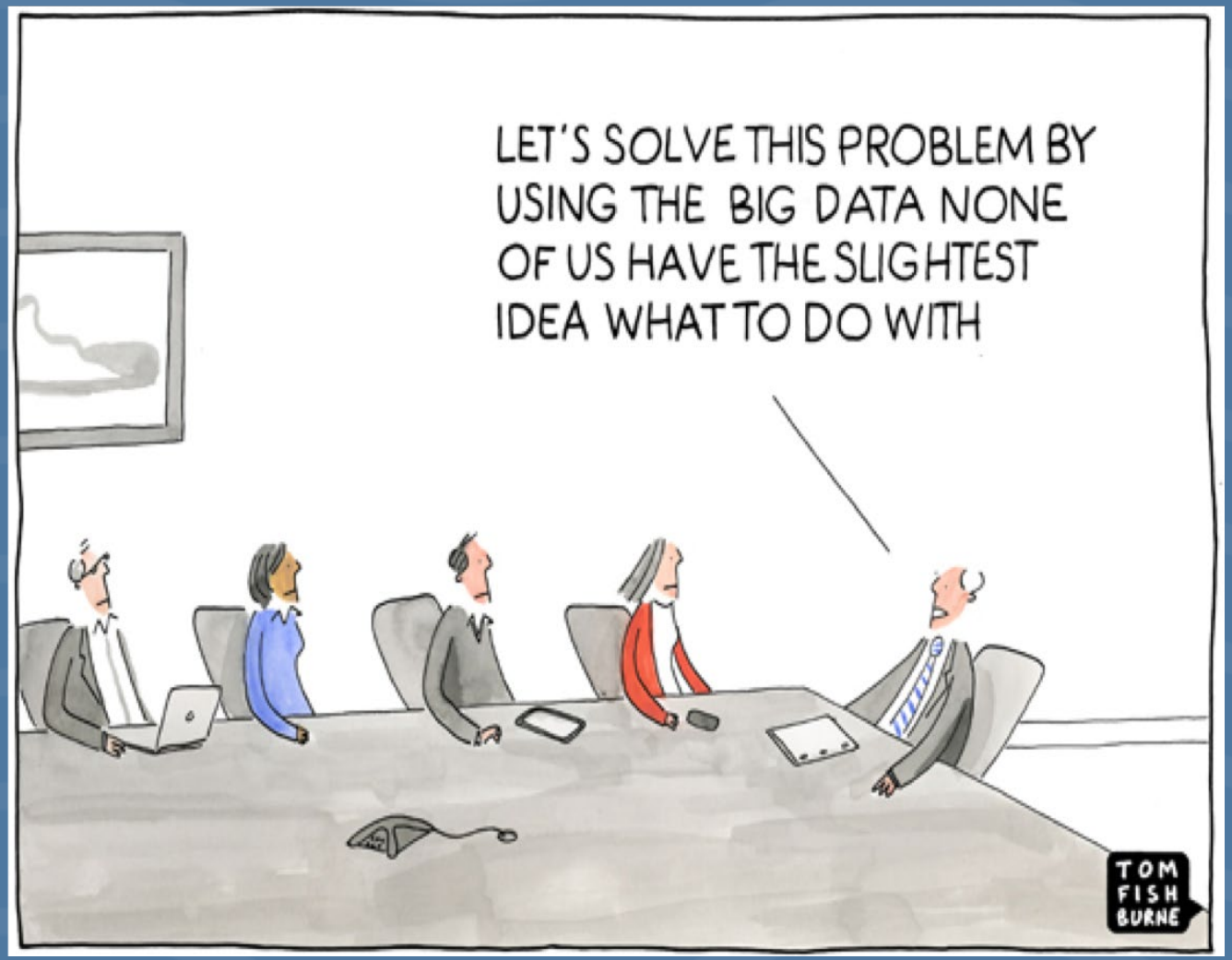
- Email notification of Shipments
- No Personnel Cost for Management

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire


Millennials VS GEN Z
BORN 1981 - 1996
19-34 YEARS OLD
BORN 1997 - 2006
10-18 YEARS OLD
Tech Savvy:
2 screens a day
Tech Innate:
5 screens at once
Communicate with text
Communicate with images
Curators and Sharers
Creators and Collaborators
Now-Focused
Future-Focused


Millennials VS GEN Z
Optimistic
Realists
Want to be discovered
Want to work for success
Dependent
Self- reliant
Entitled
Persistent
Self-centered
Self-aware



MAKING CENTS OF NEW TECHNOLOGIES

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

NMHC STUDENT HOUSING
CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire

MAKING CENTS OF NEW TECHNOLOGIES

NMHC STUDENT HOUSING CONFERENCE & EXPOSITION

#NMHCstudent
@ApartmentWire