

den kognitive bygning

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A photograph of three young adults jumping joyfully in a snowy parking lot. The woman on the left has her arms outstretched and a wide smile. The man in the middle is wearing a denim jacket and a baseball cap, also with his arms raised and a happy expression. The man on the right is wearing a black t-shirt and glasses, with one leg kicked high and his hand raised. The background shows a parking lot with snow, trees, and a building. A sign in the background reads "Caution! Cross Traffic Does NOT Stop for Pedestrians".

HAPPY?

A smart building can reduce energy cost by 18%



A modern office interior with large windows on the right side, providing a view of a landscape with hills and a body of water. The office has glass partitions on the left and a white wall with a television in the center. The floor is covered with a grey carpet. The text is overlaid on a black background.

A smart building can reduce energy cost by 18%

A cognitive building can lead to happy employees

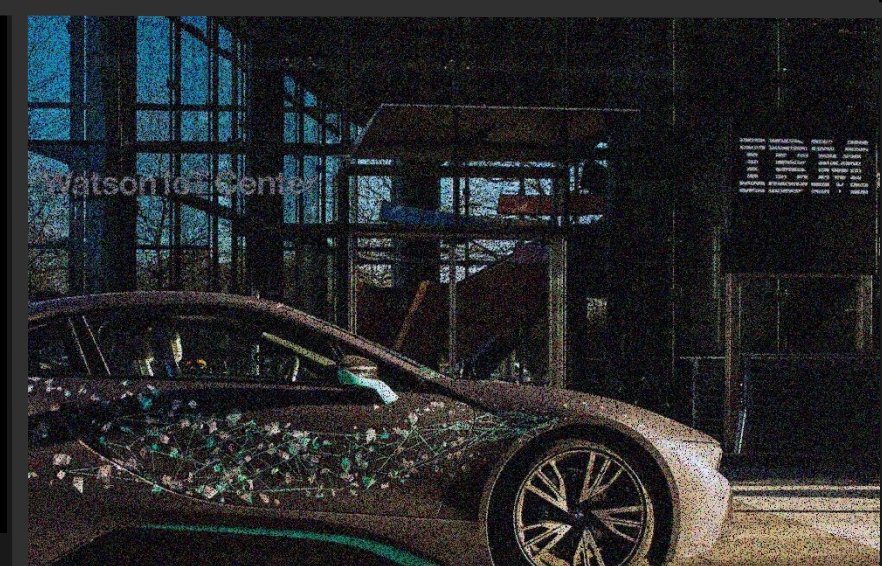
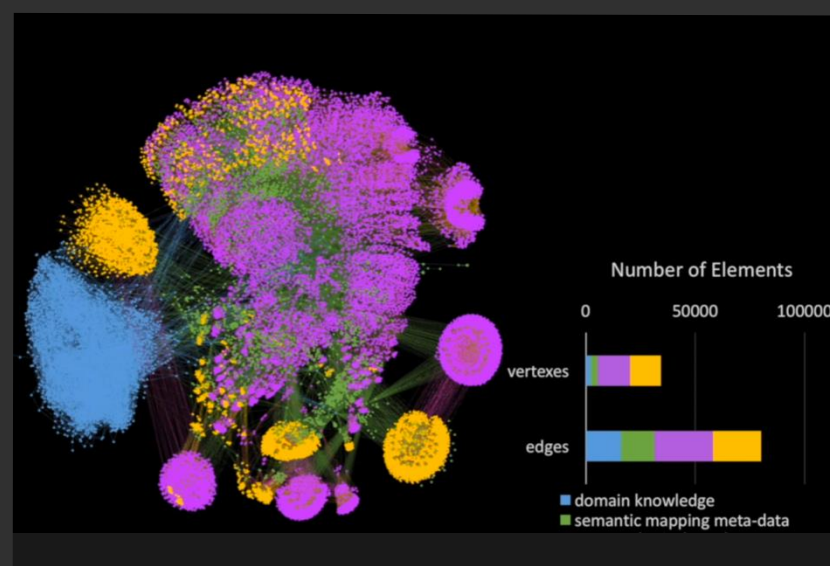
~ increased productivity by 12%



IoT & DevOps Platforms

New Ecosystems

BIM & Digital Twin



Human-computer interfaces

Analytics & AI

Innovation & Design Thinking

A modern building with a curved facade and a blue sky background. The building's facade is composed of light-colored, rectangular panels. A dark, curved architectural element is visible in the foreground, partially obscuring the building. The sky is a clear, bright blue.

COGNITIVE

Understand | Reason | Learn | Interact

Personality Portrait

24141 words analyzed: **Very Strong Analysis**

Summary

You are shrewd and excitable.

You are adventurous: you are eager to experience new things. You are authority-challenging: you prefer to challenge authority and traditional values to help bring about positive changes. And you are self-controlled: you have control over your desires, which are not particularly intense.

You are motivated to seek out experiences that provide a strong feeling of discovery.

You are relatively unconcerned with both tradition and taking pleasure in life. You care more about making your own path than following what others have done. And you prefer activities with a purpose greater than just personal enjoyment.

[How did we get this?](#)

You are likely to _____

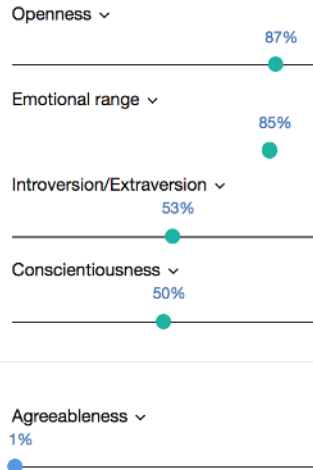
- be sensitive to ownership cost when buying automobiles
- have experience playing music
- like historical movies

You are unlikely to _____

- be influenced by social media during product purchases
- prefer style when buying clothes
- be influenced by brand name when making product purchases

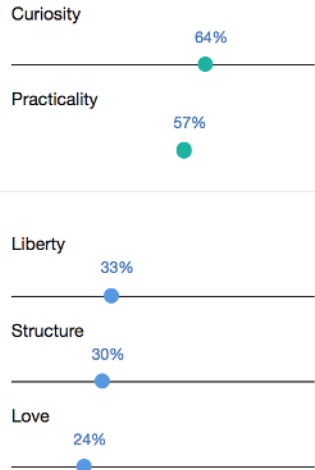
Personality

*% = percentile



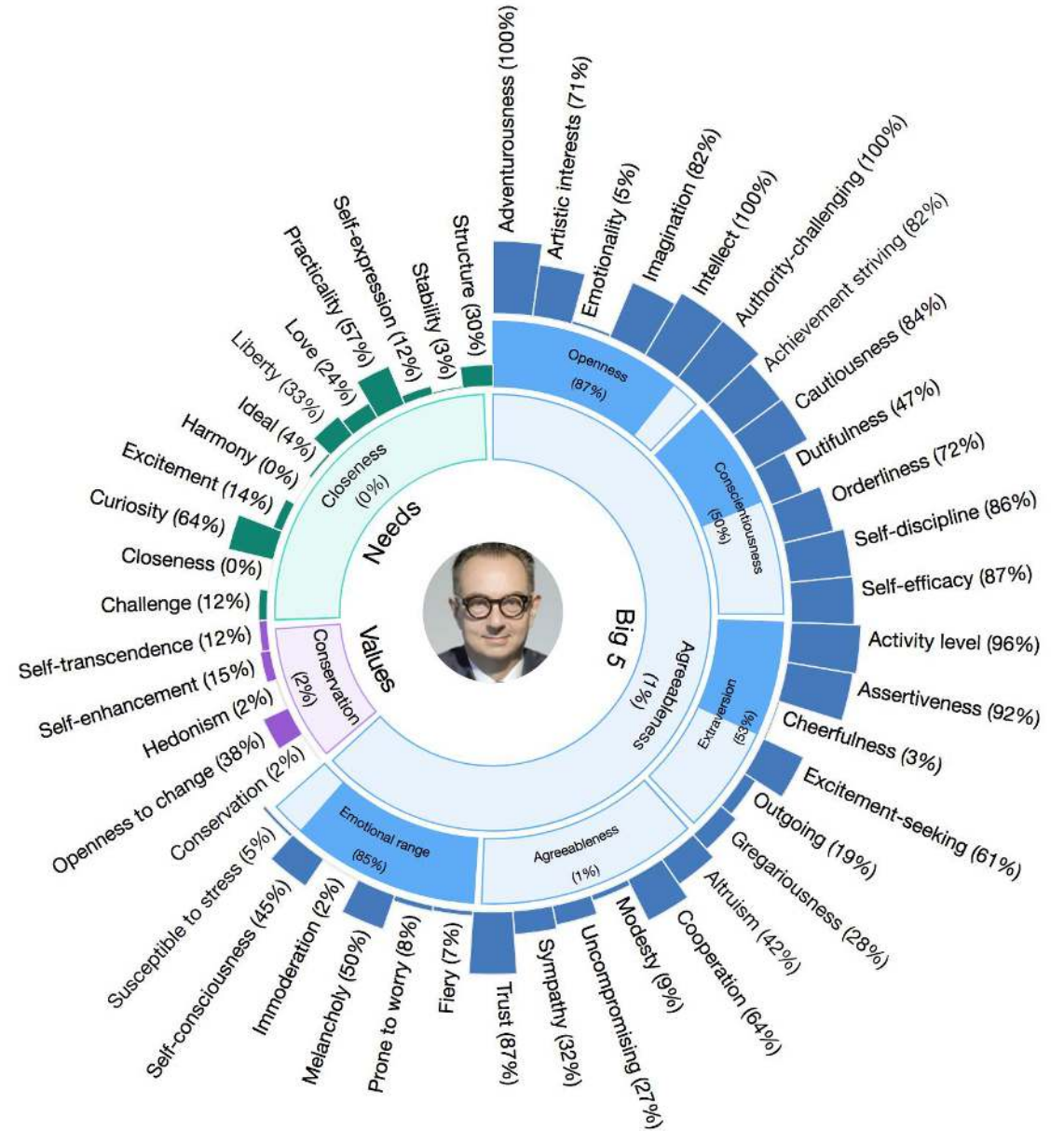
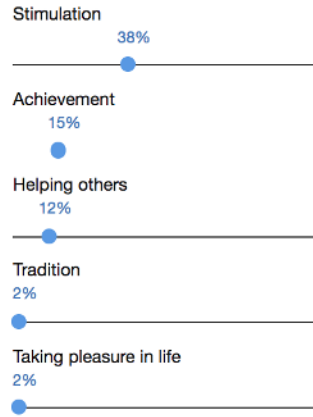
Consumer Needs

*% = percentile



Values

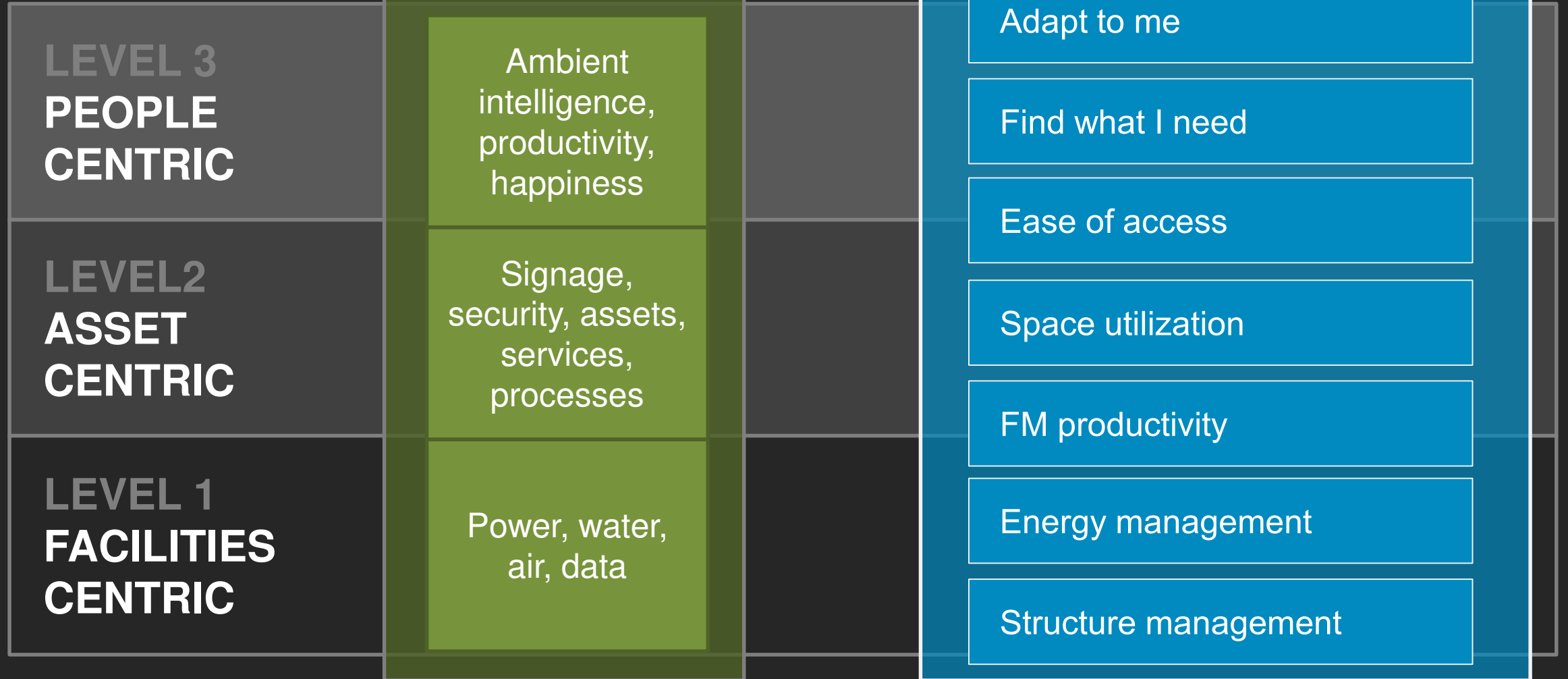
*% = percentile



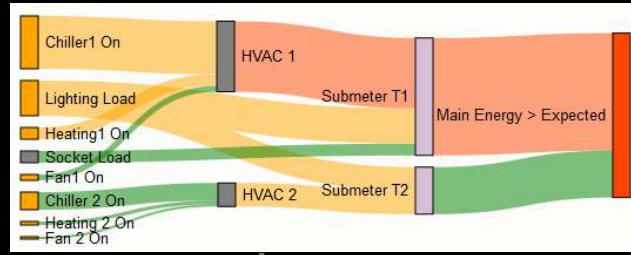


Staples Easy Button

The Cognitive Building



It...



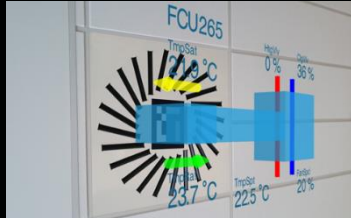
Proactively manages energy



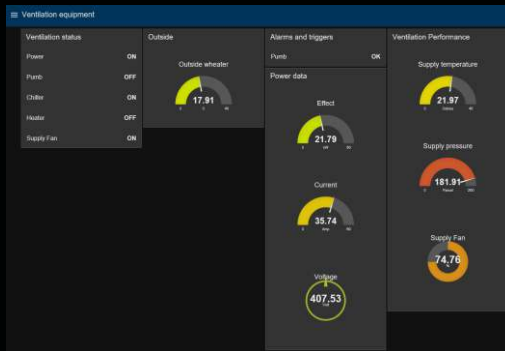
Optimises service delivery



Aware of occupants



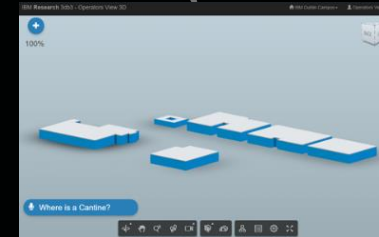
Predicts when maintenance is needed



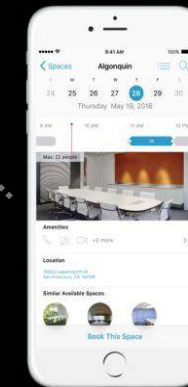
Keeps you informed



Maintains a healthy environment



Helps you navigate & connect

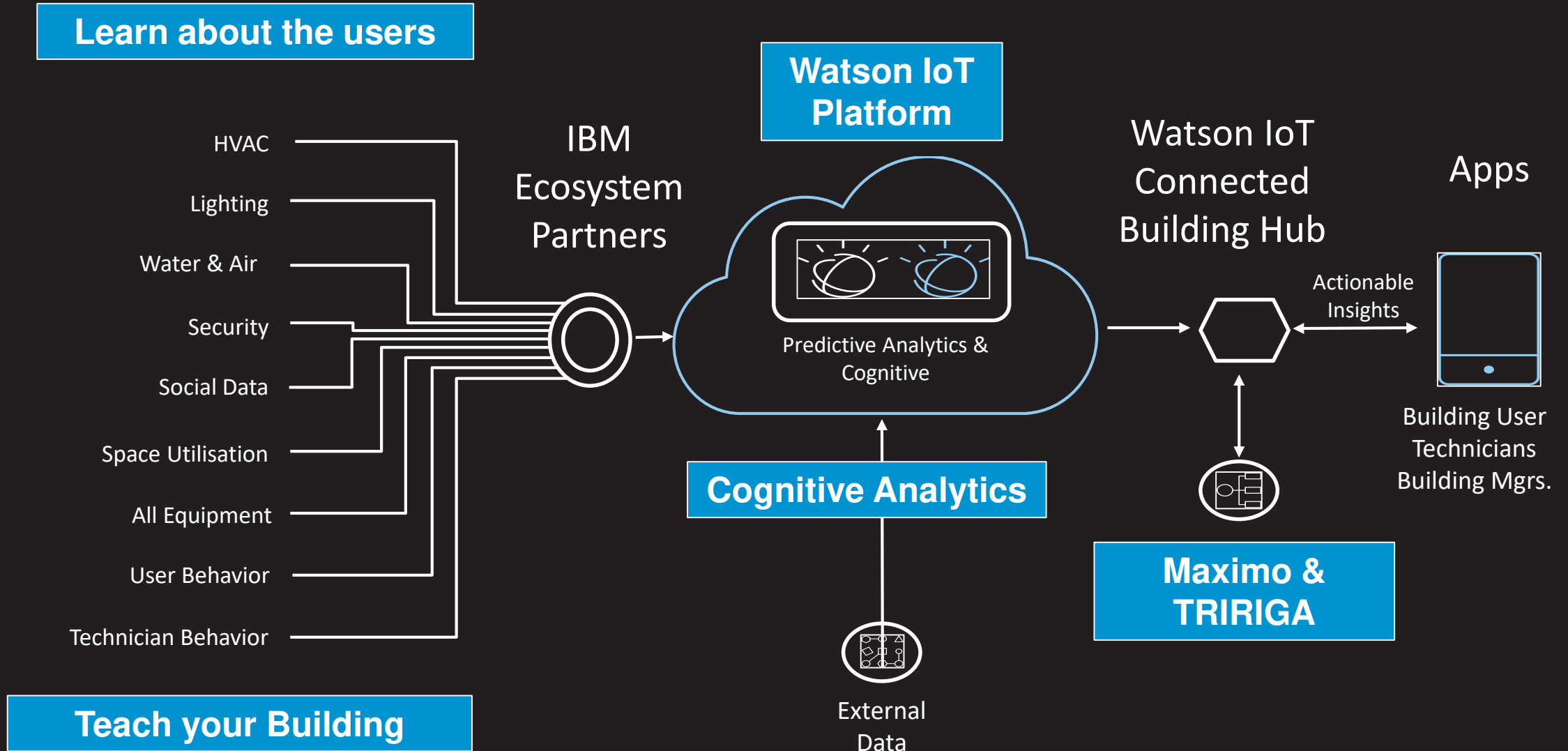


Easy to talk to



Know's your preferences and sentiment

Cognitive Building solution components



GETTING HERE

- Multi-modal transportation services
- Alerts before leaving home
- "Please be aware that we are serving fish in the restaurant" (and you are allergic)
- Remember your umbrella
- Car sharing with colleagues
- Pre-book work area (and you might decide to work from home)
- Various work-from-home-services

Weather integration | Transport/city integration | Cognitive HR analytics | IoT integration | Tririga integration | MobileFirst

ARRIVING

- Walking around guidance
- Pay for your parking in-app (guest)
- Issue mobile parking ticket
- Provide alternative parking
- Find me a parking spot (before arriving)
- Find my car

MobileFirst | IoT integration (outdoor/camera) | Tririga integration | Maps 3D | Cognitive advisory services

ENTERING

- Access control
- The concierge knows you and can notify
- The building knows you and can advise/notify
- Alternative authentication means, e.g. combination of smartphone and biometrics, face recognition, smart watch + pincode/fingerprint etc.
- Information services - app based
- Counting, crowd and pattern analytics
- Video surveillance
- Anomaly video analytics (security)

Biometrics | IoT integration | Sensing | MobileFirst | Tririga integration | Video analytics | Video content management

WORKING HERE

- Locate my colleagues
- Who is in my working area today
- Status on infrastructure
- Find me an empty seat based on personal profile
- Optimise usage of office space
- Crowd and usage analytics

Indoor localization | IoT platform | Tririga integration | Cognitive Analytics | Big data analytics

DRINKING AND EATING

- Get today's menu at the restaurant
- How long is the queue right now?
- When is it optimal for me to eat?
- Nutritional information compared to personal health profile
- Order guest tickets
- Order takeaway based on preferences

Content management / IoT integration | Video surveillance | Partner integration | Cognitive

BEING HERE

- Get alerts and notifications on building app (smartphone or iWatch)
- Get around - office maps 2D/3D
- Order hot drinks
- Order light meal
- Check delivery situation on beverage machines
- Manage postal services via app and notifications
- Understand building usage and environment
- Align internal climate with outside
- Space management

MobileFirst | 2D/3D maps | IoT Platform | Legacy Integration | Tririga Integration | Video analytics | Big data analytics

MEETING WITH OTHERS

- Physical meeting room displays
- Reserve meeting room
- Arrange spontaneous meeting (lets meet in 4 minutes in the cafe)
- Conference support app
- Booked but unused meeting rooms
- Meeting room outages / defects

Tririga Integration | MobileFirst | Localisation services | Problem detection | Bookings

LEAVING

- Checking out
- Evaluating the day
- Find my car, bicycle or the path to the train station
- Heating the car
- Notifying the spouse

IoT Integration | Partner integration | IoT integration | MobileFirst

COGNITIVE BUILDING TOUCHPOINTS

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If These Walls Could Speak: IBM, Harman Powering Cognitive Rooms

By: Chris Preimesberger | April 19, 2017

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In a meeting in which a question is asked and no one knows the answer, just ask the room itself, because it will dig up the answer for everybody within a few seconds.



The day is now here when people can gather inside a conference room for a meeting and not have to worry when someone asks a question to which no one knows the answer.

All someone will have to do is ask the room itself, because it will dig up the answer for everybody within a few seconds. The adage "if these walls could speak," is coming true in the most literal sense.

This is exactly what IBM Watson and several of its partners have done with its new Voice-Enabled Cognitive Rooms, starting with the first use case at Thomas Jefferson University Hospital in Philadelphia that was

announced April 19. Patients there now interact with in-room speakers that are connected to the IBM Watson IoT Platform and can easily control their in-room subsystems (windows, lights, temperature settings) without having to physically perform any manual tasks or try to figure out new systems.

For conference rooms, IBM's cognitive intelligence apps are embedded into Harman microphone soundbars and alarm clocks with other form factors being developed, so that users can interact by using natural language. Consumers can simply ask questions or issue commands with their voice when in a room. These requests are then sent to the Watson cloud and Watson IoT services, which work with Harman's technology to allow people to obtain information or other kinds of help in getting tasks done.

Further reading

[AT&T to Fight DOJ Opposition to Time Warner Merger](#)

[Volvo, Uber Will Provide Thousands of Autonomous Cars](#)

Order Up a Videoconference, and the Room Does It

For example, now when an employee enters a conference room, he or she can start a video conference, launch a presentation and do other tasks using voice only. In the future, these tasks will be executed automatically based on what the system has learned about the employee based on previous meetings. Thus, the system gets smarter about the person and



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By: Pedro Hernandez | November 22, 2017

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Microsoft's Cloud Rolls Out Red Carpet for VMware Workloads

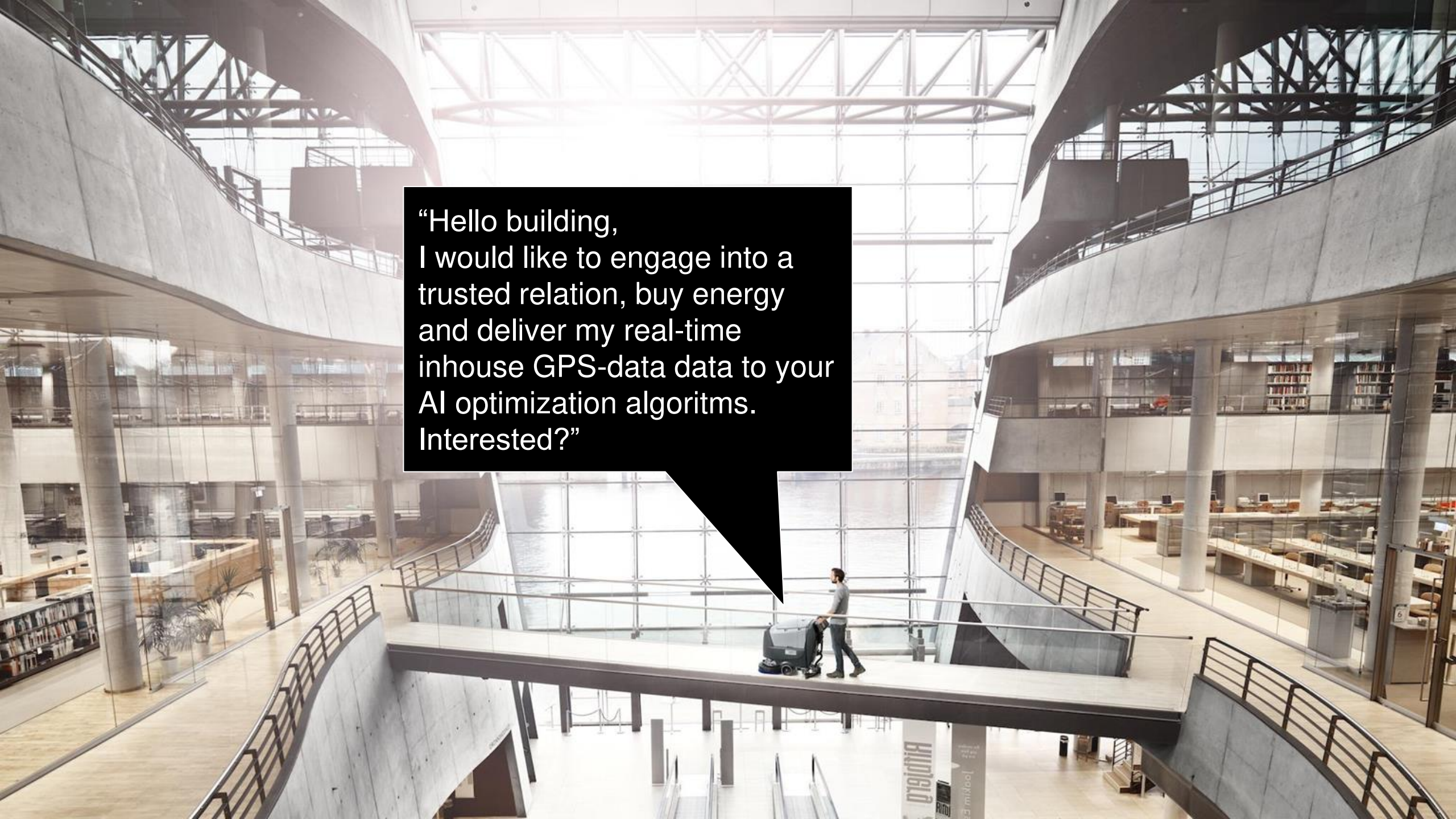
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Dome9 Unveils Magellan for Context-Aware Cloud Security

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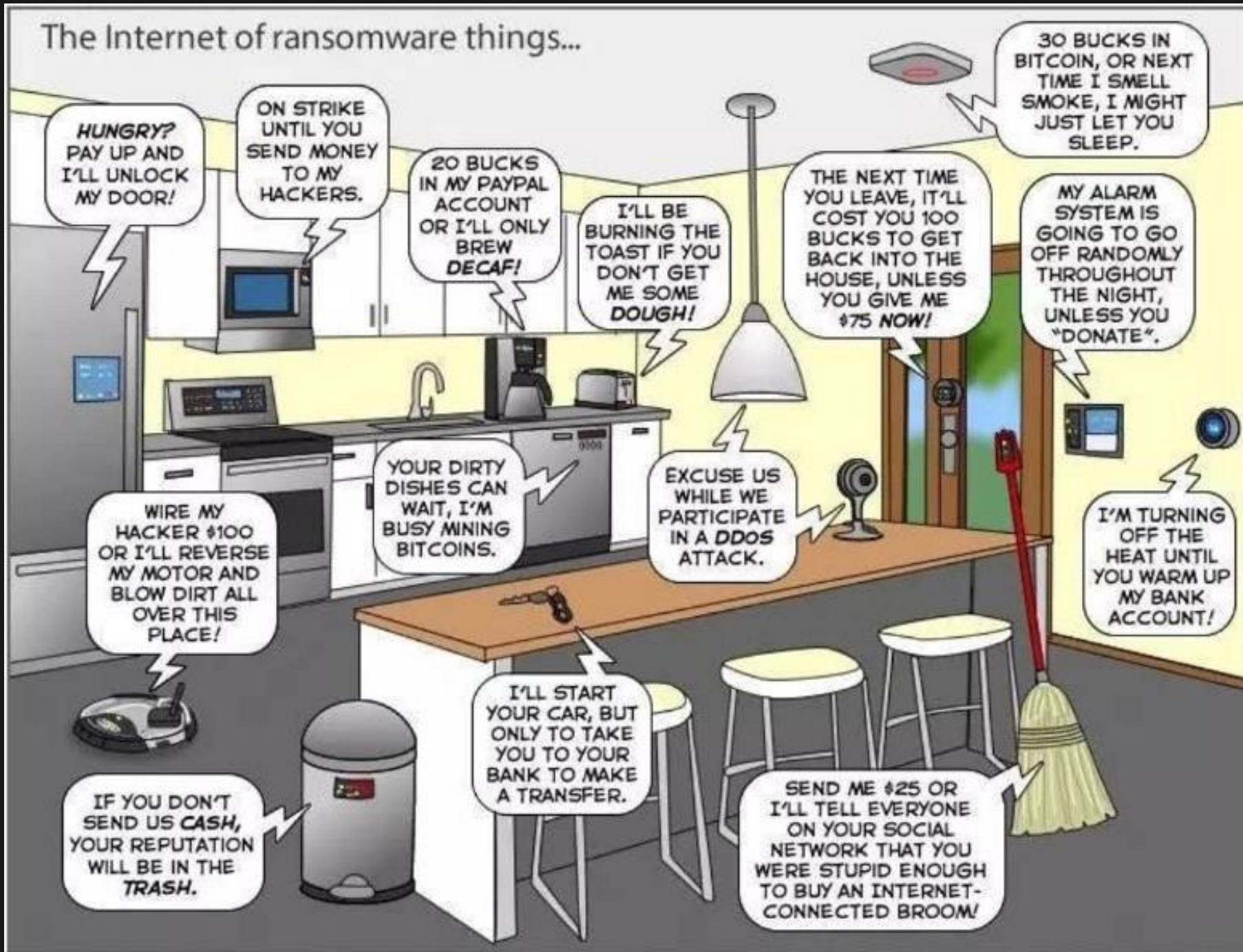
“Hi - Room here,
Weather outside is getting colder
so I will adjust temperature and
close windows. I will order extra
cleaning since the dust level have
increased 17% the last day”

**Edge
computing
IoT + AI + Analytics**



“Hello building,
I would like to engage into a
trusted relation, buy energy
and deliver my real-time
inhouse GPS-data data to your
AI optimization algoritms.
Interested?”

The Internet of ransomware things...





US 20180000355A1

(19) **United States**

(12) **Patent Application Publication**
DeBusschere et al.

(10) **Pub. No.: US 2018/0000355 A1**

(43) **Pub. Date: Jan. 4, 2018**

(54) **ASSESSING CARDIOVASCULAR FUNCTION USING AN OPTICAL SENSOR**

A61B 5/00 (2006.01)

A61B 5/024 (2006.01)

A61B 5/11 (2006.01)

A61B 5/103 (2006.01)

(71) Applicant: **Google Inc.**, Mountain View, CA (US)

(72) Inventors: **Brian Derek DeBusschere**, Los Gatos, CA (US); **Jeffrey L. Rogers**, San Carlos, CA (US)

(52) **U.S. Cl.**

CPC *A61B 5/0205* (2013.01); *A61B 5/1102* (2013.01); *A61B 5/1032* (2013.01); *A61B*

5/0077 (2013.01); *A61B 5/02427* (2013.01);

A61B 5/021 (2013.01); *A61B 5/02433* (2013.01)

(73) Assignee: **Google Inc.**, Mountain View, CA (US)

(21) Appl. No.: **15/704,825**

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Related U.S. Application Data

(62) Division of application No. 14/681,625, filed on Apr. 8, 2015.

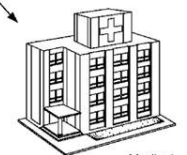
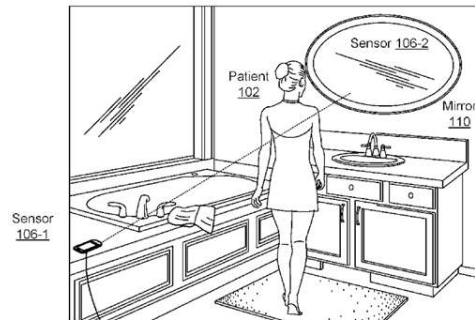
Publication Classification

(51) **Int. Cl.**
A61B 5/0205 (2006.01)
A61B 5/021 (2006.01)

(57) **ABSTRACT**

This document describes assessing cardiovascular function using an optical sensor, such as through sensing relevant hemodynamics understood by pulse transit times, blood pressures, pulse-wave velocities, and, in more breadth, ballistocardiograms and pressure-volume loops. The techniques disclosed in this document use various optical sensors to sense hemodynamics, such as skin color and skin and other organ displacement. These optical sensors require little if any risk to the patient and are simple and easy for the patient to use.

100



**Mirror, mirror, on the wall,
How is my health today?**

KONE ELEVATORS



< CHINA

NETHERLANDS >

COPENHAGEN, DENMARK



LIVE FEED

29-08-2017 | LOCAL TIME

KONE Elevator

13:04



Highly accurate landing on floor 10.

13:04

KONE Cloud

Check.



KONE Elevator

13:04



Floor 10. Doors open for 6.1 seconds.

13:04

KONE Cloud

Check.



KONE Elevator

13:04



Minimal sway while starting my way up.

13:04

KONE Cloud

Measured. Minimal.



REAL TIME CONVERSATION

CONVERSATION HIGHLIGHTS

ISS




A photograph of three young adults (two women and one man) jumping joyfully in a snowy outdoor setting. They are all smiling broadly with their arms raised in the air. The woman on the left is wearing a brown jacket, glasses, and blue jeans. The man in the middle is wearing a blue denim jacket, a black cap, glasses, and black pants. The man on the right is wearing a black t-shirt, glasses, and black pants. They are jumping over a large pile of snow. In the background, there are bare trees and a building. A black banner with white text is overlaid on the image.

**Do not underestimate the power of
happiness in buildings**

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