Intro to Density

Company & Product Overview
Company Background

Focus
To improve the efficiency, safety and performance of our customers’ buildings and real estate.

Track Record
Leadership and engineering from NASA, Genentech, Microsoft, Apple and Stanford.

Capital Partners
Backed by Founders Fund, Upfront Capital, Ludlow Ventures and Launch.
Customers (snapshot)

100+ million sq. ft. of corporate and commercial real estate is analyzed by Density sensors for occupancy, space utilization and foot traffic.

50 million people (and growing) have been counted by Density in the past 6 months.

Adoption across industries: corporate real estate, hospitality, higher education, healthcare, retail.
Physical space is the most valuable asset class that people invest in **without measuring** its **performance**.
Space is Valuable

$150B
Spent on unused space

$31B
Lost employee productivity for F1000

$6B
Cost of physical security measures for F1000

41% of leased or owned corporate office space in U.S. is vacant but paid for. ¹
Typical employee wastes 27 hours per year looking for available conference rooms. ²
The annual estimated cost associated with not solving entrance tailgating. ³

¹ CBRE: “Space Utilization: The Next Frontier”; ² Gartner; ³ Allied Barton
Existing technologies for counting people are either **inaccurate** or **invasive**, or both.
Density accurately and anonymously counts people in rooms and buildings, all around the world.
A Scalable Platform for Measuring How People Use Space

- Real-time occupancy & foot traffic
- Space utilization analytics
- Conference room utilization & booking trends
- Fire code capacity compliance
- Entrance tailgating detection
- Real-time data for mustering & emergency response

People-count sensors
Real-time data
Mobile apps
Developer APIs
How Density’s Data Creates Business Value

- **Know how much space you need**
  - **Insight:** 750,000 sq. feet in real estate portfolio is unused
  - **Value:** Consolidating/repurposing 50% yields $15M in savings

- **Know the space types you need**
  - **Insight:** 8-person meeting rooms used by 3 people 78% of time
  - **Value:** Dividing rooms saves $12M in avoided expansion cost

- **Know how many people enter/exit**
  - **Insight:** Entrance tailgating occurs ~250 times/week
  - **Value:** Reduced risk of damage and loss from unauthorized access

- **Know real-time space occupancy**
  - **Insight:** Get alerted when there’s a surge in customers or guests
  - **Value:** Optimize staffing, services and amenities; avoid code violations; better mustering & emergency response
Customer Story: Physical Security & Safety

“We’ve pulled in carts, we’ve tried to sneak people in right next to a person... a shorter person behind a taller person. We’ve tested it for hours at the door and we could never get it to fail.”

—Chris Bauer, Physical Security Systems Architect

Read Story
The Density Depth Processing Unit (DPU)

• Not a camera—the DPU’s infrared sensors capture depth data from above a doorway

• DPU is enabled by deep learning algorithms, which are continually trained on Density’s massive depth dataset

• Human entrances/exits are detected and counted in near-rear time (<700 milliseconds)
Privacy by Design — Density is Not a Camera

**Raw Data**
Raw depth data captured by Density’s sensors—contains no personally identifiable information (PII).

**Onboard Deep Learning**
Density’s algorithms are trained to detect human movement and ignore all other objects.
Transparent, Accurate, Anonymous (Better than a Camera)

Accuracy Report: Corporate Office in New York, NY

1,176,191 events
439 humans/hour

Space Accuracy: 96.11%
Annotated Events: 14,698
Matched Events: 14,343
Extra Events: 82

Ingress Accuracy: 97.49%
Annotated Events: 7,291
Matched Events: 7,165
Extra Events: 57

Egress Accuracy: 95.38%
Annotated Events: 7,407
Matched Events: 7,179
Extra Events: 114
Open APIs Connect Density with Other Business Applications

Density Cloud
Dashboards, reporting & alerts

3rd Party Systems
Workplace, facilities & retail apps

- Workplace & Room Booking
  - Robin
  - Comfy
  - slack
  - CONDECO
  - team

- Physical Security & Safety
  - ISONAS
  - AVIGILON
  - LENEL

- IWMS & CRE
  - CBRE
  - JLL
  - Serraview
  - office365

- Data Analytics
  - Google BigQuery
  - Tableau
  - Excel

REST APIs: real-time, scalable
Appendix
Mounting Options

**Wall Mount**
Density mounts to a variety of wall surfaces using a small bracket. Simply screw the bracket into the wall and slide the device over for a flush fit.

**Top of Frame Mount**
Density can be attached to the top of flat surfaces like a metal frame. Two screws pass through the the Utility Bracket and drive into the mounting surface.

**Ceiling Mount**
Density can easily be hung from the ceiling. Attach the device to our utility bracket and screw in a threaded rod. Use a mounting bracket of your choice to attach to the ceiling.
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Modern power and connectivity

With built-in options for Power-over-Ethernet (PoE), standard outlet power and WiFi, Density is not just easy on the eyes but also on your Facility and IT teams.

WiFi + 4G LTE