The Internet of Moving Things

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WHAT DOES VENIAM DO?

We move massive amounts of data between vehicles and the cloud.

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HD DATA

Capture rich actionable data about your fleets, vehicles, industrial spaces, and smart cities.

MANAGED MOBILE WI-FI

Deliver cost-effective wireless internet access on the move with optional branding and ads.

VENIAM

THE INTERNET OF *MOVING THINGS*

SECURE V2X PLATFORM

Run your applications on a secure V2X mesh, including safety, infotainment and software updates.

CLOUD-BASED MANAGED SERVICES

Control your network and services from our cloud platform and use simple APIs for effortless system integration.

HETEROGENEOUS NETWORKING FOR VEHICLES

Leverage cutting-edge wireless technologies, including mesh-enabled DSRC, LTE, Wi-Fi and Bluetooth for future-proof connectivity.

VENIAM TIMELINE

VENIAM IS BACKED BY WORLD LEADING VCS AND CORPORATE INVESTORS

Jan 2013

SEED GRANT

$500k

Cane Investments (lead),
4 Angel investors

Aug 2014

SERIES A

$4.9M

True Ventures (lead)
USV, Cane

Feb 2016

SERIES B

$25M

Verizon Ventures (lead), Cisco, Orange, Yamaha, Liberty Global, True Ventures, USV, Cane

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INDUSTRY RECOGNITION

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WHY MASSIVE DATA BETWEEN VEHICLES AND THE CLOUD?

VEHICLE AND FLEET ANALYTICS

Manage product life cycle, improve maintenance, maximize fleet ROI

HIGH-BANDWIDTH INTERNET TRAFFIC

Mobile Wi-FI for passenger, content for onboard screens

URBAN DATA FOR SMARTER CITIES

Urban sensing using vehicles, IoT sensors, data APIs

AUTONOMOUS VEHICLES

Accelerate product and time-to-market
Maps, software updates, Internet traffic

VIDEO CAMERAS

Increase security and safety, reduce risks, build maps

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4G/LTE ALONE IS NOT ENOUGH

IMPERFECT COVERAGE

- Frequent dead zones
- Loss of data

EXPENSIVE

- High-cost data plans
- Must manage SIMs

CONGESTED

- Exponential growth in traffic
- Licensed frequencies for mobile devices

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VENIAM PLATFORM: MULTI-NETWORK, MULTI-PURPOSE, UPGRADEABLE

- **LOCAL DATA MANAGEMENT**
  Real-time and delay-tolerant data management for optimized cost, prioritization, and context-awareness;
- **MULTI-NETWORK MESH NETWORKING**
  DSRC, 4G/LTE, and Wi-Fi with V2X multi-hop, mobility, and bandwidth aggregation for improved connectivity experience;
- **LOW LATENCY**
  Fast connection to cloud and edge services for critical real-time and event-driven applications.

10 YEARS OF R&D | AWARD-WINNING TECHNOLOGY | 80+ PATENTS

DEVELOPED IN PARTNERSHIP WITH MIT AND CARNEGIE MELLON

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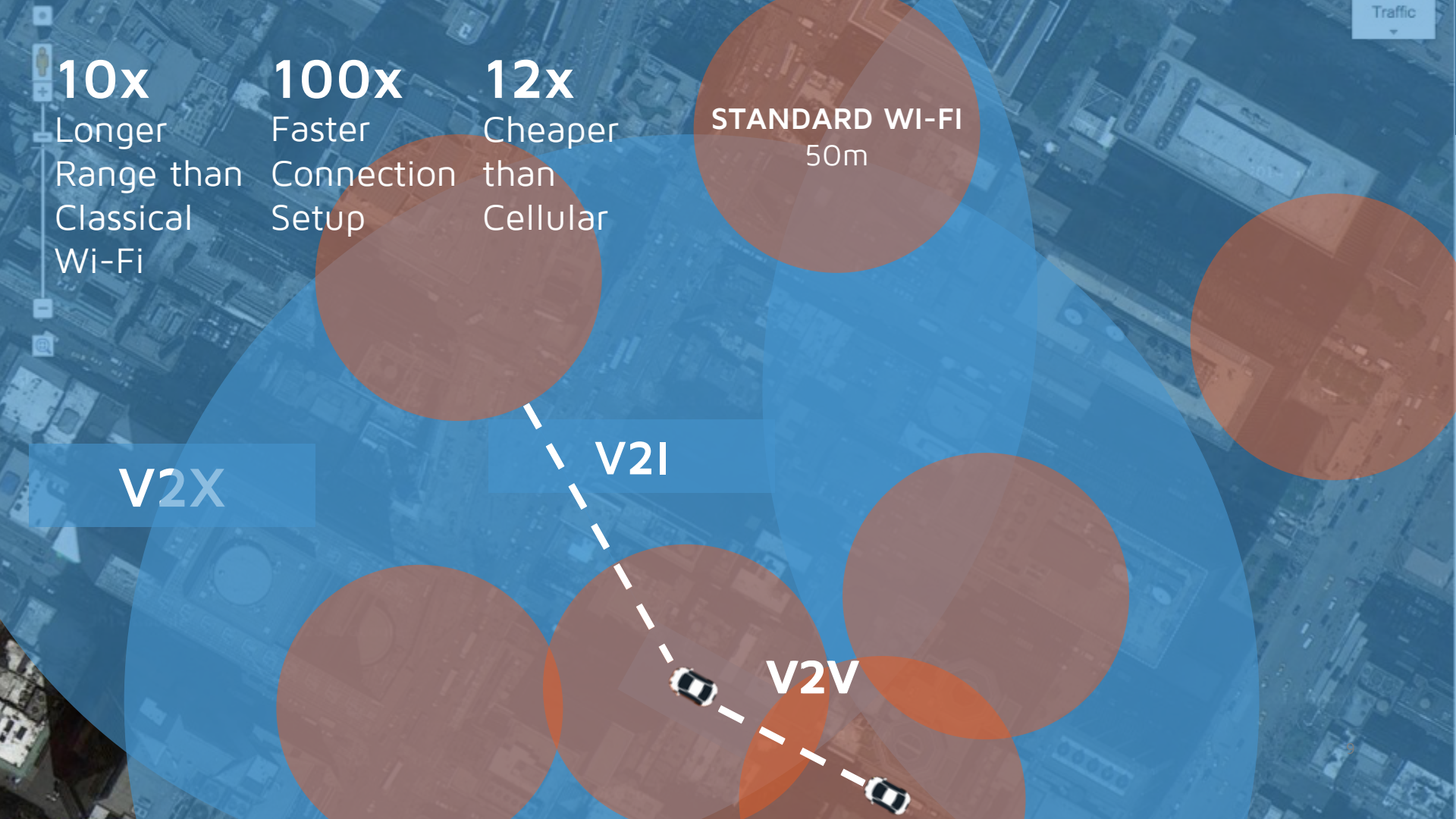
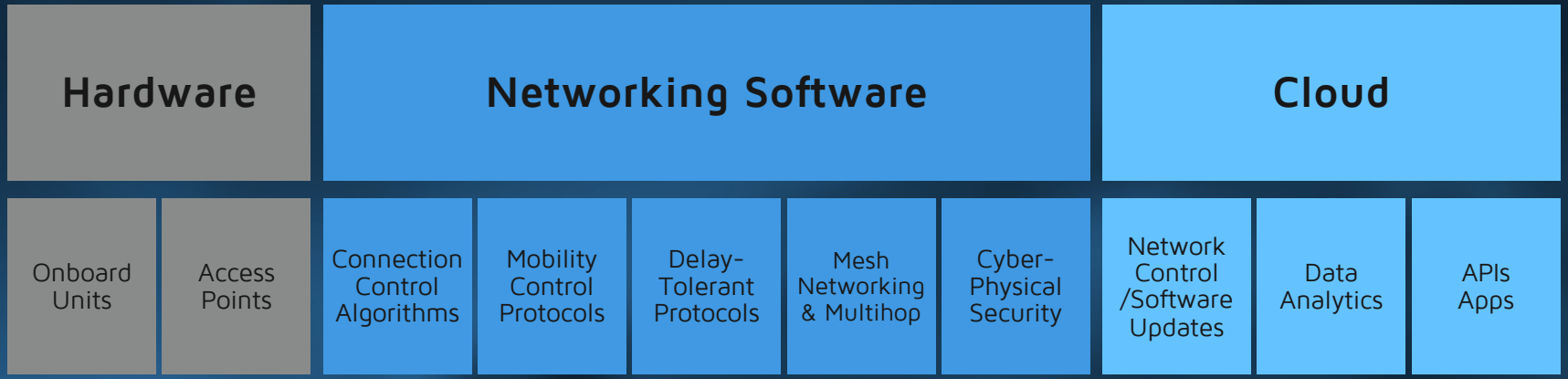

10x
Longer
Range than
Classical
Wi-Fi
100x
Faster
Connection
Setup
12x
Cheaper
than
Cellular
STANDARD WI-FI
50m
V2X
V2I
V2V
Traffic

VENIAM TECHNOLOGY PLATFORM

KEY HARDWARE, SOFTWARE, AND CLOUD COMPONENTS FOR CONNECTED VEHICLES

Our technology & IP solve the essential networking challenges in connecting moving things



10 YEARS OF WORLD-CLASS R&D BY VENIAM TECH FOUNDERS AND THEIR TEAMS

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FULL-SCALE COMMERCIAL DEPLOYMENT IN PORTO, PORTUGAL

City-scale vehicular mesh network (September 2014 – today)

600+ vehicles, including entire bus fleet, taxis and municipal service vehicles

405,000+ unique Wi-Fi users

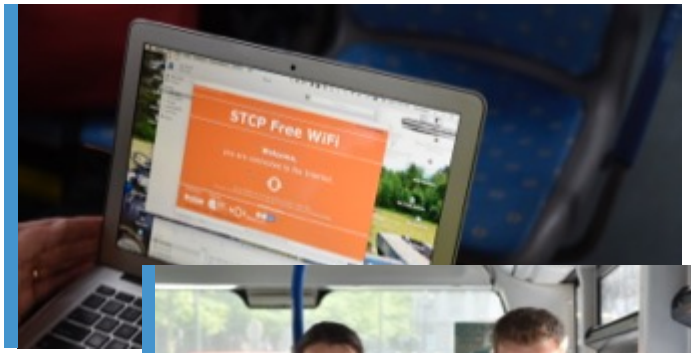
4,400,000+ Internet sessions

2.5 TB of Internet traffic per month

1.3M hours of Internet surfing

70% of traffic offload from cellular to fixed network with 8 APs/km^2

Service paid today by Vodafone



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Just as a car is more than a faster horse, an autonomous vehicle is more than a self-driving car

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AUTONOMOUS VEHICLES

SAFETY DATA

HIGH RES MAPS

INFOTAINMENT

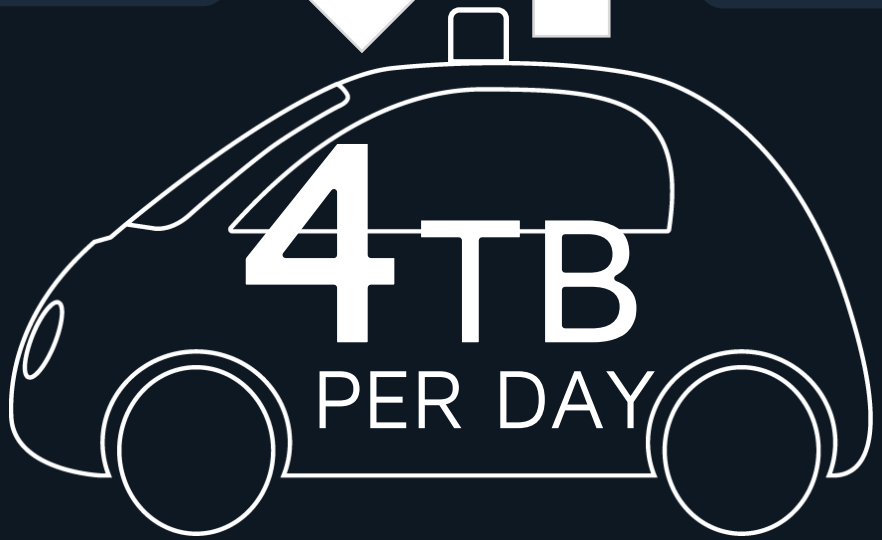
SOFTWARE UPDATES

ROAD DATA

SECURITY VIDEOS

VEHICLE TELEMETRY

PASSENGER DATA

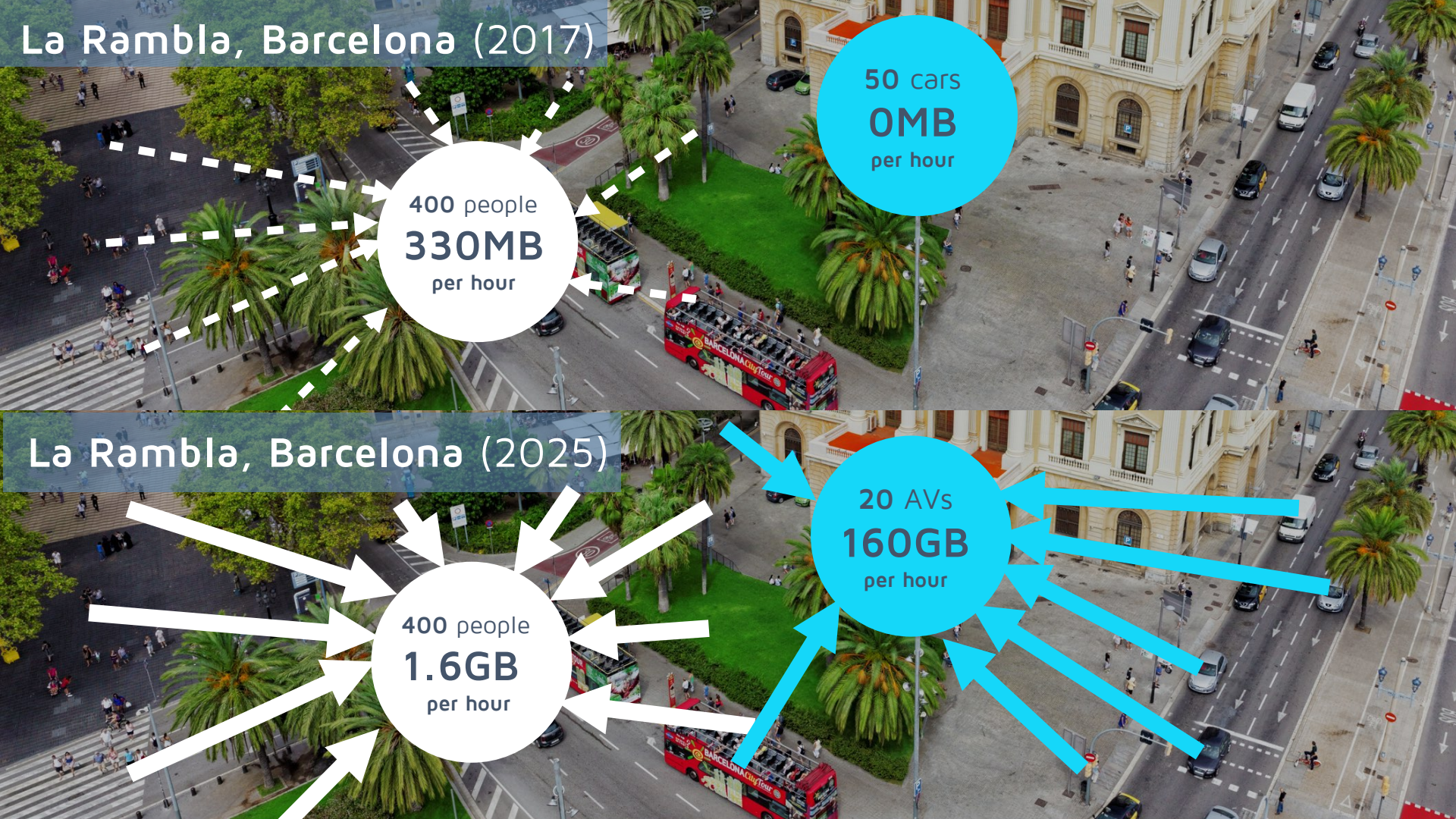


GPS
50 KB/S

LIDAR
70 MB/S

CAMERAS
40 MB/S

RADAR
100 KB/S


La Rambla, Barcelona (2017)
400 people
330MB
per hour
50 cars
0MB
per hour
La Rambla, Barcelona (2025)
400 people
1.6GB
per hour
20 AVs
160GB
per hour

VENIAM

Veniam is 5G

Manageability

Mobility

Diversity

Low Latency

Location & Context

Network slicing

VENIAM®

The platform that moves massive amounts of data between vehicles and the cloud.

VENIAM

THE INTERNET OF MOVING THINGS

MORE INFO AT

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