The Internet of Moving Things

March 2017

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WHAT DOES VENIAM DO?

We move massive amounts of data between vehicles and the cloud.
MANAGED MOBILE WI-FI
Deliver cost-effective wireless internet access on the move with optional branding and ads.

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

CLOUD-BASED MANAGED SERVICES
Control your network and services from our cloud platform and use simple APIs for effortless system integration.

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

HETEROGENEOUS NETWORKING FOR VEHICLES
Leverage cutting-edge wireless technologies, including mesh-enabled DSRC, LTE, Wi-Fi and Bluetooth for future-proof connectivity.
VENIAM IS BACKED BY WORLD LEADING VCS AND CORPORATE INVESTORS

VENIAM TIMELINE

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
INDUSTRY RECOGNITION
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
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
10x Longer Range than Classical Wi-Fi
100x Faster Connection Setup
12x Cheaper than Cellular

STANDARD WI-FI
50m

V2X

V2I

V2V
# VENIAM TECHNOLOGY PLATFORM

## KEY HARDWARE, SOFTWARE, AND CLOUD COMPONENTS FOR CONNECTED VEHICLES

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

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- **10 YEARS OF WORLD-CLASS R&D BY VENIAM TECH FOUNDERS AND THEIR TEAMS**
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/km²

Service paid today by Vodafone
Just as a car is more than a faster horse, an autonomous vehicle is more than a self-driving car.
AUTONOMOUS VEHICLES

SAFETY DATA

HIGH RES MAPS

SOFTWARE UPDATES

ROAD DATA

VEHICLE TELEMETRY

PASSENGER DATA

SECURITY VIDEOS

CAMERAS
40 MB/S

RADAR
100 KB/S

GPS
50 KB/S

LIDAR
70 MB/S

4 TB PER DAY
La Rambla, Barcelona (2017)

- 400 people per hour
- 330 MB per hour

La Rambla, Barcelona (2025)

- 400 people per hour
- 1.6 GB per hour
- 20 AVs per hour
- 160 GB per hour
Veniam is 5G

- Manageability
- Diversity
- Mobility
- Low Latency
- Location & Context
- Network slicing
The platform that moves massive amounts of data between vehicles and the cloud.