



# Company Overview

November 2017

# Ossia: Pioneering Wireless Power Delivery

## Our Vision

Establish **cōta** as the global **standard** for the intelligent delivery of wireless power over distance

## Our Experience

Over **15 years** dedicated to the R&D of technology to deliver wireless power over distance

## Our Results

The world's only available reference design and interoperability standard for safely delivering power wirelessly, backed by an extensive portfolio of **foundational IP** in RF power.

2010 - 2013



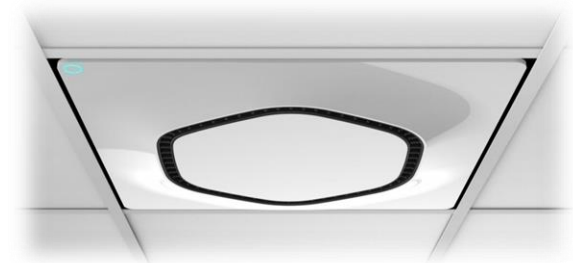
2014



2015



2016



# Wireless Power like Wi-Fi

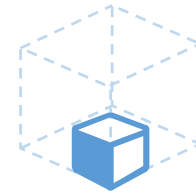
Real Wireless Power:™ like WiFi- but instead of sending Data, Cota sends Power



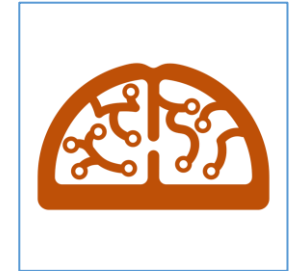
At a distance –  
no wires or pads



Available  
everywhere in the  
presence of  
the Power  
Transmitter



Keeps the  
receiver device  
small



Smart, intelligent  
and secure

# Wireless Power Technology Comparison

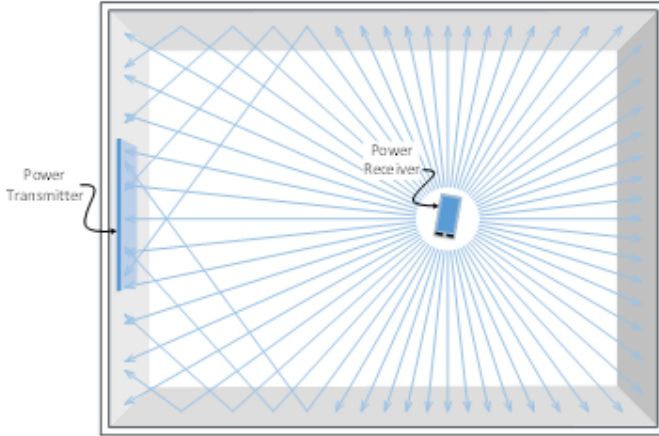
TECHNOLOGY	Distance	Non-line-of-sight	All Direction Transmission	Real-Time Client Tracking	Orientation Reception	Multi-Use Antenna Receiver	Commentary
	✓	✓	✓	✓	✓	✓	Broad range of applications from mobile devices to Industrial and IoT; the only proven non line of sight charging at a distance technology in motion
Beamforming RF	✓	✗	✗	✗	✗	✗	Lower power applications, technology enables less mobility than Ossia and has safety concerns
Induction/ Pad Charging	✓	✗	✗	✗	✗	✗	Pad Charging/ Qi requires contact to the pad to charge a device
Lasers/ Ultrasound	✓	✗	✗	✗	✗	✗	Mobile devices and IoT; suffers from NLOS limitations



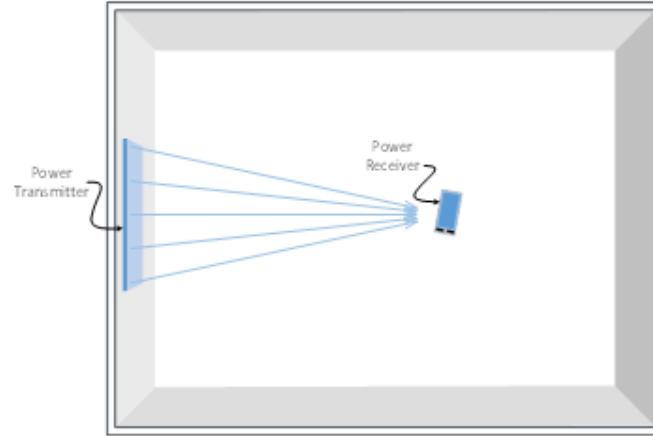
# CORE DISCOVERY

Originally, this was an attempt to improve Wi-Fi communication

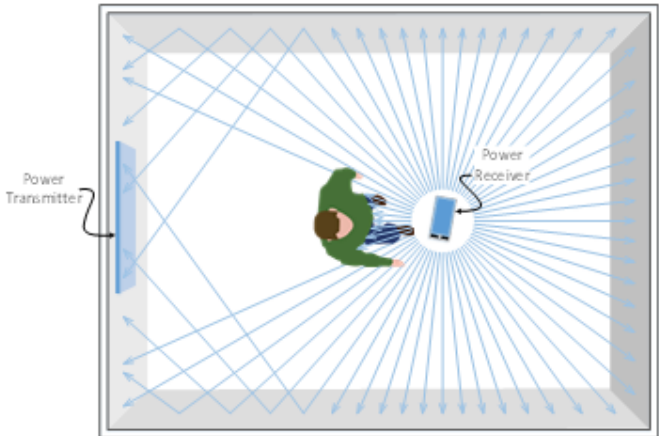
But it turned out to be so efficient, the discovery was useful power transfer



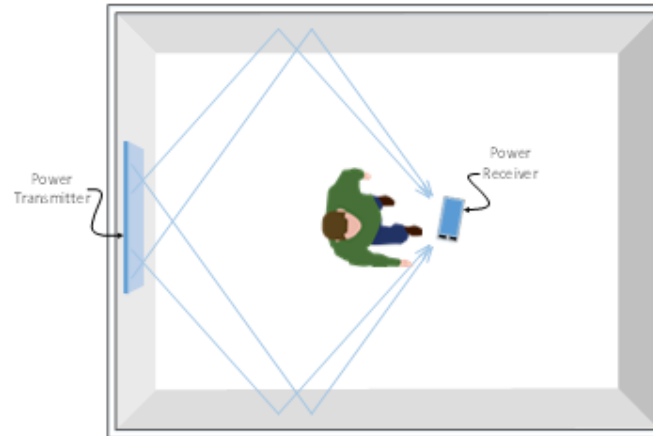
*Figure 1: Power Receiver transmitting a Beacon Pulse when the most direct paths between the Power Transmitter and Power Receiver are unobstructed.*



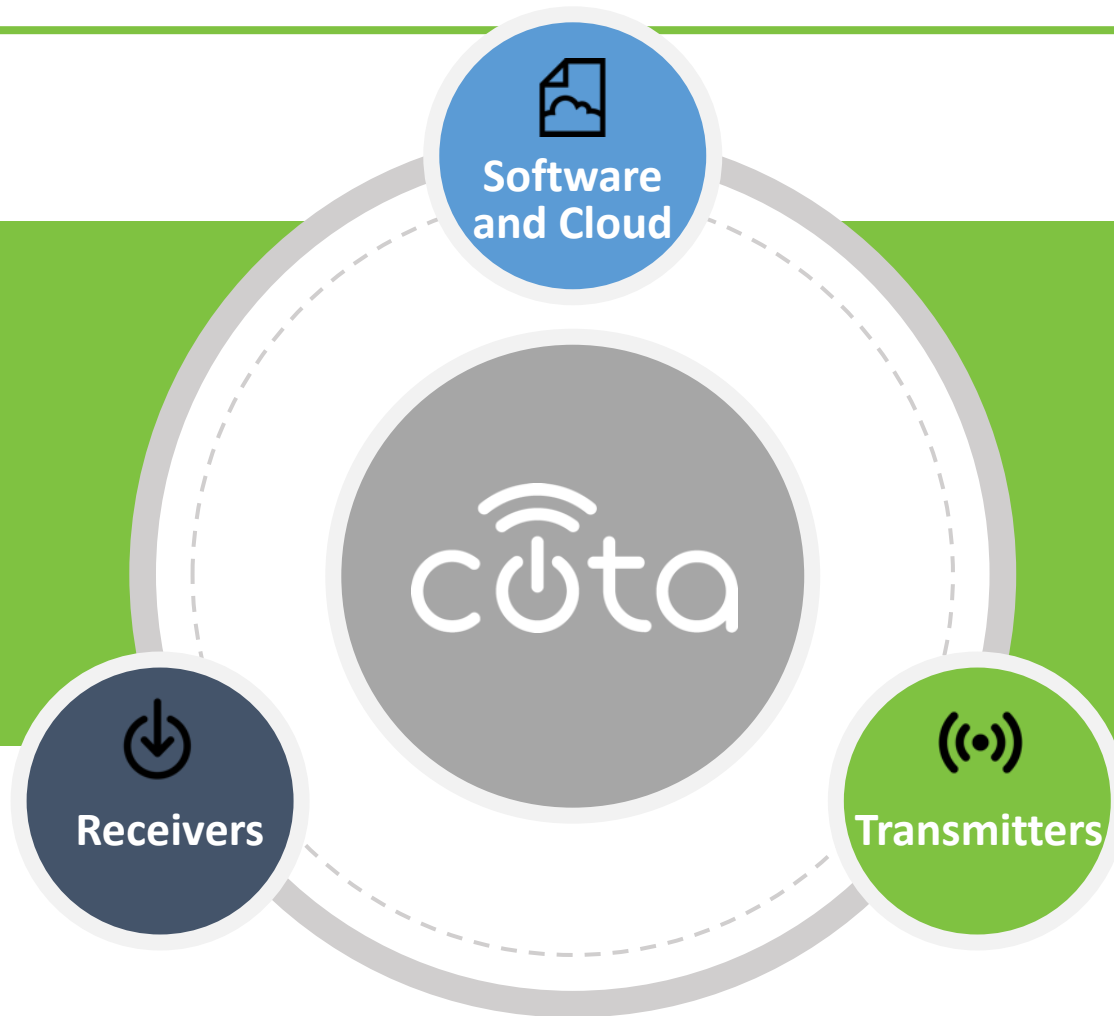
*Figure 2: Power Transmitter sending power using a phase conjugate reflection of the Beacon Pulse when the most direct paths between the Power Transmitter and Power Receiver are unobstructed.*



*Figure 3: Power Receiver transmitting a Beacon Pulse when a person is blocking the most direct paths between the Power Transmitter and the Power Receiver.*



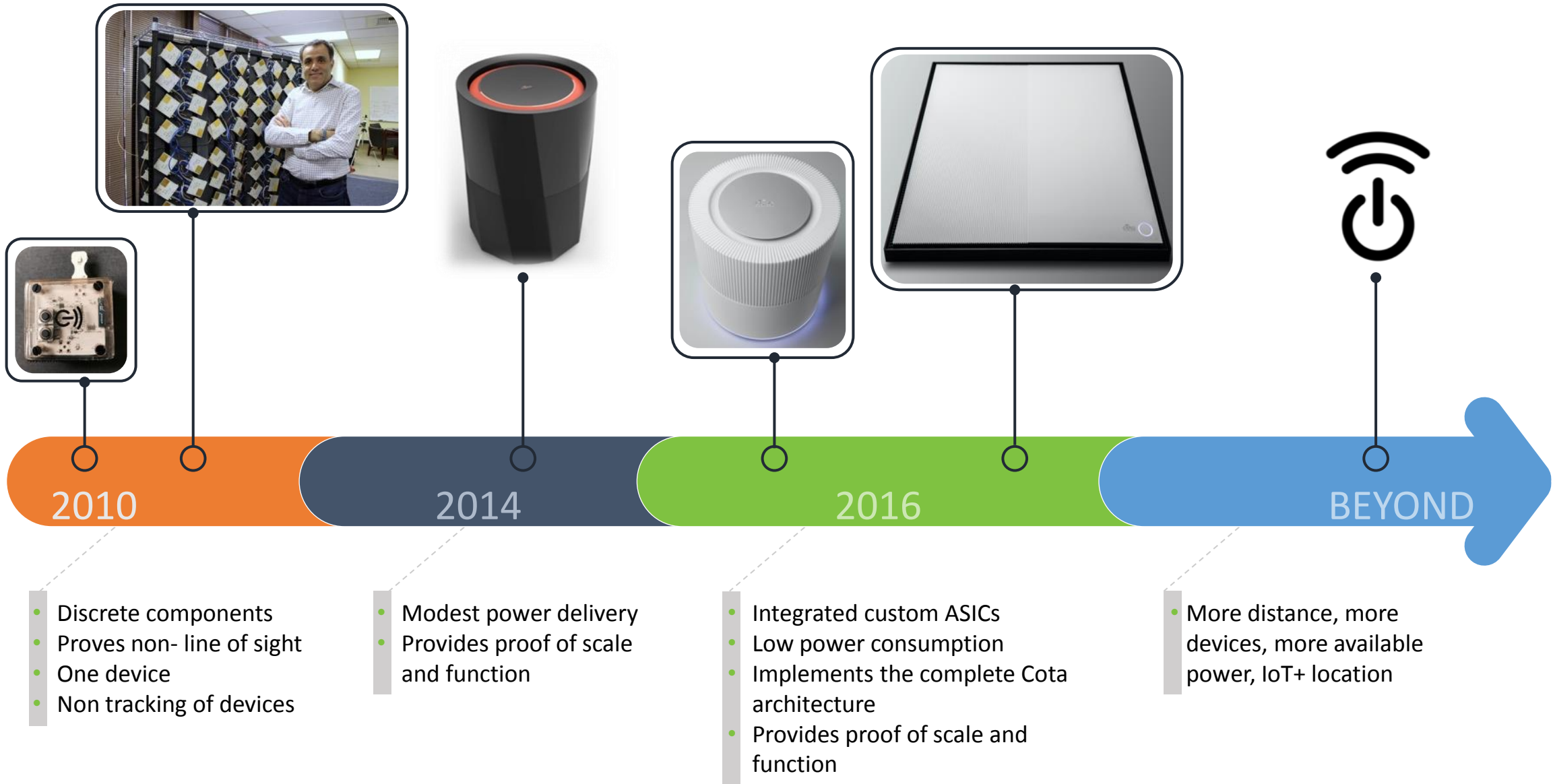
*Figure 4: Power Transmitter sending power via a phase conjugate reflection of the Beacon Pulse when a person is blocking the most direct paths between the Power Transmitter and the Power Receiver.*



## COTA PLATFORM

The Cota platform spans receivers, transmitters, secure communication protocols, software and cloud services for **delivering managed wireless power**







# Video Demo



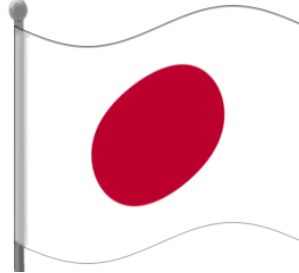
# Regulatory Approvals – Recent Progress



## US FCC:

Ossia will submit detailed application in December 2017. FCC expected to establish:

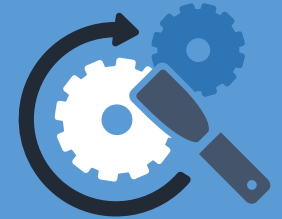
- Cota is properly classified as an ISM device (similar to high frequency equipment under Japanese Law).
- Cota devices meet all human health and safety standards.



## Japan: MIC/BWF

**Ossia has been working with MIC and BWF since 2016**





- Met with MIC in November 2016. MIC has not taken a position on WPT
- Ossia and its partners, -- KDDI and other Japanese companies (under confidentiality) -- have participated in BWF on wireless power issues since March 2017
- BWF met with MIC on WPT in October 2017, and MIC was non-committal on WPT



## Next steps:

- Ossia expects FCC to issue approval by early 2018
- Ossia plans continued engagement in BWF with Japanese partners
- Following FCC approval, Ossia will engage directly with MIC to seek approval for Cota prototype devices ASAP
- Target approval is mid-2018

# Patent Overview: Representative List of Patents

PATENT TITLE		PATENT NUMBER	PATENT FILING DATE	ISSUE DATE
Wireless power transmission system		8,446,248	6/14/07	5/21/13
Wireless power transmission system		8,159,364	8/23/10	4/17/12
Wireless power transmission system		8,410,953	4/10/12	4/2/13
Wireless power transmission system		8,558,661	3/27/13	10/15/13
Method & apparatus for focused data communications		9,351,281	2/21/14	5/24/16
High Dielectric Antenna Array		9,685,711	8/15/14	6/20/2017
Wireless power transmission system		8,854,176	10/14/13	10/7/14
		9,142,973	10/6/14	9/22/15

**25+ patents currently in 6 countries** so far with published and unpublished **patent application for 300+ inventions**

# Leader in the Intelligent Delivery of Wireless Power Over Distance



## PROVEN TECHNOLOGY

Backed by an extensive portfolio of foundational IP in RF wireless power



## EXPERIENCED & PROVEN MANAGEMENT

The team to build the market enabler for wireless power



## MASSIVE MARKET OPPORTUNITY

Addressable market of billions of units annually, with new applications emerging

ossia  
REAL WIRELESS POWER



# Additional Background

# Notable Awards for Ossia, 2016-2017



# Media Praise for Ossia

## Ossia featured in TIME Magazine



**BIG IDEA**

### A ceiling that wirelessly charges devices

Imagine a room in which everything charges automatically. That's the idea behind the Cota Tile, a ceiling fixture that can send power over radio waves to devices like phones, laptops and smoke detectors, so long as they're outfitted with special receiver chips. (Think Bluetooth or wi-fi connectivity, but more advanced.) Bellevue, Wash.-based tech startup Ossia, which developed the Cota, said it's working on licensing the technology before the Tile hits the market—though it will likely be many years before this kind of wireless power is commonplace. —Julia Zorthian



## Press Quotes

*“It’s safe to say that Ossia, the wireless pioneers behind over-the-air charging platform Cota, gave one of the most impressive demonstrations at last year’s Consumer Electronics Show. And this year is no different.”* –Kyle Wiggers, Digital Trends

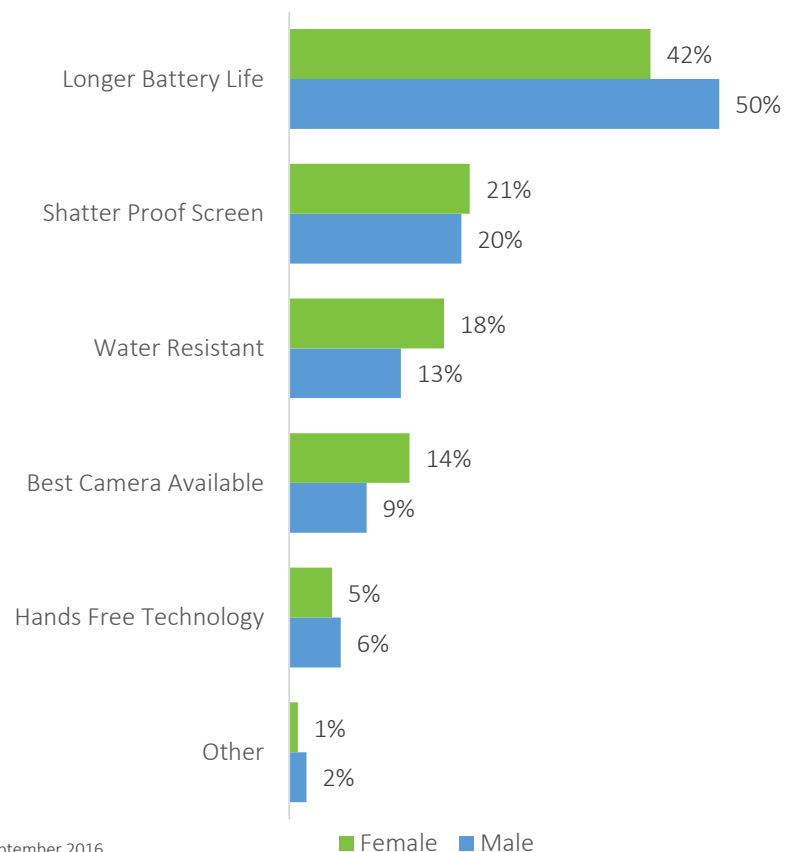
*“True wireless power that travels through the air is the holy grail of mobile tech and Ossia has found it.”* –Avram Piltch, Tom’s Guide

*“This is no longer science fiction. It’s science fact, and the transmitters are going to be hidden in plain sight.”* –Mike Brown, Inverse



# Wireless Power Over Distance: The Killer App of the Connected Future

The Most Wanted Smartphone Features<sup>(1)</sup>



<sup>(1)</sup> YouGov, September 2016.

## Our **cōta** Platform Revolutionizes Power Delivery for Consumers and Enterprises Alike:



Seamless Charging: Never have to think about charging your small devices again- no more plugging devices into the wall. No more replacing batteries. That's **cōta**



Enabling the IoT: Instantly providing smart connectivity to thousands of devices while ensuring they are always on and always charged



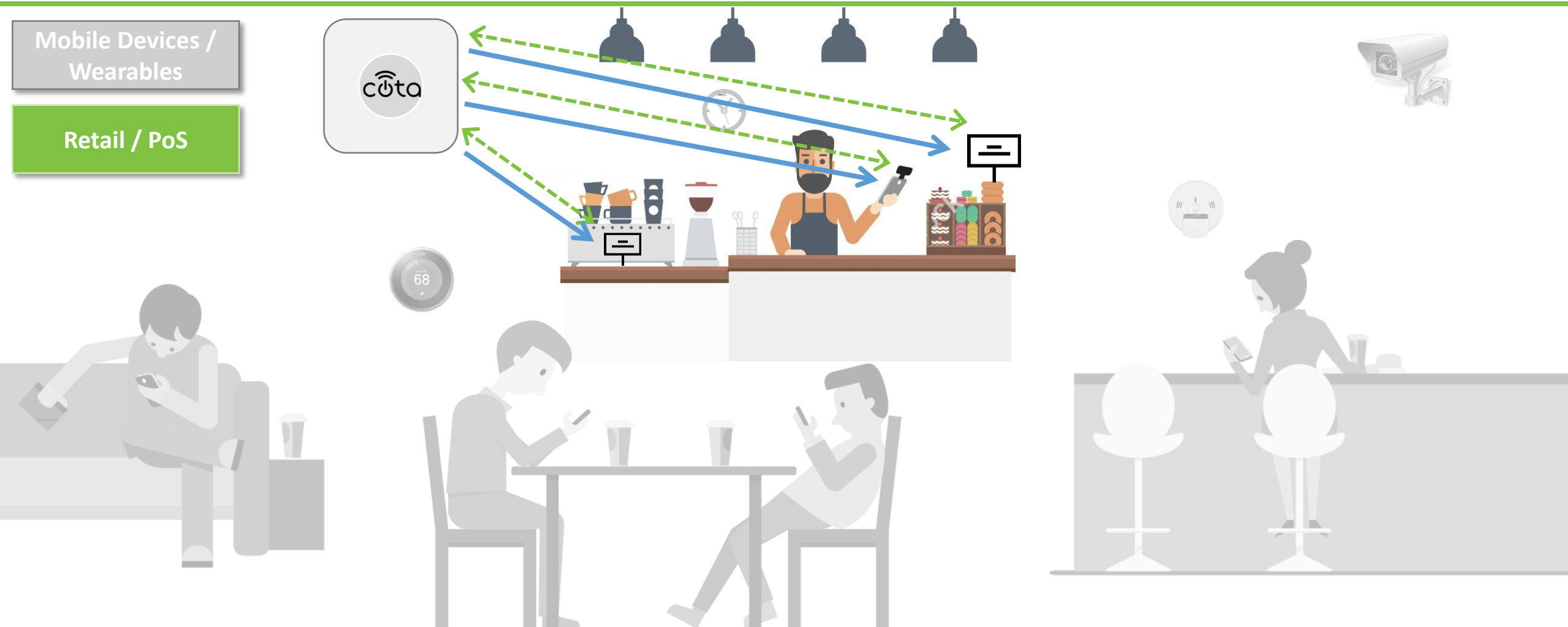
Green Power: Trickle charge approach significantly extends the lifespan of rechargeable batteries, while embedding **cōta** technology in AA and other form factors potentially removes billions of batteries from landfills annually



Catalyzing Innovation: What could you design if battery capacity wasn't an overriding constraint for your mobile and IoT devices? Faster processors, brighter screens, better connectivity and higher definition cameras are just the beginning



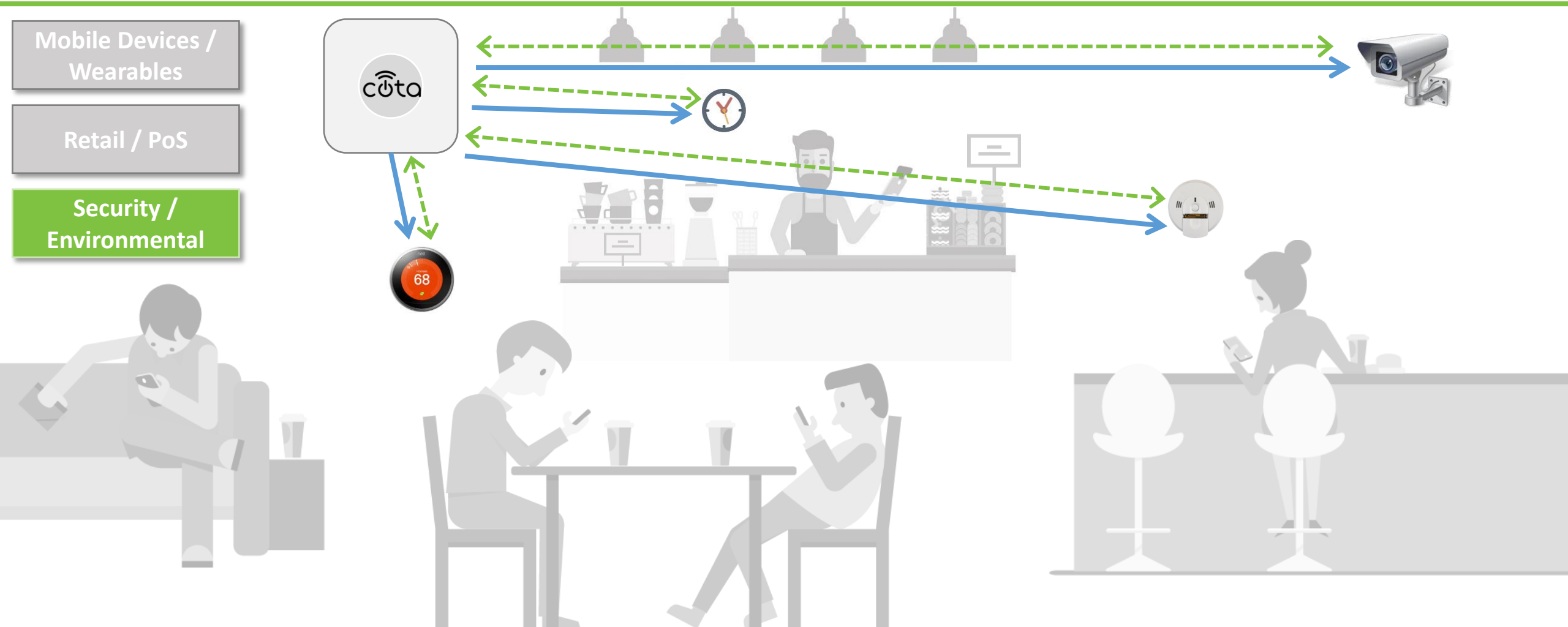
# cōta's Potential: One Store, a Thousand Applications



Mobile Devices /  
Wearables

Retail / PoS

# cōta's Potential: One Store, a Thousand Applications



# Cota is Form factor Agnostic

The PAC: Compact  
Cylindrical format, used  
for stand alone home use,  
servicing personal  
space/room

2016



2017



The Cota Tile: Invisible,  
infrastructure based Tile, can be  
extended with multiple units to  
service larger spaces

Smart Furniture  
Conspicuous, hidden power  
transmitter for home, office  
space or public spaces

Beyond

