

# Solving Industry 4.0's Biggest Problem

IoT device operations



### Background

# **About ByteTrail**

- Founded mid-2022
- 3 co-founders, 4.5 FTEs
- Self-funded 1 year (\$500K)
- Maintain IoT devices (firmware, apps, OS, config)
- B2B SaaS Solution
- Clean cap table

## **Traction**

- MVP foundational software
- Cx #1 delivered Aug 2023
  - SMB Distributed water utility
  - Value: \$250K cost avoided
- Cx #2 pilot secured
  - Enterprise Intl manufacturer
  - \$ in negotiation
- Cx #3 pilot in negotiation
  - OEM Industrial IoT mfr

### Problem: Chaos for 20 Billion Things

# This is Industry 4.0



### "Things" have a Big Problem

**76%** 

of 20 billion things are not updated, not managed

Discord survey: Industry 4.0 SMEs – Industrial IoT User Community Courtesy of Walker Reynolds, Dec 2022

### Reason: Why it Matters





- Geographically distributed
- · Hazardous conditions





- 2M mfg. jobs unfilled by 2030
- 68% of SMBs struggle with IT talent



#### **Examples:**



100's of millions of Industrial IoT devices affected; total costs est. over \$1 billion



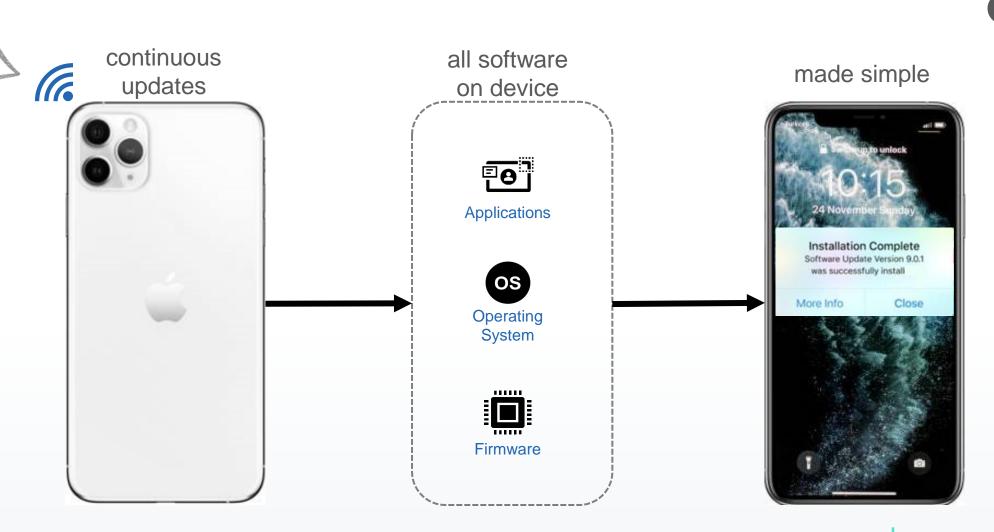
70M customers' data exposed; direct costs exceed \$200M

### **Huge Unserved Market**

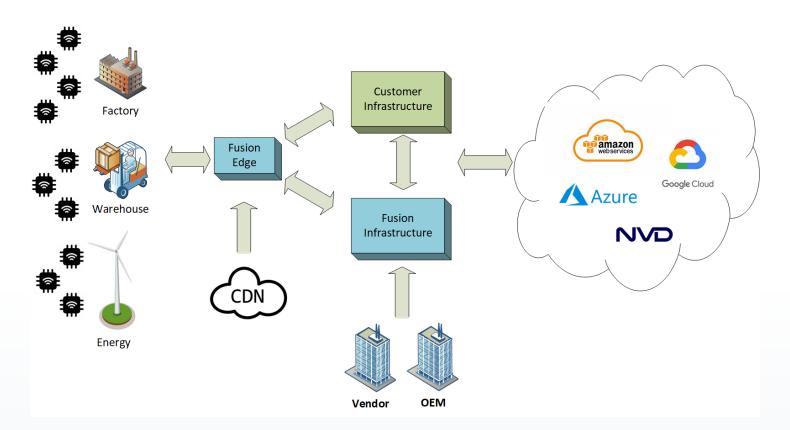
## Metaphor: Updates for iPhone



ByteTrail's solution replicates this service for most IIoT devices



# ByteTrail tech overview



- 1. Tech solution scales across all verticals/use cases with NO MODIFICATIONS
- 2. Continuous device updates
- 3. Automation frees IT, enables OT
- 4. Conforms to coming security regulations / breach avoidance (\$4.4M per incident)
- 5. Leverages industry standards and protocols
- 6. Aggregated data has extraordinary value

Innovative modern tech stack solves for scale

### Value Innovation



#### Updates for All Devices All the Time

BYO smart device and protocol and it's covered

#### Plug-and-play Simplicity

Plug in a new device and the system handles the rest

## SBOM (Software Bill of Materials)

Operationalize the software 'ingredients' and dependencies

### Technology Moat

9 key differentiating features



## Frees IT and enables OT

The first system purpose-built to offload IT and support operators



#### Made for Scale

Composable architecture of lightweight, reusable components



#### Edge First Design

Edge-driven system reduces net operations costs by at least 5X



## Proactive Security

Edge security made easy with zero-trust and NVD-driven patching



#### Open Ecosystem

Platform agnostic, standards based, APIfirst design



#### **Vendor Freedom**

BYO HyperCloud, IT platform, and applications

### Vast Blue Ocean Opportunity





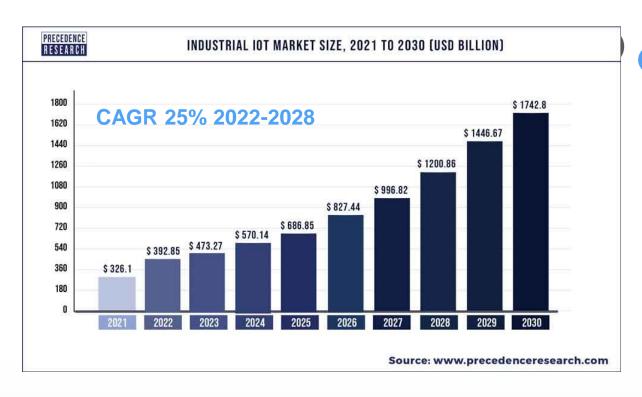






### First Focus: Energy

- 30% of overall TAM
- High innovation and investment
- Looming regulatory (see: <u>Executive Order 14028</u>)



	2024	TAM	SAM	
SMB	Software	\$285B	\$71B (25%)	
(amount OM/Da	SMB		\$28B (40%)	
target SMBs				

## **Energy & Utilities Vertical**



#### **ByteTrail GTM Sweet Spot**

- ✓ Highly distributed
- ✓ High value
- ✓ High growth
- Repeatable

#### **Start Here:**

First customer

Mobile Water Treatment

#### **Then Here:**

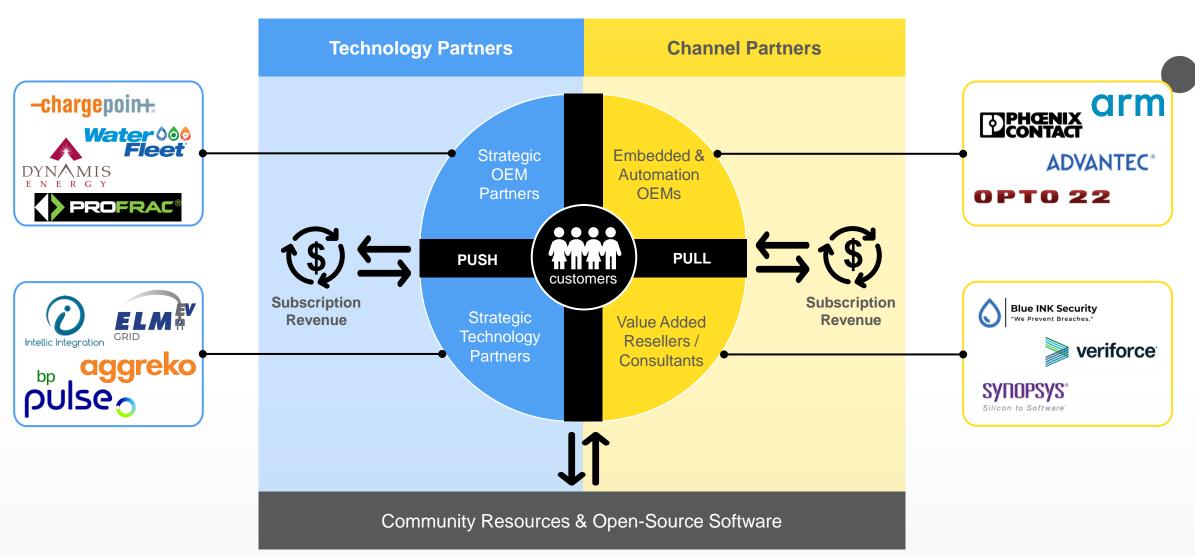
Next target customer Distributed Energy

Market Vertical	US Market Size (\$Bn)
Electric Utility	\$1,200
Oil and Gas	\$1,000
Renewable Energy	\$200
Water and Wastewater	\$150
Waste Management	\$100
Mining	\$50
Smart Energy	\$32
Natural Gas Utility	\$24
Hydrogen	\$1

For more detailed GTM strategy, click here

### GTM leverages other people's customers





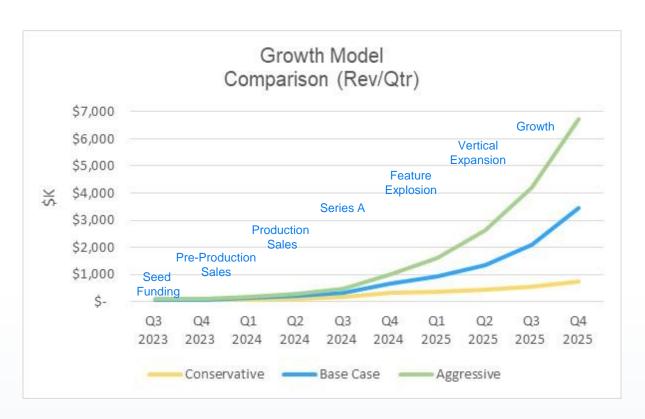
### **Financial Model**

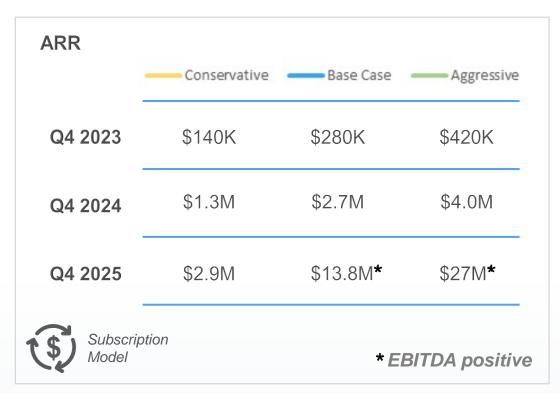


WHY..... Solve Industry 4.0's biggest problem

WHAT..... Build world-class software solutions

HOW..... Leverage a world-class engineering & product team





Full proforma available on request

### Deal Details and Use of Funds



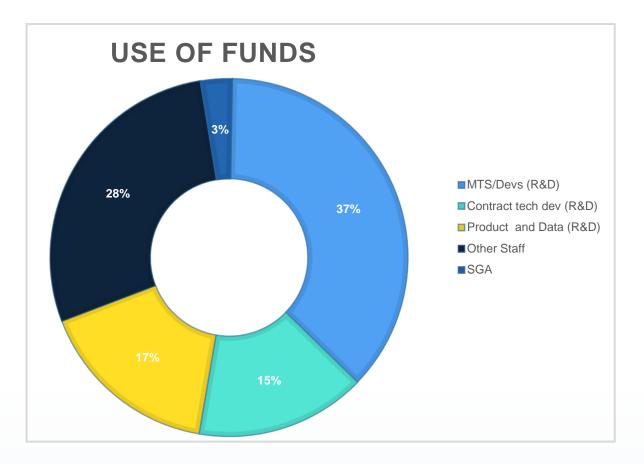
#### 1st Customer delivered late Aug - MVP

\$2.5M Convertible Note

15 Months Runway

#### **Key Objectives**

- 2+ additional Lighthouse Cx engagements
- multiple learning cycles
- production ready tech
- GTM model proof
- staffing to proforma



70% of seed funding for IP and product development

### Team Experience



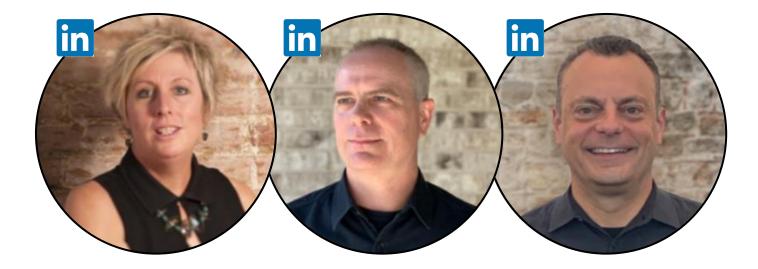
Enterprise

Startup

**Technology** 

Cyber Security

History Together



**Brenda Stoner**Cofounder | President

8X Founder, Fierce Innovation Advocate, Board Member, Advisor, Culture First Leader 24 consecutive Q growth in last startup

**Brandon Grooters**Cofounder | Technology

Distinguished Engineer, Technology Leader, Proven Architect

**Steve Coutoumanos** Cofounder | Product

Proven Leader of Product, DevOps / SRE, Solution Engineering

## Why ByteTrail?



### Solving Industry 4.0's Biggest Problem

- Blue Ocean opportunity
- Unchallenged multi billion-dollar market
- Replaces scarce workers with automation
- Innovative modern tech built for scale
- Reduces cloud costs by 5-10X
- ✓ Cybersecurity/regulatory enforcement mandates coming in 2024



Market opportunity: 20 Billion devices \* \$1 SaaS service / month



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### Roadmap





edge & cloud foundation

device/partner onboarding

workflow engine foundation

software update foundation

supply chain by device class

end-to-end command & ctrl

multi-layer software update

CPE-CVE exception workflows

production ready N. America

PEN testing & certifications

knowledge graph & observability

compliance & governance

Foundation Ready

Q2 2023

Client Operations

Q3 2023

SBoM foundation

client command & control

client / edge visibility

client / edge update support

SW Supply Chain Operations

Q4 2023

Pre-Production Ready

Q1 2024

Production Ready

Q2 2024

customer/partner onboarding

device class/workflow toolkit

continuous deployment toolkit

CPE-CVE remediation workflows



View a 1-minute demo

## Competition is limited



Competitive Comparison		ByteTrail.	Direct Competition			Indirect Competition	
			SecuriThings	ThingsBoard	JFrog Connect (formally Upswift)	Azure IoT	AWS IoT
B U S I	HQ location	incorporated 2023	founded 2016	founded 2016	Upswift acquired 2021		
	funding to date	in process	\$39MM (as of Apr. 2023)	<u>\$0</u> (as of Apr. 2023)	\$5MM (pre-acquisition)	n/a	n/a
N E S	licensing model	open API-driven	$\odot$	$\odot$	$\odot$	limited	$\odot$
S	customer focus	operator vs. IT focus		$\odot$	$\odot$	<b>:</b>	$\odot$
S O F T W A R E	source software	SBoM / code signing		<b>③</b>		<b>:</b>	
	store software	edge-driven	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$
	deliver software	edge-orchestrated	$\odot$	$\odot$	$\odot$	$\odot$	custom
	implement software	Continuous Deployment	$\odot$	$\odot$	$\odot$	custom	custom
	monitor devices	compliance support	$\odot$	$\odot$	$\odot$	custom	custom
P P L	manage devices	scalable & simple		$\odot$	limited	difficult	difficult
Υ	nintelligent remediation	autonomous edge	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$
	learn & improve	device operations	$\odot$	$\odot$		custom	custom