Why Precise Tracking is Important?
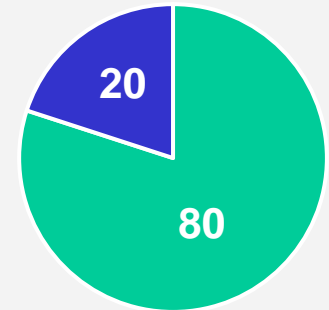
Why Precise Tracking is Important?

- Even though we spend approximately 80% our time indoors*, LBSs are developed for outdoor environments.

- Their main components are a localization method and a map, but unfortunately

  - GPS cannot work indoors, since its signal cannot penetrate solid objects, such as walls.

 - Most of the indoor places lack of indoor maps.

Daily Life

20

80

■ Indoors ■ Outdoors

* Buildings and the Environment: A Statistical Summary. Technical report, U.S. Environmental Protection Agency Green Building Workgroup, December 2004.

03

Commercial Real Estate Operators are Flying Blind

The Commercial Real Estate (CRE) Market it is still effectively lacking an analytics layer. CRE monitoring and optimization are stuck in the previous century.

This is how leading retailers, such as IKEA, track visitor trajectories today (by pen and paper).
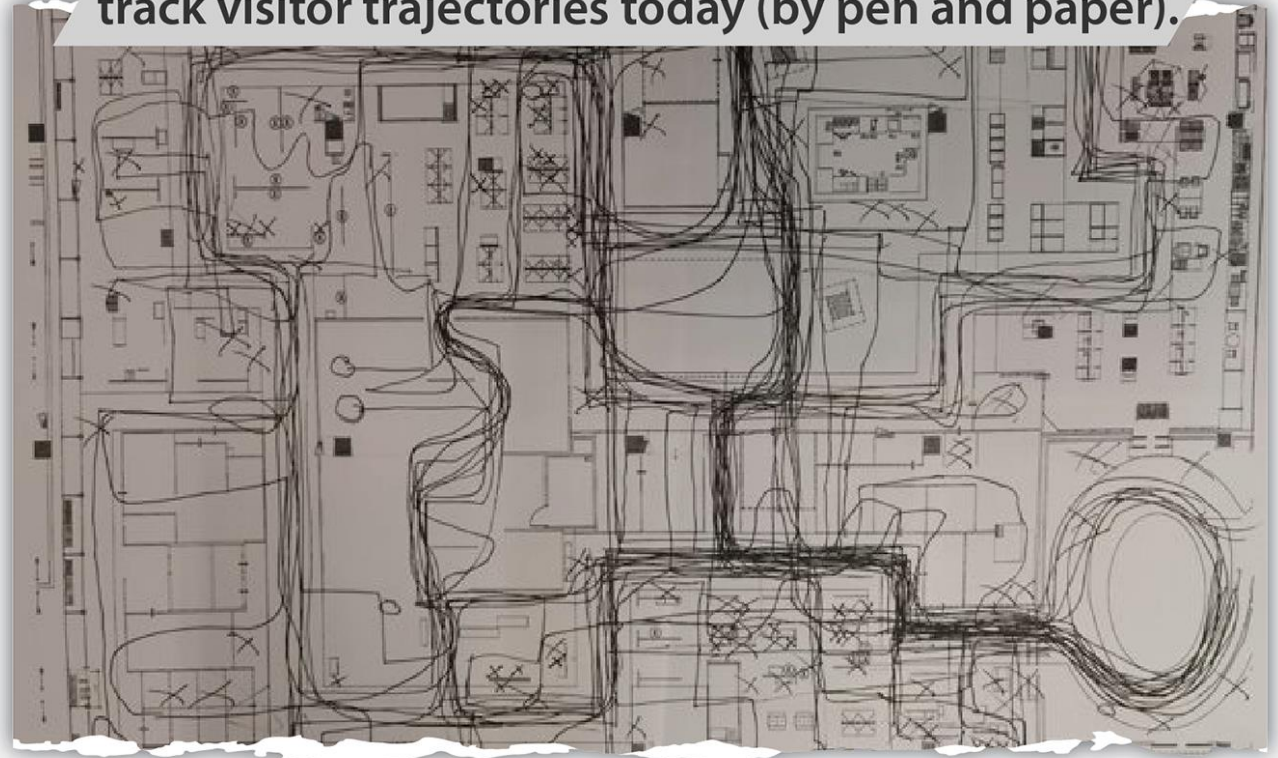
Current Solutions Do Not Work

01 | **Manual counting**
Calculate footfall & traffic
Costly and not viable solution.

02 | **Loyalty cards**
Track purchases of repeat customers
Used by less than 20% of customers.
No info on in-store behavior.

03 | **Cellular / GPRS**
Calculate catchment area
Costly and inaccurate data with limited coverage.

04 | **Cameras**
Calculate footfall & traffic
Costly and limited coverage (20m² per camera).
No loyalty, dwell time, catchment area and trajectory tracking.

05 | **WiFi connection**
Identify popular areas
Limited coverage, privacy problems.

06 | **Beacons**
Track repeat customers
Only 1 in 1000 visitors install the required app.

Solution

Was ist der Besuchsgrund?

does not require

Smartphone App

WiFi Network

Cameras

LTE & GSM Network

Proprietary Hardware

Our Solution and How It Works
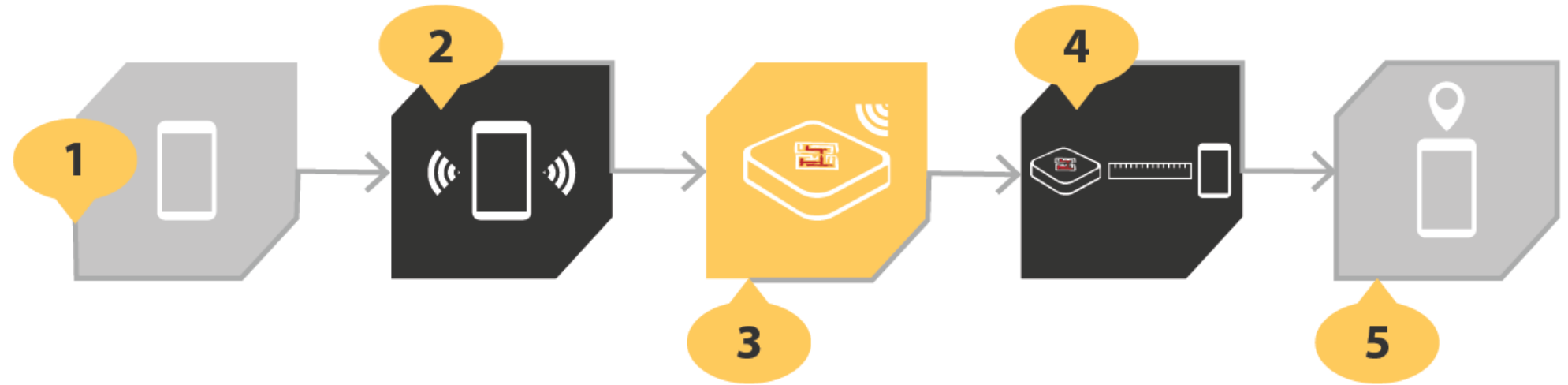
Phone	Signals	Device	Distance	Location
Everyone carries a smartphone.	Every phone is emitting signals. Even in airplane mode!	Ariadne's devices sense such signals. No opt-in required!	They estimate the distance from each device. Up to 30cm accuracy!	Then compute the exact location of each individual. Every 20 seconds!

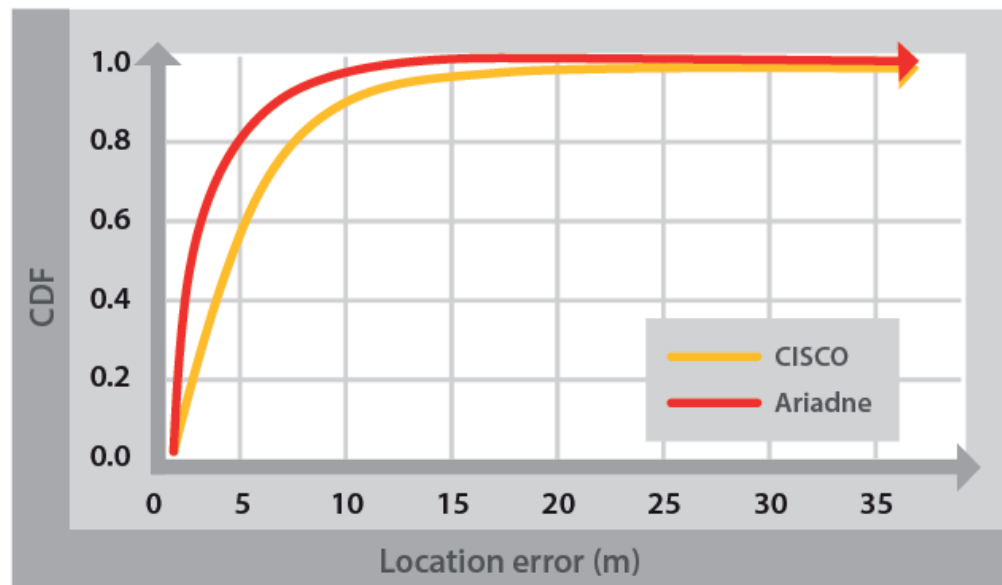# Powered by the Most Accurate AI

We are 3x more accurate than Google's AR Core. Even though we do not use cameras.

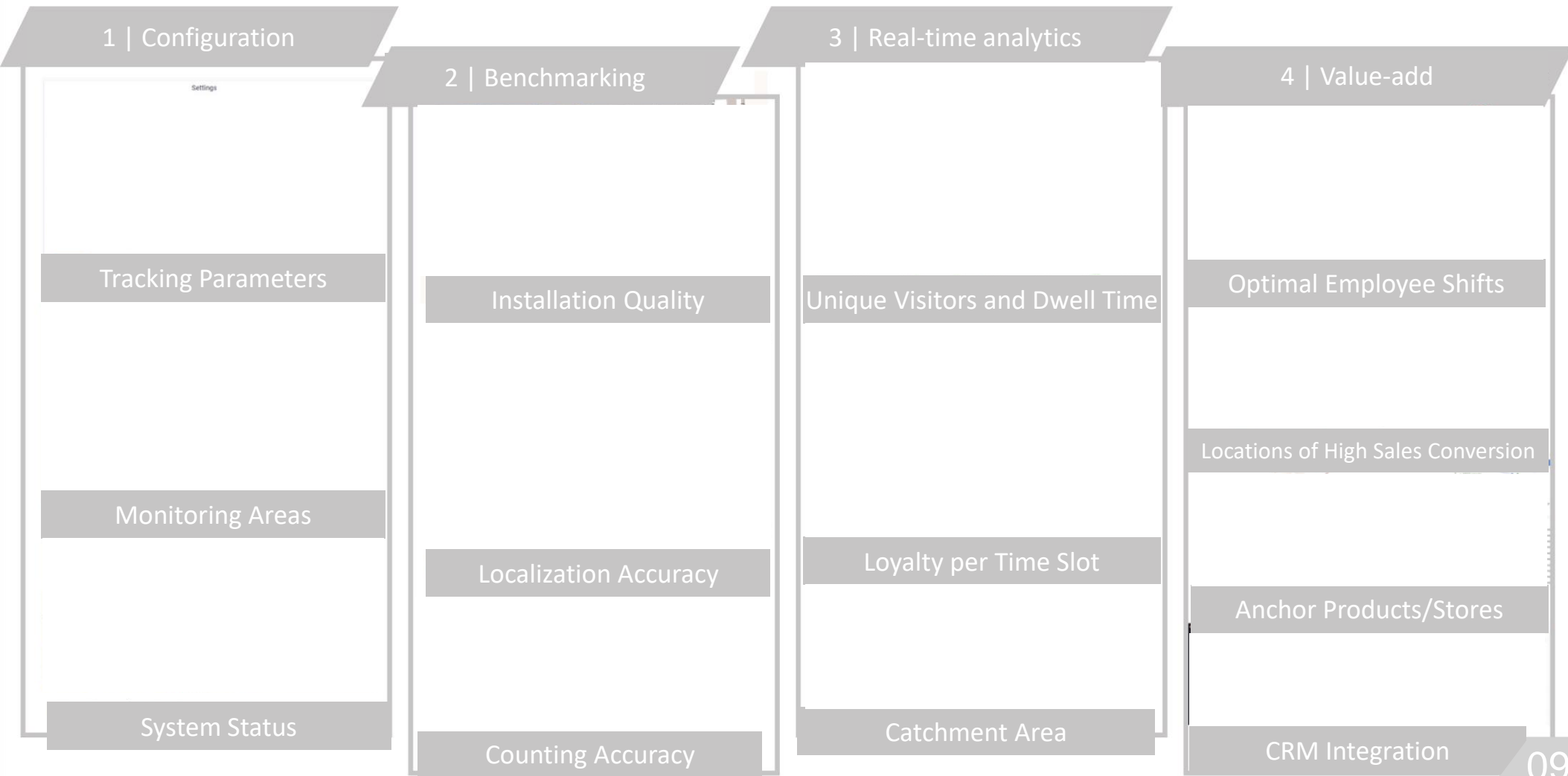| IEEE IPIN 2018	
International Conference of Indoor Position and Indoor Navigation	
Rank	Team
1st	Ariadne
2nd	ETRI
3rd	CLE
4th	UPJS
5th	Google
6th	IBM
...	...

We have 3x more accurate median accuracy than Cisco, while having 5x higher coverage.

[1] Huy Tran, Abhishek Mukherji, Nirupama Bulusu, Santosh Pandey, Xu Zhang, "Improving Infrastructure-based Indoor Positioning Systems with Device Motion Detection". IEEE International Conference on Pervasive Computing and Communications, 2019, Kyoto, Japan
[2] Georgios Pipelidis, Nikolaos Tsiamitros, Efdal Ustaoglu, Romeo Kienzler, Petteri Nurmi, Huber Flores, and Christian Prehofer, "Cross-Device Radio Map Generation via Crowdsourcing". IEEE International Conference on Indoor Position and Indoor Navigation, 2019, Pisa, Italy
[3] V. Renaudin et al., "Evaluating Indoor Positioning Systems in a Shopping Mall: The Lessons Learned From the IPIN 2018 Competition", in IEEE Access, vol. 7, pp. 148594-148628, 2019, doi: 10.1109/ ACCESS.2019.2944389.

Product walkthrough

1 | Configuration

Settings

Tracking Parameters

Monitoring Areas

System Status

2 | Benchmarking

Installation Quality

Localization Accuracy

Counting Accuracy

3 | Real-time analytics

Unique Visitors and Dwell Time

Loyalty per Time Slot

Catchment Area

4 | Value-add

Optimal Employee Shifts

Locations of High Sales Conversion

Anchor Products/Stores

CRM Integration

Our Customers Love It!

> " You presented to us what we were expecting to see in at least 7 years. "

Janis Diekman
Deutsche Bahn
Innovation Manager

"Your devices are like beacons in steroids."

Anthony Lynsdale
Atlantis The Palm
Vice President Information Technology

"Ariadne is going to be the operating system of every airport in the near future."

Gina Jacobs
San Diego Airport
Innovation & Business Development

"I cannot think of anyone who does not need your devices."
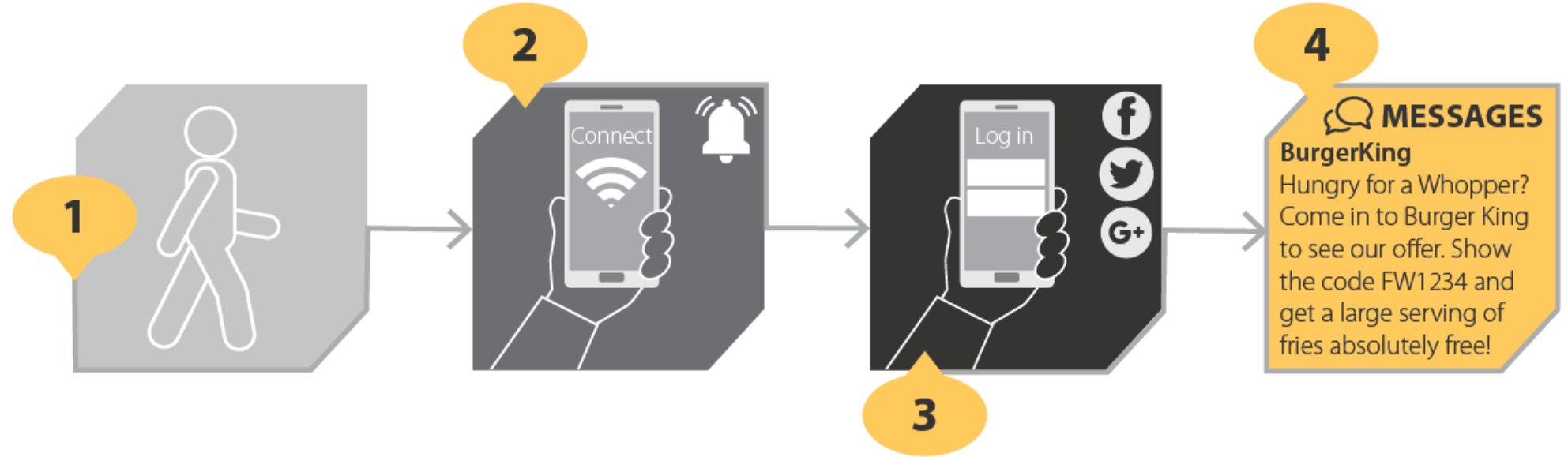
Gordon Bain
Glasgow Airport
Head of Project Delivery

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…and Most Importantly It Respects People's Privacy

Bavarian Data Protection Authority

"Ariadne tracking technology is anonymous and does not fall to the GDPR regulations."

14

Our Solution Provides a Bidirectional Flow of Information

Visitor	Notification	Log in	Gets offers
Visitor walks in your premises.	Receives notifications to Opt-In.	Opts-In with preferred method.	Receives notifications that are related to her location.

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First In Market 360° Solution
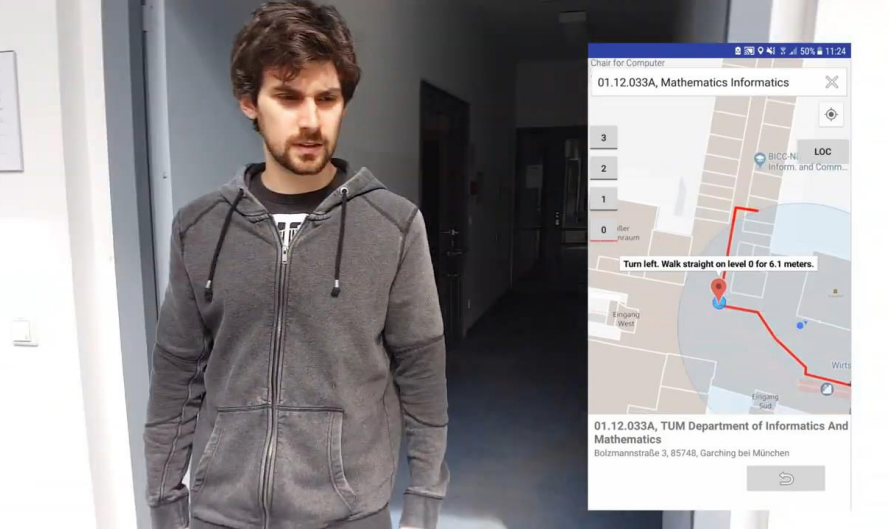
How does it work?

> When the users have opted-in you can:

- push WhatsApp, Messenger, SMS or Emails to your customers and strengthen their loyalty,
- obtain demographics that will help you to better understand your customers,
- populate you CRM with leads that have been generated from loyal customers,
- increase your revenue by pushing ads to your visitors,
- push surveys and collect usefull feedback from your customers.

Full Integration with your Existing Systems
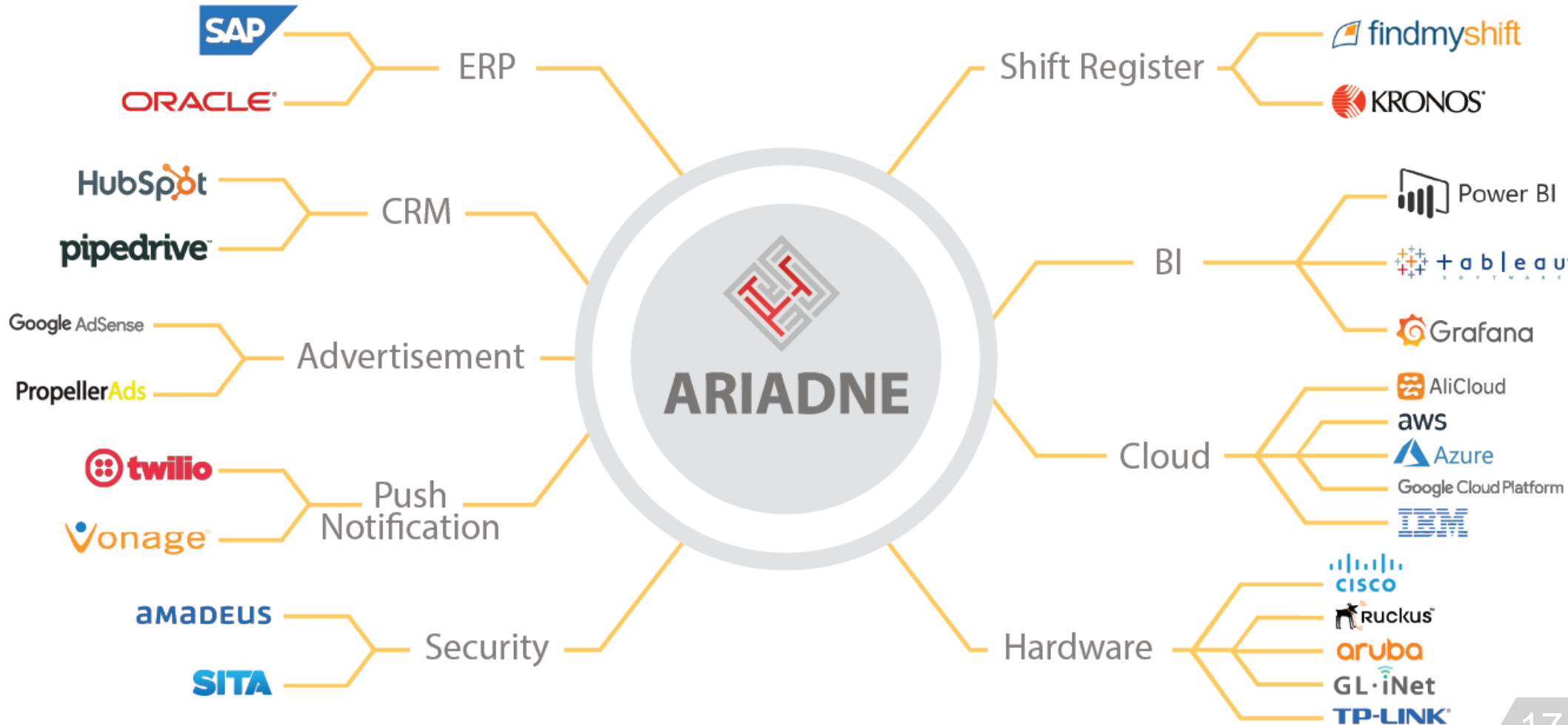
Adopted Across Geographies and Industries

UNITED STATES
Metra®
Public Transport

CANADA
IKEA
Retail

UNITED KINGDOM
GLASGOW AIRPORT
Airport

NETHERLANDS
IKEA
Retail

GREECE
Media Markt
Retail

CHINA
IKEA
Retail

SINGAPORE
CHANGI airport group
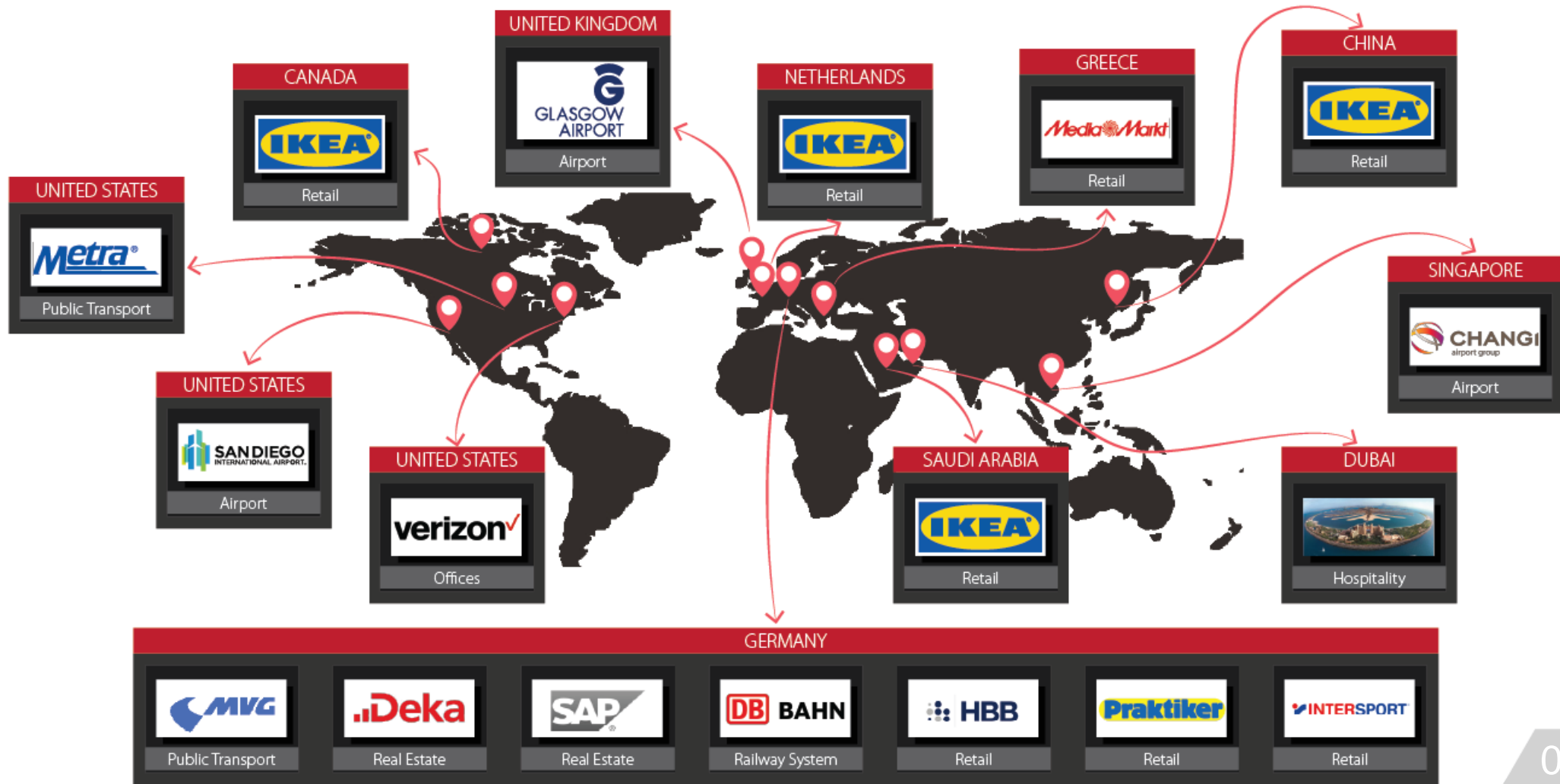Airport

UNITED STATES
SAN DIEGO INTERNATIONAL AIRPORT.
Airport

UNITED STATES
verizon✓
Offices

SAUDI ARABIA
IKEA
Retail

DUBAI
Hospitality

GERMANY

MVG	Deka	SAP	DB BAHN	HBB	Praktiker	INTERSPORT
Public Transport	Real Estate	Real Estate	Railway System	Retail	Retail	Retail

01

Core use cases

Retail
- IKEA
- INTERSPORT
- Praktiker
- weko
- JCPenney
- GameStop

Public Transportation
- DB BAHN
- Metra
- RTA
- MVG
- συγκοινωνίες αθηνών ΟΑΣΑ Α.Ε.
- MVV

Shopping Malls
- Deka
- CBRE
- ECE
- SONAE SIERRA
- MULTI
- INGKA CENTRES

Airports
- MELBOURNE AIRPORT
- CHANGI airport group
- SAN DIEGO INTERNATIONAL AIRPORT
- GLASGOW AIRPORT
- Fraport
- DFW DALLAS FORT WORTH INTERNATIONAL AIRPORT

We are an international team of crazy ambitious people.

A diverse team of 24

Growing our team in Greece!

MARATHON VENTURE CAPITAL

Dr. Georgios Pipelidis
CEO and Co-Founder

Nikos Tsiamitros
CTO and Co-Founder

Nam Le Duc
Full Stack Developer

Pati Flannery
Strategic Partnerships, N. America

Francesco Vasta
Key Account Manager

Ira Dobrovolska
Data Scientist

Md Shahabuddin
Wireless Network Engineer

George Kanellopoulos
Business Controller

Mustafa Parlak
Business Development Manager

Hasim Koc
Business Development Manager

Victoria Tsiamitrou
Country Manager (Greece – R&D)

Najeeb Khan
Computer Vision Engineer

Wasiq Rumaney
Senior Data Engineer

Kostas Theocharoulis
Data Engineer

Precious Adipere
Procurement Specialist

Theodore Polykandriotis
Director of Sales, S. Europe and M. East

Kostas Ziampakas
Onboarder

Xiaolin Hou
Account Manager

Kostas Kitsikidis
Chief Account Manager

Karolina Piekarz
Administrative Assistant

Elli Dimopoulou
Data Scientist

Roman Kees
Data Engineer

Athanasios Brianis
UX Data Engineer

Kalliopi Pipelidou
Graphic Designer

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Thank you!

Georgios@AriadneMaps.com

Return of Investment for Our Customers

Dimitris Galanis
Praktiker CEO

Watch in YouTube

Ariadne's Value for us:

- We **save 10% of costs per year** thanks to Ariadne's State-of-the-Art Employee Scheduling.
- We have increased **by 11% Our Sales Revenue** thanks to better employee distribution, introduced by Ariadne, which enabled us to:
    - Increase our sales conversion by 6% and
    - Reduced our customers bounce rate by 5%

Return of Investment for Our Customers

Ariadne's Value for us:

- We have increased by **40% Our Sales Revenue in certain products,** thanks to the improved customer experience that we introduced via experimenting with Ariadne.
- We have **20% increased customer traffic** thanks to improved visual merchandizing that was evaluated with Ariadne.

Raier Latzlspenger
Weko Wohnen GmbH
CEO

Watch in YouTube