WHOELSE?

Unified language for AIs

Pitch Deck

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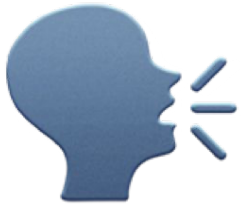
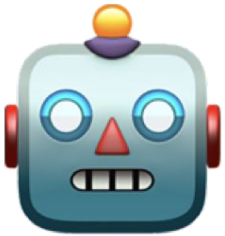
New normal: People talk to machines



Voice becomes UI #1

words replace buttons & keys

O´Reilly



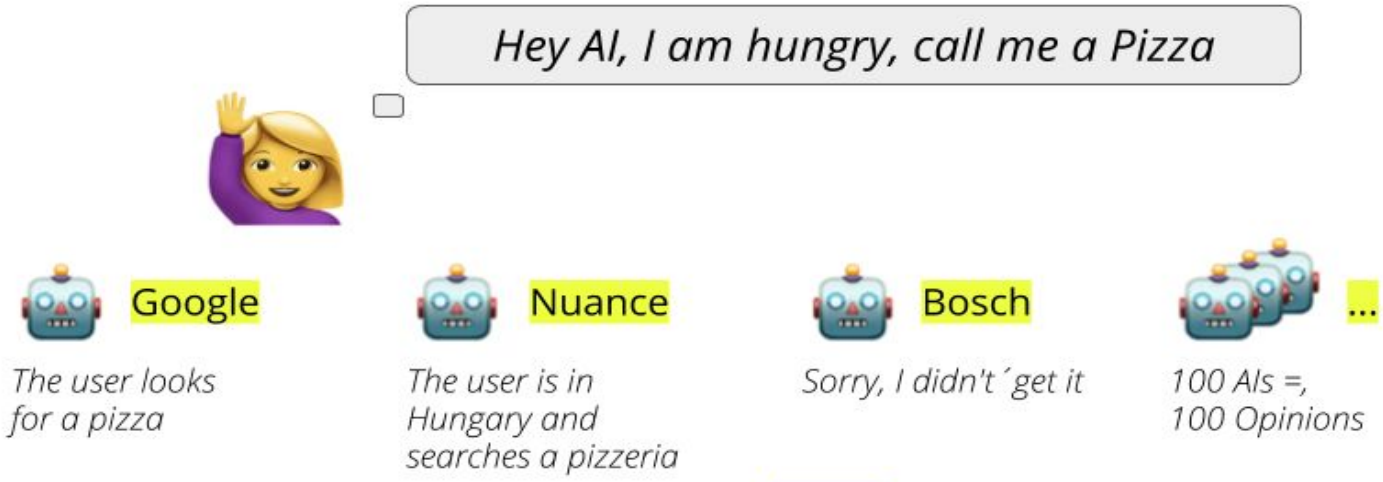
85% of all consumer touchpoints

will be operated by AIs by 2022

Gartner

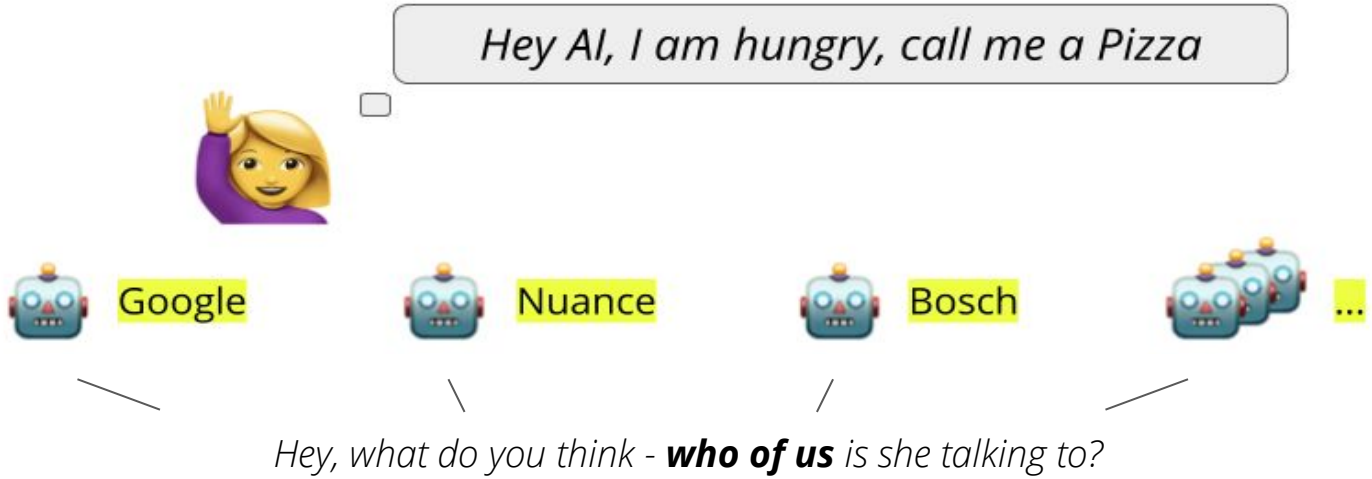
Opportunity: Voice Internet becomes a $ 55bn market in <5 years

But: AI is biased. And: Every AIs has a different bias



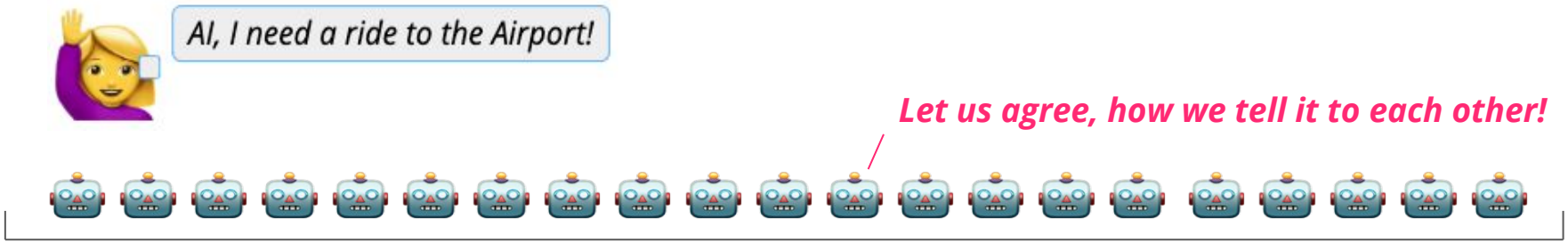
Problem 1: Every NLP understands language slightly different

...and how will different AIs communicate about 1 intent?



Problem 2: Concurring data about user voice inputs

Dreaming of: A unified language for AI



Solution: The Esperanto of AI - a shared language across NLPs

And we could also use some privacy!

Bloomberg

Amazon´s "Always on" patent: The future will be recorded, on your smartspeaker

REUTERS

Germany planning to access voice assistant data to tackle crime

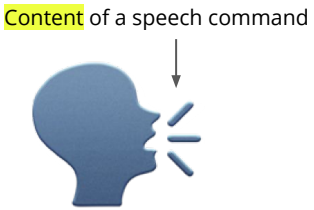
TC

41% of voice assistant users have concerns about trust and privacy, report finds

Must have: Protection of biometric information

And in the end...

...it's all about **intent!**

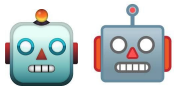


~~How do you say it = Individual syntax, slang, vocabulary~~

Why do you say it = Requested result

To do: Reduce complexity!

AI, I need a ride to the Airport!

	Consumer Touchpoint	Intent Recognition	Service Fulfillment
Value Creation	Hardware Platforms	AIs / NLPs	E-Commerce
Player	 BMW Miele Innogy	 Amazon Nuance Jovo	foodora airbnb CAR 2GO MyTaxi Foodora AirBnB

Current siloed ecosystems disappoint

AI, I need a ride to the Airport!

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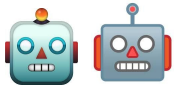
Player	 BMW Miele Innogy	 Amazon Nuance Jovo	foodora, CAR2GO, airbnb — MyTaxi Foodora AirBnB

Who controls which part of the value creation chain?

"GAFA" Blackboxes

Alexa integrations in Miele devices
= Miele gives up touchpoint, but integrates best catalog

+ Best voice catalog UX
- OEMs depend on GAFA

"3rd AI" Customization

Houndify integrations in Mercedes cars
= Mercedes builds into a 3rd party voice ecosystem

+ OEMs control voice service catalog
- Expensive customized integrations in 3rd party AI

"Low-Level" Integration

Jovo as low level voice e-commerce API
= Online shops integrate across different voice AIs

+ Cheap
- Low-level voice business cases

whoelse.ai simplifies NLP APIs

AI, I need a ride to the Airport!

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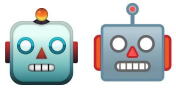
Player	 BMW Miele Innogy	 Amazon Nuance Jovo	foodora CAR2GO airbnb MyTaxi Foodora AirBnB

WHOELSE? Taxi who else?

Universal Grammar for NLPs

DIN

NLP Interoperability Standard

A simplified protocol to encode intent

Mindmeld

Rasa

Fraunhofer

Houndify

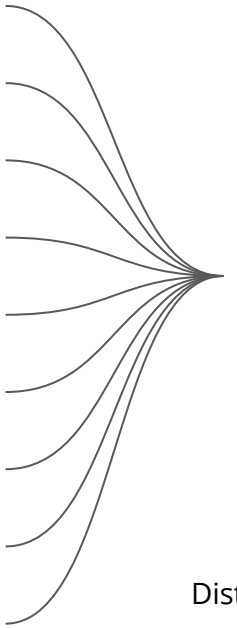
Watson

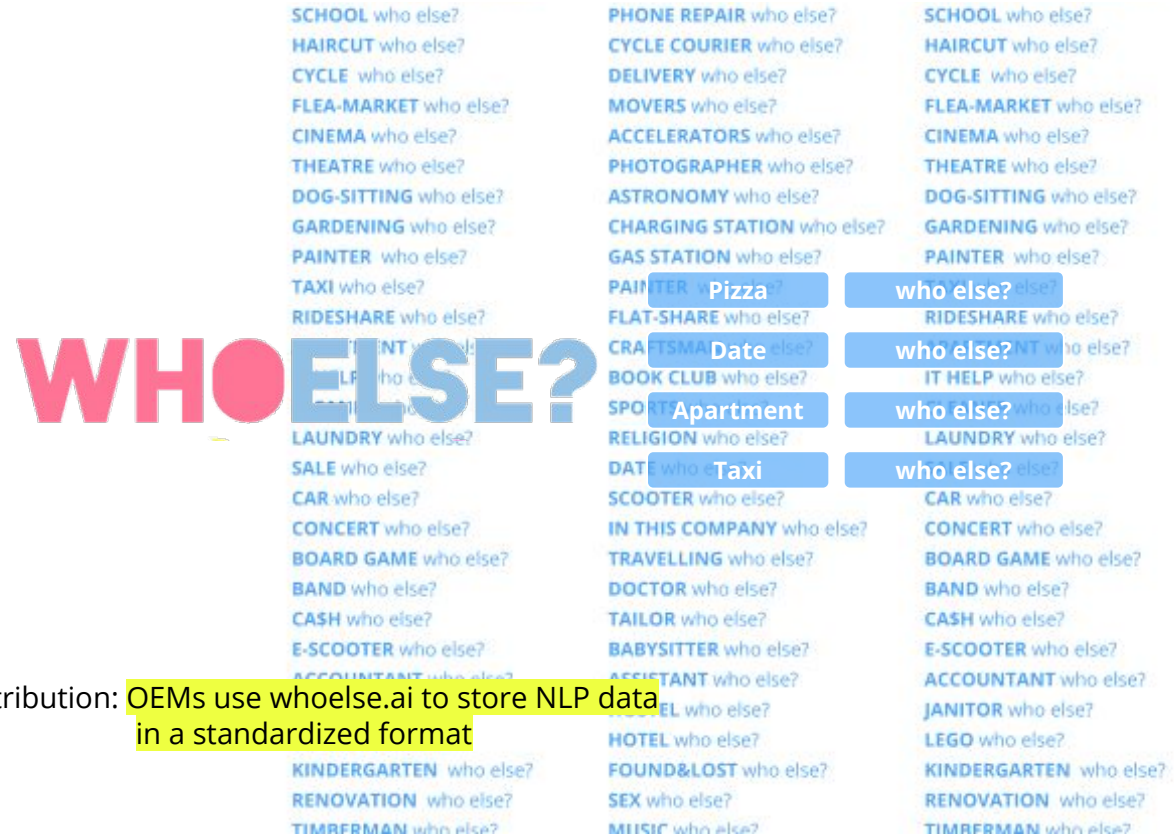
Mycroft

Omnibot

Houndify

Bosch





Distribution: OEMs use whoelse.ai to store NLP data in a standardized format

Examples

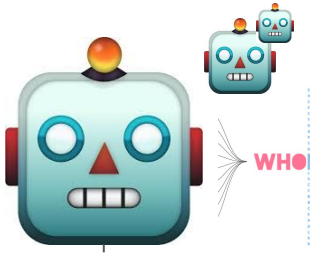
Unified grammar between human & machine intelligence

Natural Language Input

Hey Al, um.., I need a ride to the Airport.

For me and my friend.

We need to be there at 16:45. Can you do that?



Language Catalog

Intent Encoding

Protocol Convention

Metadata

Cab (or) Driver	in 20 Minutes	Tegel Airport	2 People	who else?

WHOELSE?

Our APIs enable NLPs to store natural language in a standardized format

LANGUAGE API NLPs request universal grammar to store intents in a standardized format

MARKETPLACE API OEMs can trade intents received by NLP integrations

Solution: Standardized protocol for intents

Hardware → DIN Standard → Intent Catalog → Services

Pizza	who else?
Date	who else?
Apartment	who else?
Taxi	who else?

IN THIS STREET who else?
IN THIS HOUSE who else?
IN THIS CITY who else?
FOOD-SHARING who else?
EVENT who else?
JOB XYZ who else?
STARTUP who else?
UNIVERSITY who else?
PHONE REPAIR who else?
CYCLE COURIER who else?
FLAT-SHARE who else?
CRAFTSMAN who else?
BOOK CLUB who else?
SPORTS who else?
RELIGION who else?
DATE who else?
SEX who else?
MUSIC who else?
SCOOTER who else?
IN THIS COMPANY who else?

Sixt · DHL · wework · OpenTable · Car2Go · eventim · indeed · ParkNow · UBER · YACHTICO · skyscanner

Voice Interface | File Format | Matching | Execution

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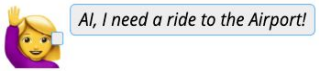
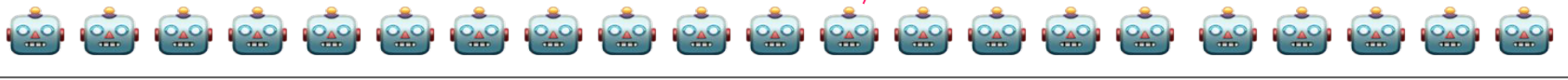
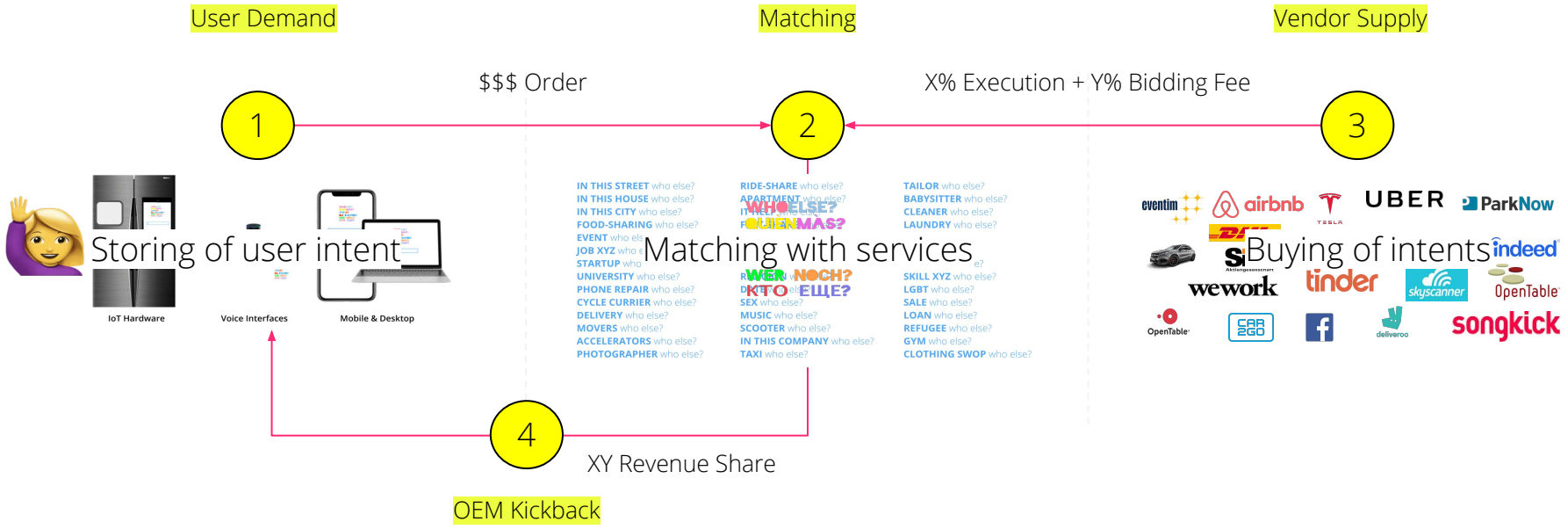
Dream: fulfilled 😎



Let us agree, how we tell it to each other!

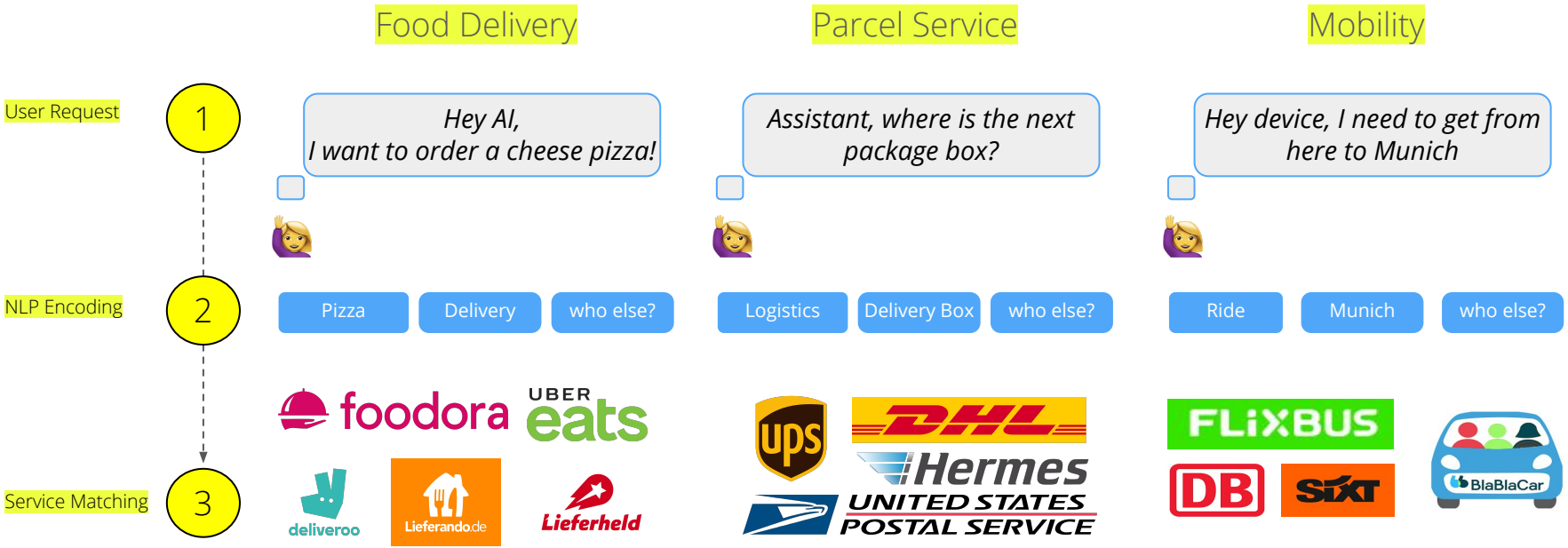


Monetization: Real-time marketplace for user intents



Affiliate model: IoT OEMs integrate the namespace catalog and earn a commission with every voice order placed

Business model: Services bid on verbally requested intents

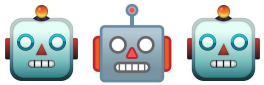


Voice Internet UX: Language is an invisible user interface.
Simple questions become requests for services.

OEM advantage: Retrofitting of hardware with voice UIs

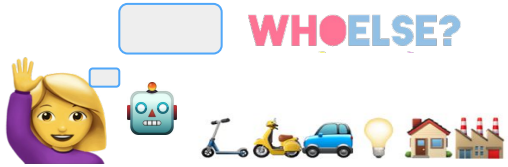
1 Selection of interfaces

Cars
Real Estate
Appliances
Shared Mobility
Logistics
Charging Stations
Logistics
Electricity
Car sharing
..



2 Selection of voice AIs

Energy Efficiency
Multimedia Services
Industry Applications
Model Adaptability
IoT Applications
..
Fraunhofer
Houndify
Bosch
Rasa
McCroft

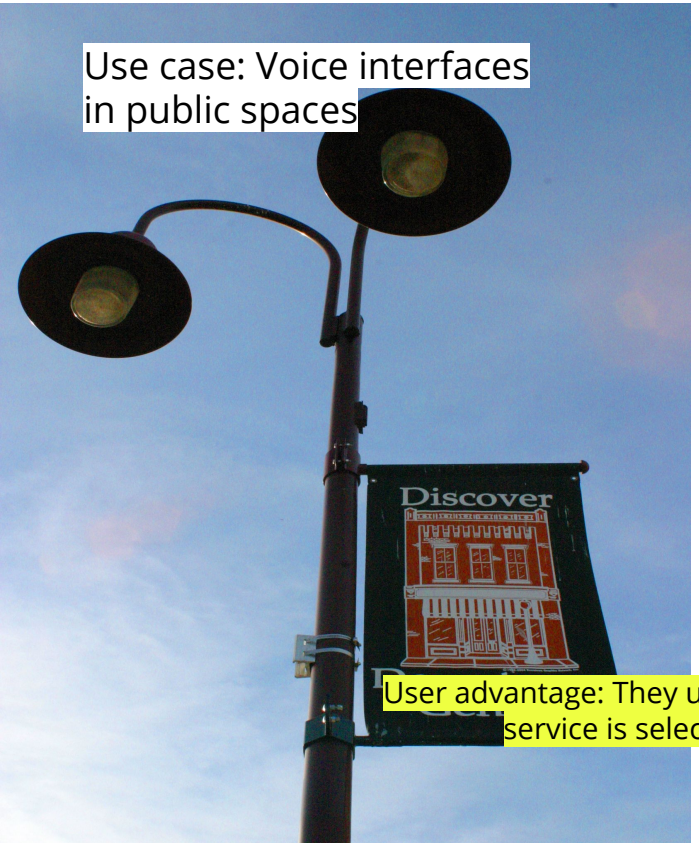


3 Integration in intent catalog

IN THIS STREET who else?
IN THIS HOUSE who else?
IN THIS CITY who else?
FOOD-SHARING who else?
EVENT who else?
JOB XYZ who else?
STARTUP who else?
FLAT-SHARE who else?
CRAFTSMAN who else?
BOOK CLUB who else?
SPORTS who else?
RELIGION who else?
DATE who else?
SEX who else?

Vision: Every hardware becomes a voice interface - every first consumer contact will be a bot

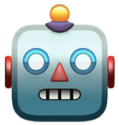
Consumer product: Voice Internet companion app



Hey lamppost, I need a parking ticket for the campus

Parking Ticket | who else?

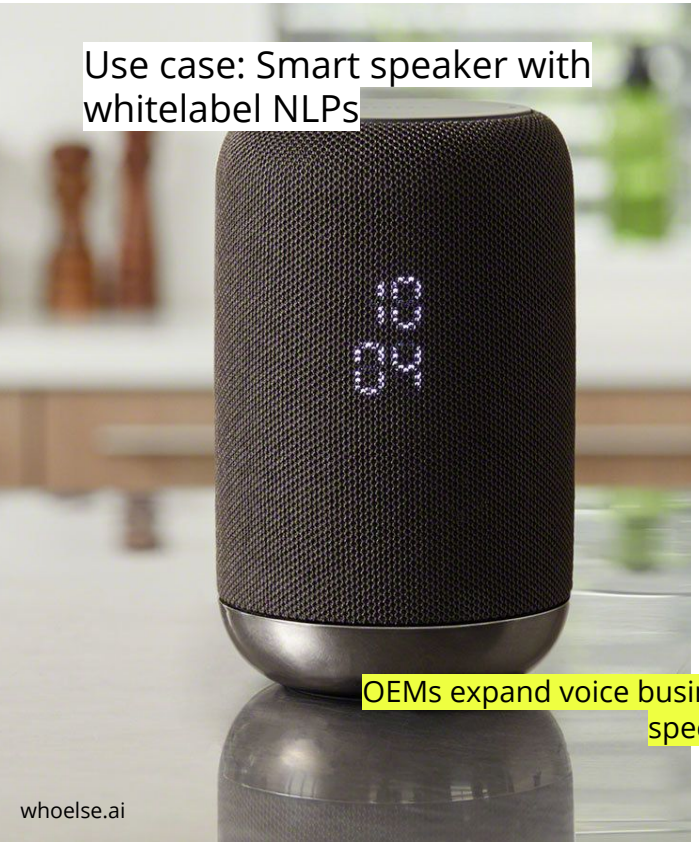
Open your who else? app to pay



- Voice profiles: Sign-in with your biometric fingerprint
- User accounts: Payment data for voice activated services

User advantage: They understand (i) how the AI processes a verbal request, (ii) why a service is selected, and (iii) how voice-based information are stored

OEM advantage: Access to marketplace applications

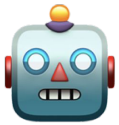


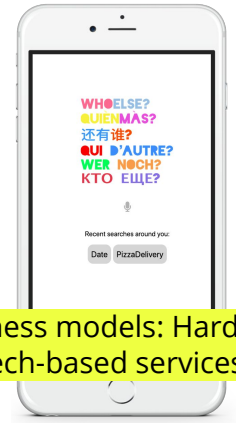
Hey speaker, I want to book a flight to Paris

Domestic Flight

who else?

We will send you matching offers to your phone in 30 minutes





Order book: Users can manage voice search requests

Preference management: Users assign preferences for voice requests

OEMs expand voice business models: Hardware manufacturers can integrate additional speech-based services and use localized NLPs

Market entry: B2B partnerships as growth driver

Partnerships with NLPs & OEMs → Generation of userbase → Launch as B2C product

Standards Organizations

DIN

IEEE Advancing Technology for Humanity

NLP API Interoperability Standard

OEM Partnerships

Smart Cities	Smart Home	Digital Governments
Connected Mobility	Conversational Commerce	Realtime Logistics
Intelligent Grids	Human Robotics	Whitelabel Hardware

Examples

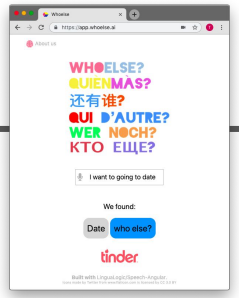
OEMs can integrate 3rd party voice interfaces

Smartspeaker integrations
Voice interfaces in public transport
Wearables with speech features
Car infotainment & conversational Intelligence
Smart fridges, coffee machines, ..

Growth Loop

- What if *"who else?"* questions are really better remembered by our users?
- *"who else?"* could be the last question a user ever needs to know,
- Does this device listen to *"who else?"* questions - let's try!

Traction: AAA+ Partners, POCs, & Media/Industry Attention



Sep-Dec 2018

Prototype

25+ services integrated

http://app.whoelse.ai

DIN

Jan 2019

DIN Commission

Standards committee

http://din.whoelse.ai

DOTZON

.berlin
.hamburg
.vw

Feb/Mar 2019

Angel Supporter

TLD entrepreneurs

http://dotzon.com

O'REILLY®

October 2019

O´Reilly AI Europe

Go live with protocol

https://oreil.ly/2wUw92S

2020

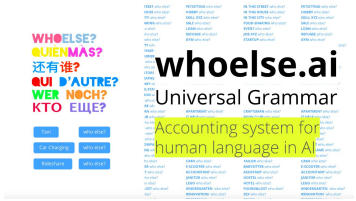
.whoelse TLD

Setup of infrastructure for independent Voice Internet address namespace

OEM Partnerships

Integration of .whoelse in whitelabel hardware products and as open source protocol

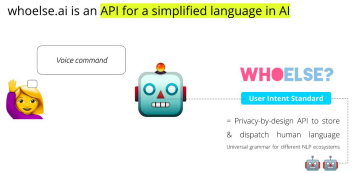
Backups: Learn more about whoelse.ai



Voice Internet White Paper

http://whitepaper.whoelse.ai

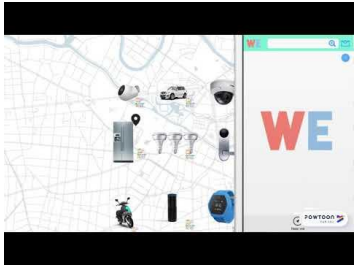
Why does conversational AI change online marketing?



DIN / IEEE Standards Use Cases

http://cases.whoelse.ai

How can different NLPs be combined into a single AI ecosystem?



whoelse.ai Intro Video

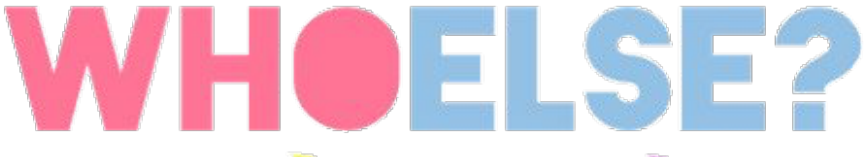
http://demo.whoelse.ai

What do we do at whoelse.ai?

Background & Demos

http://din.whoelse.ai	DIN Gremium
http://app.whoelse.ai	Demo App
http://one.whoelse.ai	1 Pager
http://elevator.whoelse.ai	Pitch Video

Meet us at O´Reilly AI Europe 15-16 October 2019
https://oreil.ly/2wUw92S



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