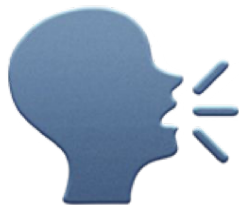


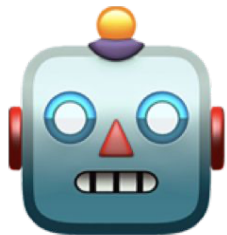
New normal: People talk to machines



Voice becomes UI #1

words replace buttons & keys

O'Reilly



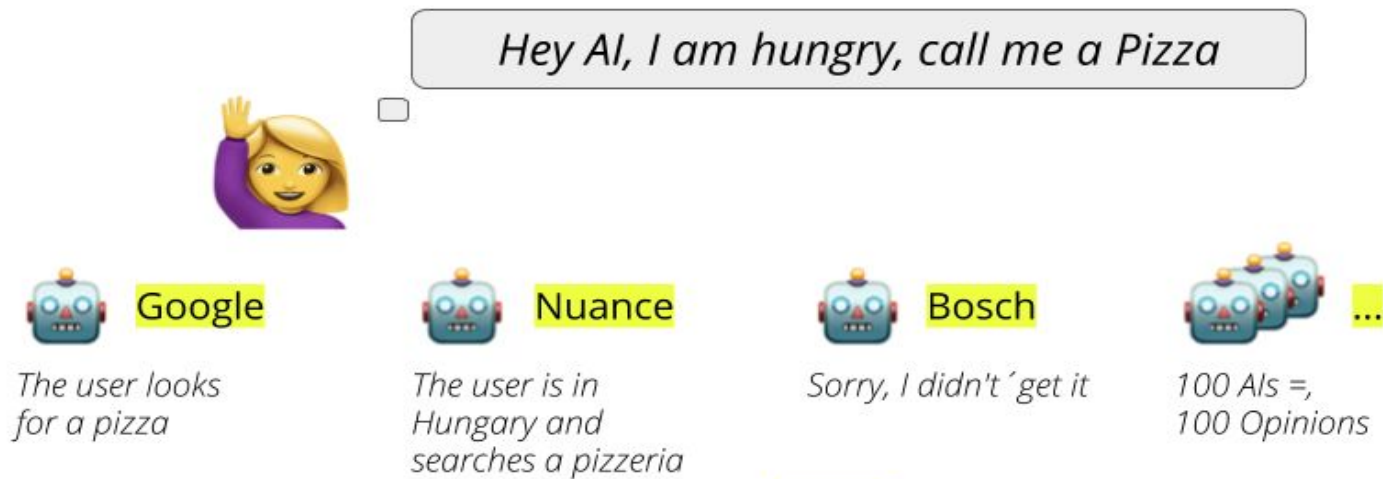
85% of all consumer touchpoints

will be operated by AIs by 2022

Gartner

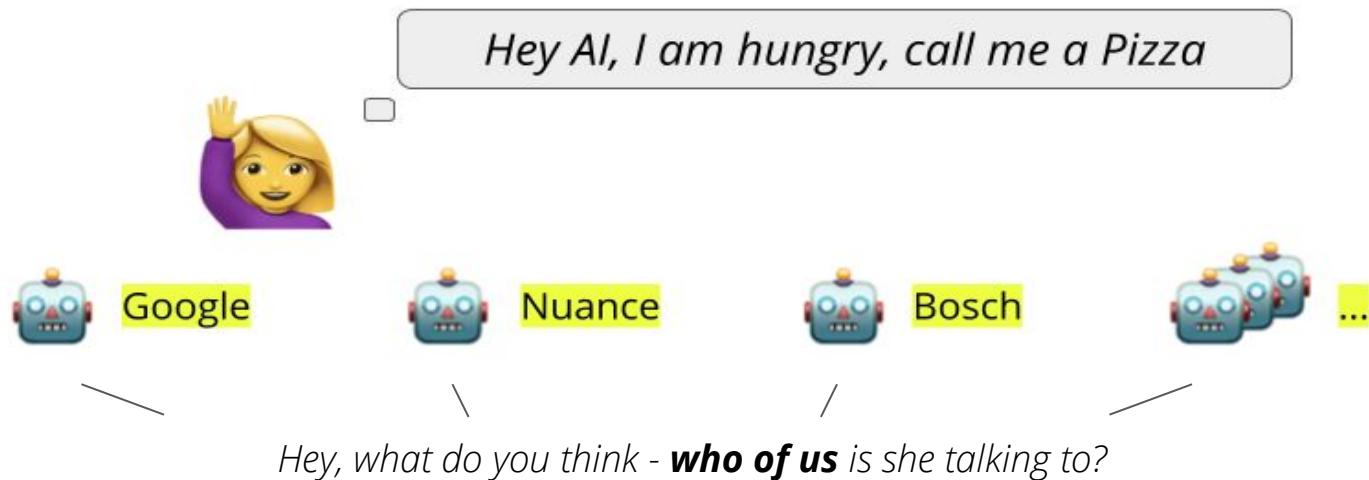
Opportunity: Voice Internet becomes a \$ 55bn market in <5 years

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



AI, I need a ride to the Airport!

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



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



Germany planning to access voice assistant data to tackle crime



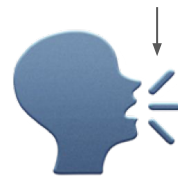
41% of voice assistant users have concerns about trust and privacy, report finds

Must have: **Protection of biometric information**

And in the end...

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

Content of a speech command



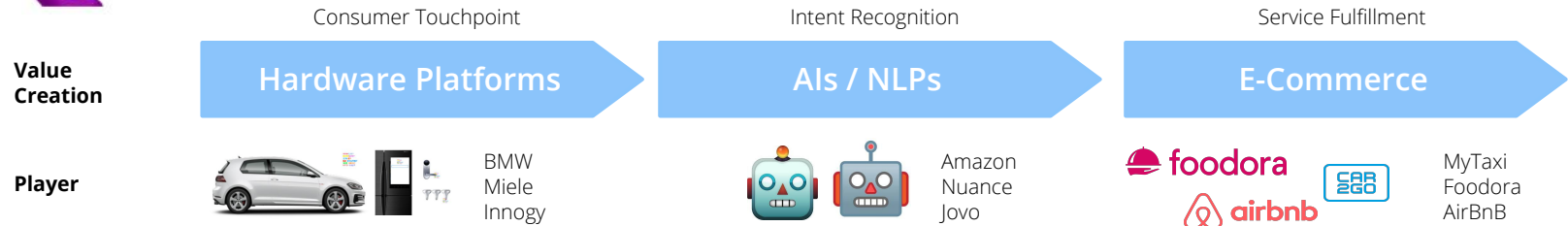
~~How do you say it = Individual syntax, slang, vocabulary~~

Why do you say it = Requested result

To do: Reduce complexity!



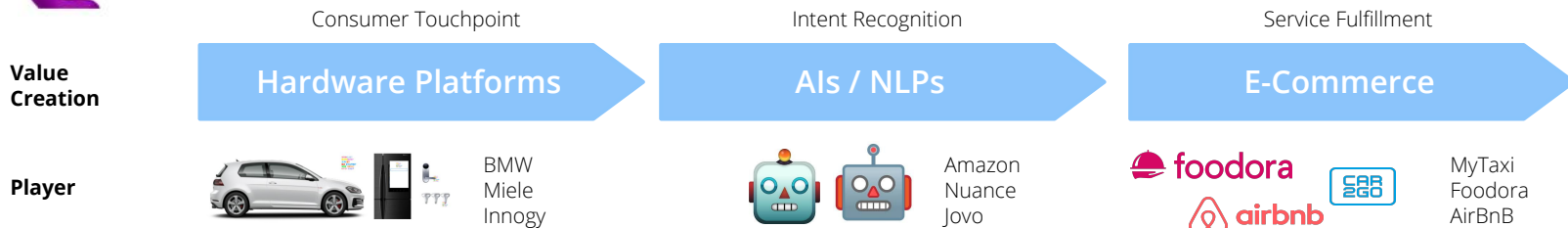
AI, I need a ride to the Airport!



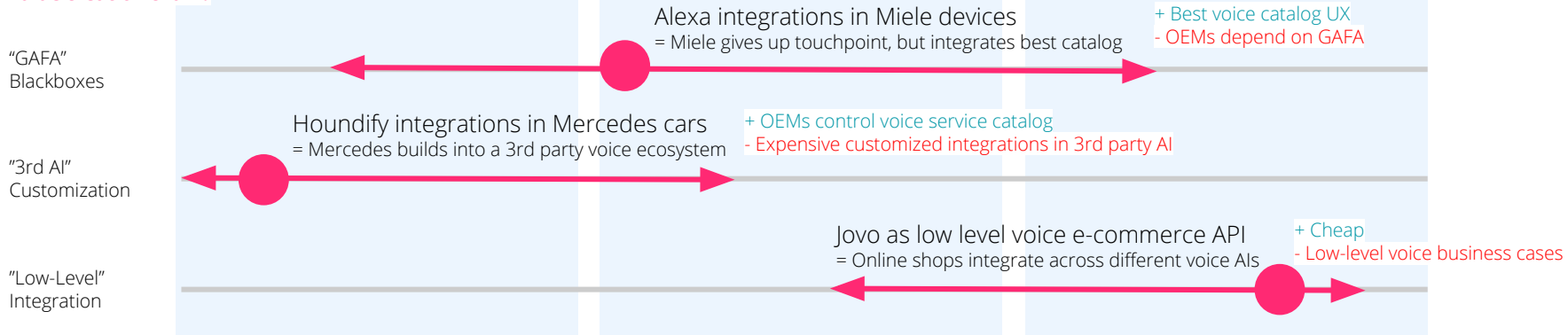
Current siloed ecosystems disappoint



AI, I need a ride to the Airport!



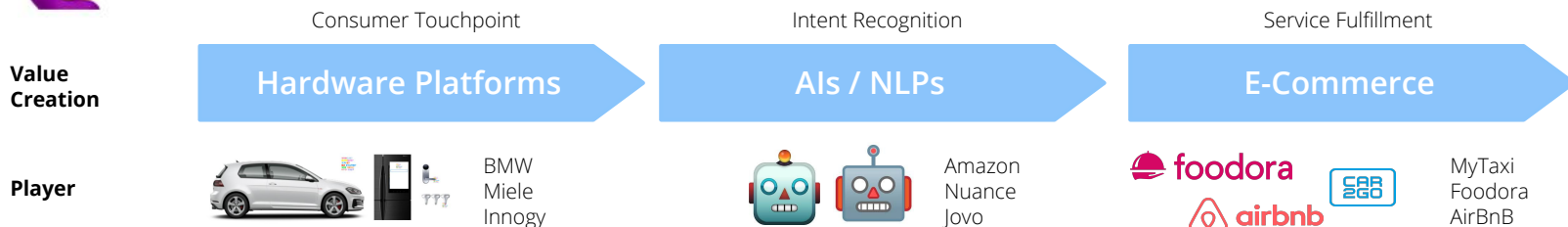
Who controls which part of the value creation chain?



whoelse.ai simplifies NLP APIs



AI, I need a ride to the Airport!



WHOELSE? Taxi
who else?

Universal Grammar for NLPs

DIN

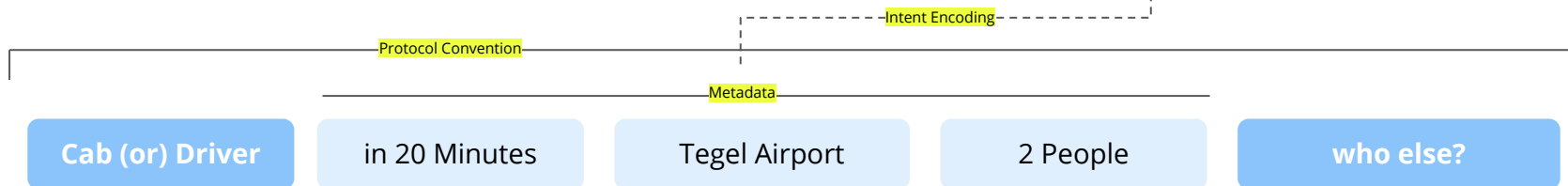
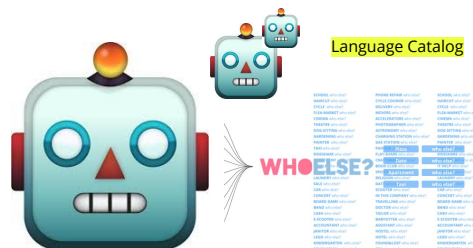
NLP Interoperability Standard

Unified grammar between human & machine intelligence



Natural Language Input

Hey AI, 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?



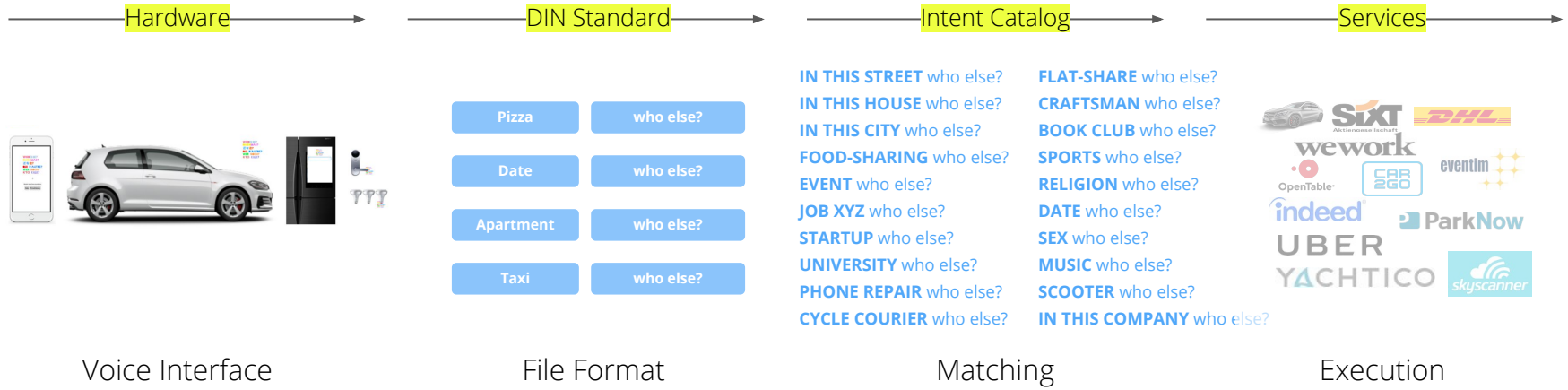
WHOELSE?

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



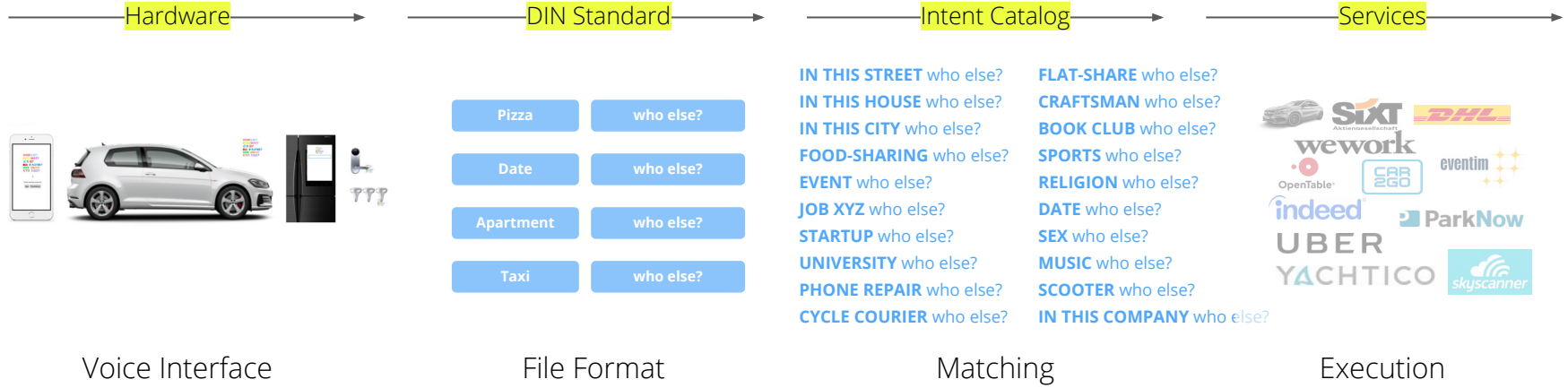
Voice Interface

File Format

Matching

Execution

Solution: Standardized protocol for intents

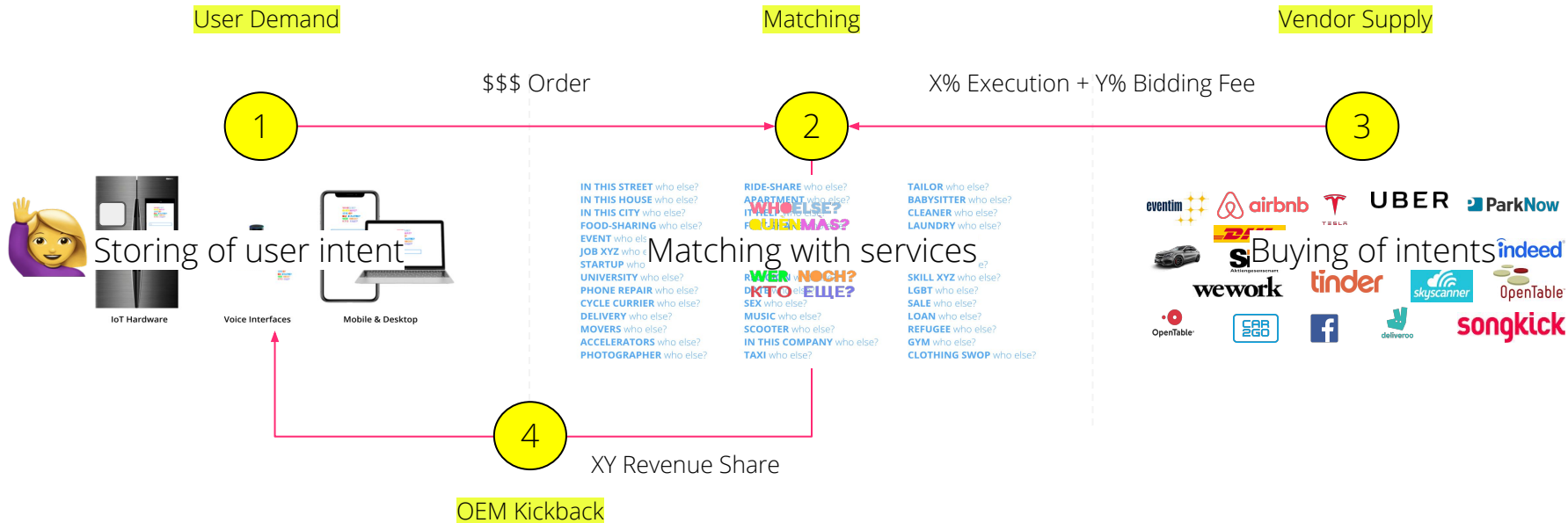


Dream: fulfilled 😎

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

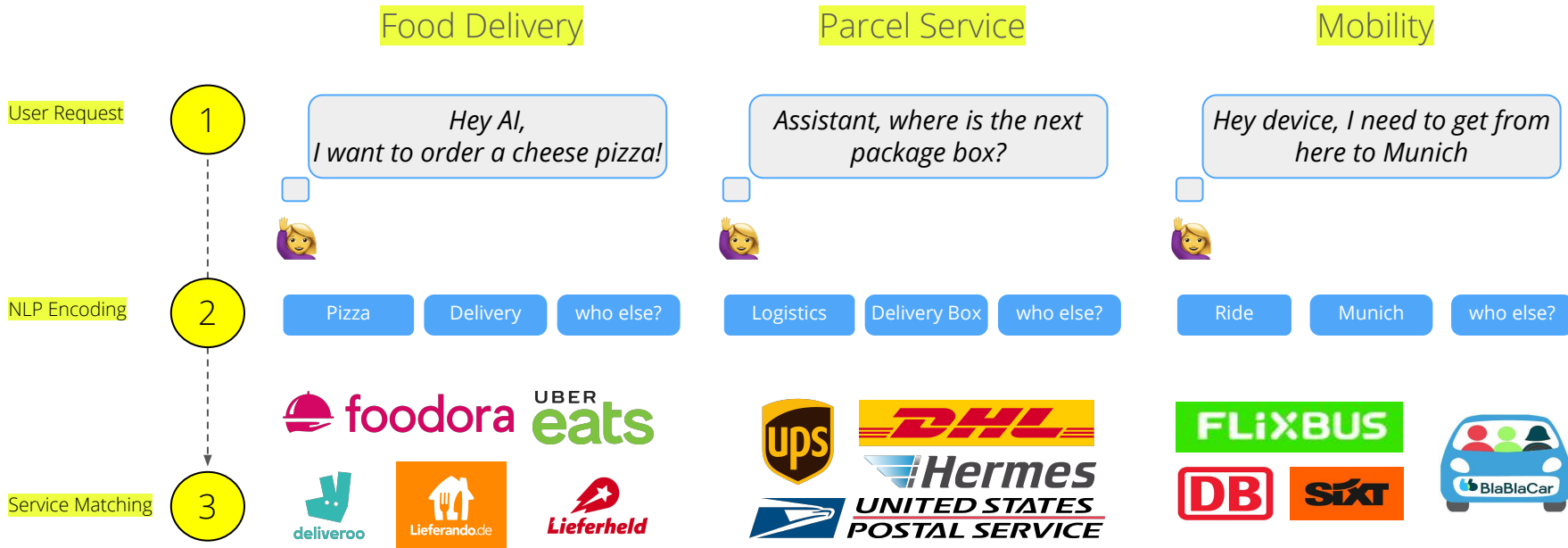
AI, I need a ride to the Airport!

Monetization: Real-time marketplace for user intents



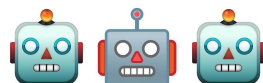
Affiliate model: IoT OEMs integrate the namespace catalog and earn a commission with every voice order placed

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

Use case: Voice interfaces in public spaces

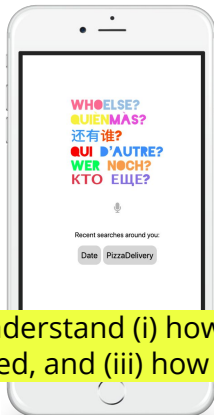
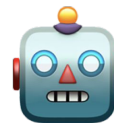


Hey lamppost, I need a parking ticket for the campus

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

Use case: Smart speaker with whitelabel NLPs

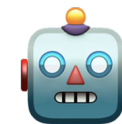


Hey speaker, I want to book a flight to Paris

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