

QNAP



*Keep in touch, wherever you are.*

# AfoBot

Video Companion Robot



AfoBot

# AfoBot Video companion robot



Smart video companion

Click-n-Home

Auto answer  
Face tracking

4-peer video call  
Call recording

F2.0 Aperture for  
dim environment

Voice assistant

Alarm

Weather

Take photo

Shared cloud album



Multimedia by Voice control

Music

Broadcast

Video



# Application



AfoBot



Mobile / Tablet



# 1. Companion



## AfoBot

### Video Companion Robot





# Want to connect with family but...

Phone / Cam

Weak

Disturbs family

Feels like being observed



AfoBot

Win

Click-n-home

Remote rotation control

5MP Cam (>1080P) + Dim vision mode





# When making calls with aging parents...

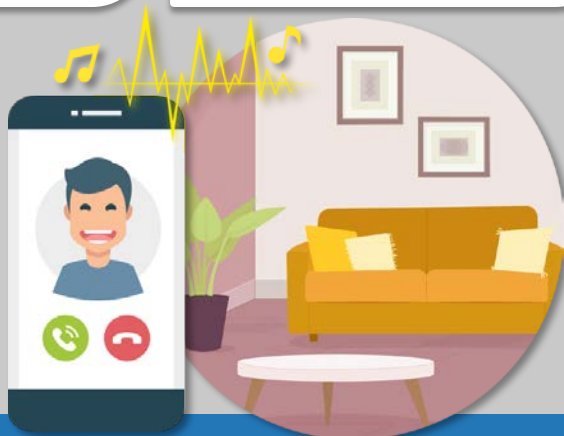
Phone / Tablet

Weak

Not carried when at home

Nobody  
answers

Don't know how to  
answer



AfoBot

Win

Auto answer

Video call

Face Tracking

Voice dial to phone app





# Wants to call kids at home

Phone / Tablet

Weak

Need to hold the phone

Device cost

Device lost



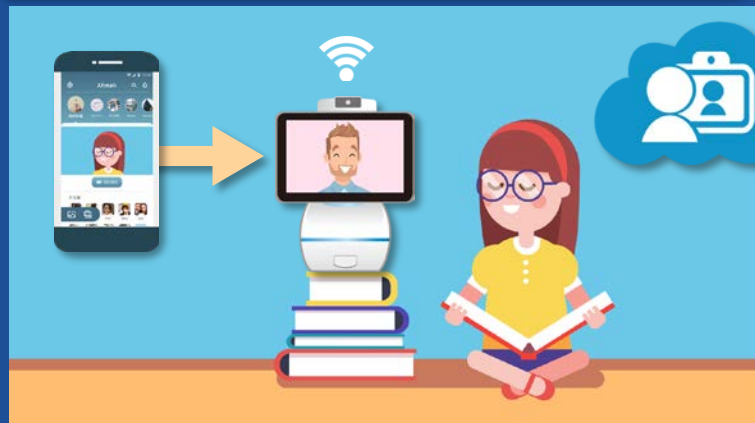
AfoBot

Win

Auto answer

Face tracking

Always connected





# When busy cooking but need help...

Phone / Tablet

Weak

Limited angles

Greasy hands

Both hands are busy



AfoBot

Win

Voice dial

Face Tracking

Audible guidance for recipes

Audible alarms (timer...)







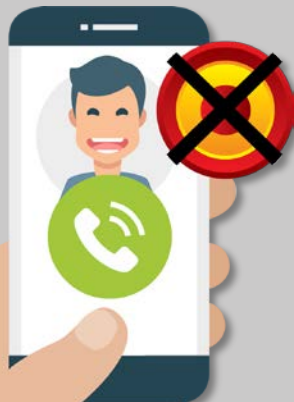
# Record events to be remembered...

Phone / Tablet

Weak

Can not record

Screen size is limited.



REC

AfoBot

Win

Group video call (max. 4)

Can record





## 2. Voice assistant



AfoBot  
Video Companion Robot



# The evolution phases of UX

1



2



3



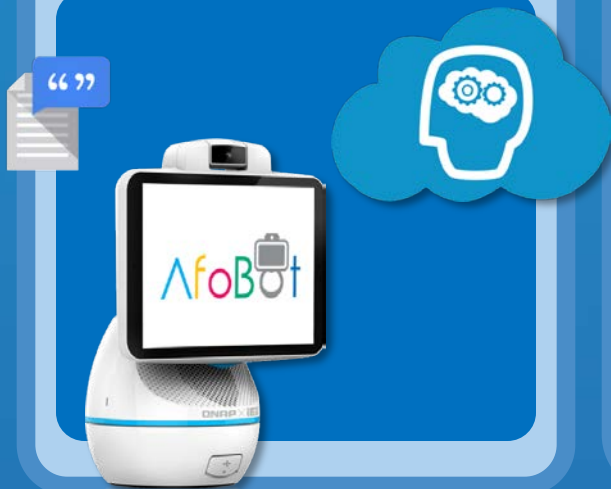
# Key factor of voice interface

## Natural Language Processing

### Natural Language Understanding

**Play**  
Just The Way  
You Are

### Natural Language Integration



### Natural Language Generation

Deep learning / Grammar / Intents /  
Domain knowledge



# Manage things with voice @home

Phone / Tablet

Weak

Phone is for single person

It is designed mainly for touch.



AfoBot

Win

For 1 or family members

Ask for weather

Voice to set alarm





# Manage things with voice @home

Phone / Tablet

Weak

Limited angle

Limited size of screen

Limited range



AfoBot

Win

Take picture with voice

Cloud album (10GB)

Digital photo frame





## 3. Multimedia by Voice control



**AfoBot**  
**Video Companion Robot**

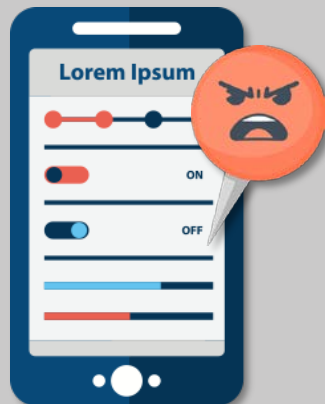
# Play what you asked for

Phone / Tablet

Weak

Inflexible

More steps needed



AfoBot

Win

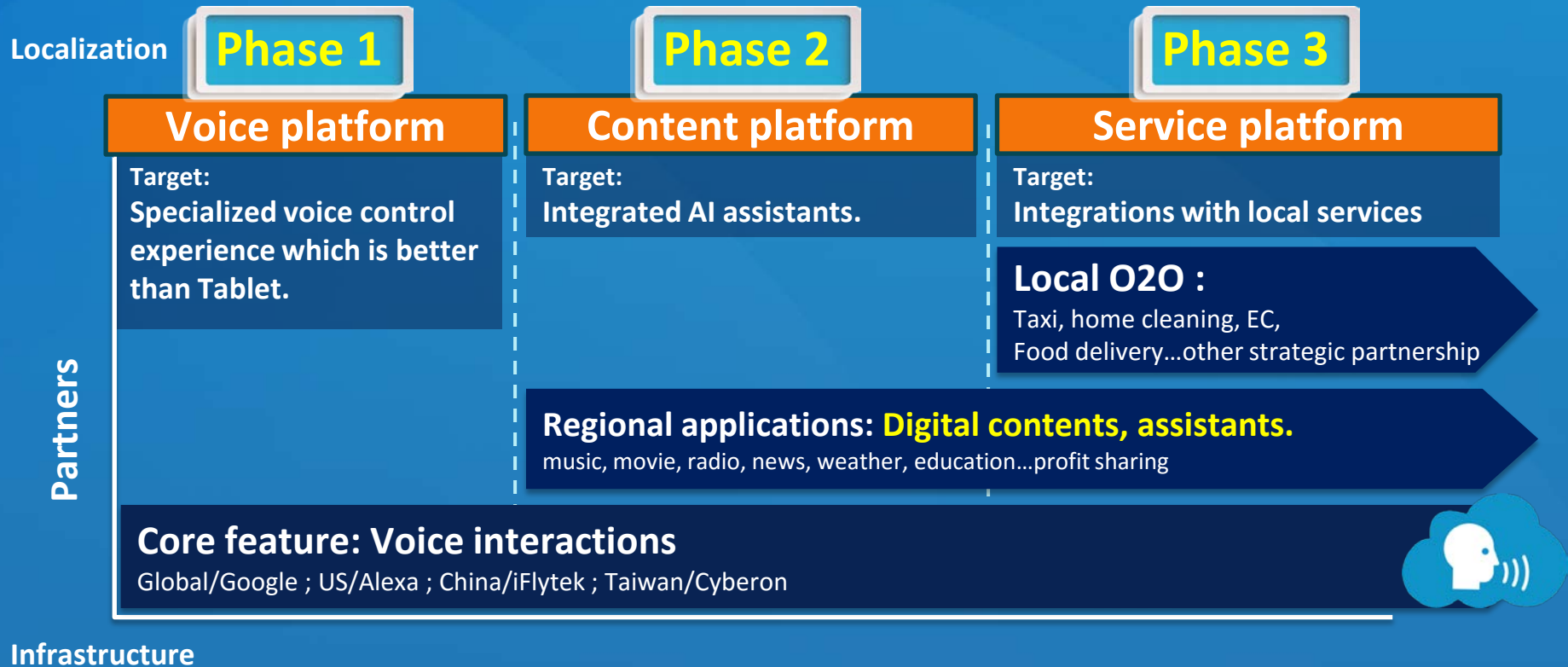
NLP, Flexible

1 step play

5W speaker



# Development phases of AfoBot





Major features

AfoBot  
Video Companion Robot



# 8 major strengths



**Click-n-home**

**Remote camera control**

**Auto answer**

**Face tracking**

**Group video call and recording**

**Shared cloud album (10GB)**

**Personal voice assistant.  
(Weather, alarm)**

**Search and play multimedia with  
voice interactions**



HW Spec

# AfoBot

Video Companion Robot

# Hardware design





Use cases

# AfoBot

Video Companion Robot

# AfoBot use cases (B2C)

Customizable hardware and software for different industries and demands

AfoBot will provide SDK for Android developer, content maker, and service providers for developing their own applications. And provide value-add applications in retail, health care and kindergarten.



## Why AfoBot?

Companion

Video calls

Voice assistant

Education

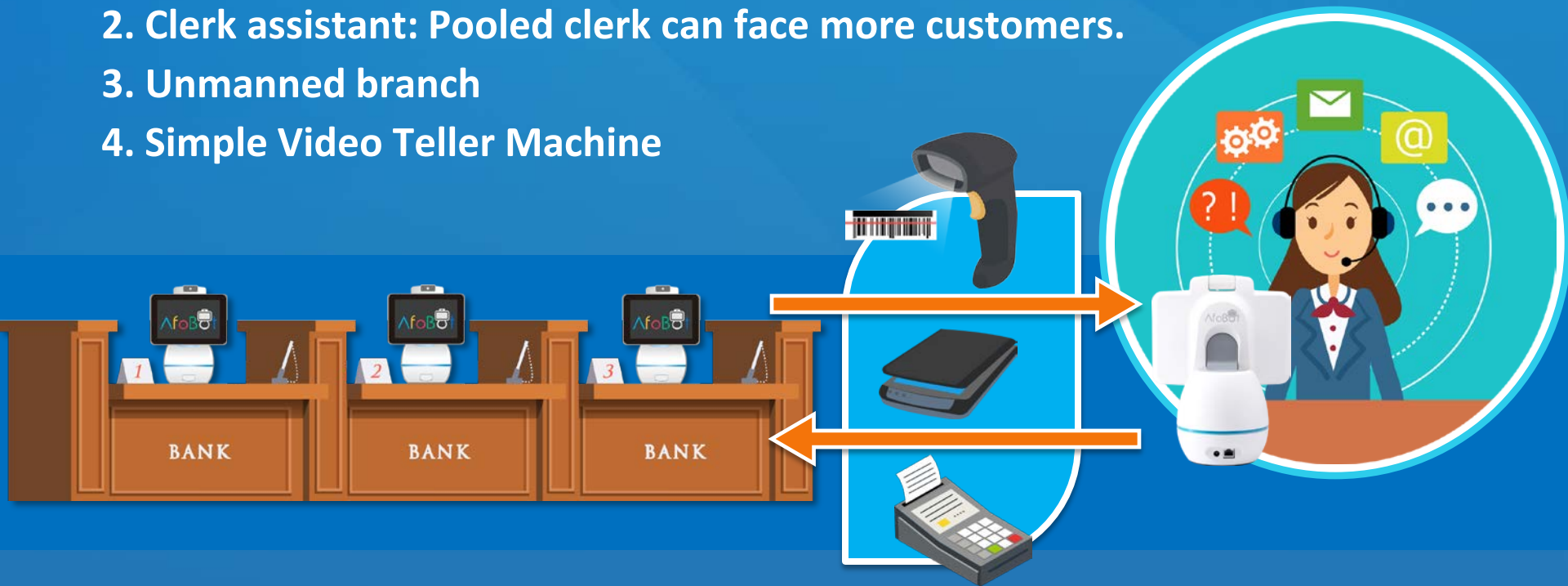
Health care

Surveillance



# AfoBot @ Bank

1. Video customer service
2. Clerk assistant: Pooled clerk can face more customers.
3. Unmanned branch
4. Simple Video Teller Machine



# AfoBot @ Hotel



1. Self check in
2. Remote housekeeper
3. Points of interests.
4. Room services and remote control
5. Video conference, real-time interpretation services.

# AfoBot @ Health Care



- Doctors can access to multiple sites at same time.
- Instructions can be conveyed even when doctors are away from hospital.
- Patients can be visited remotely.
- Voice trigger for emergency help. Can be an addition option.



# AfoBot @ Retail



- A new channel to engage with customers.
- New customer support method
- As a catalogue which provides more interactions.
- Provide tailored advertisement and recommendations based on age or gender.



# AfoBot @Kindergarten



- Video feeds of the kindergarten can be accessed by parents.
- Kids can also dial to parents when they like to.
- Player of supplemental materials.







Looking for partners

AfoBot  
Video Companion Robot

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Thank you!!

