CISCO

You make **possible**

An open architecture for modern Contact Centers

cisco *Live!*

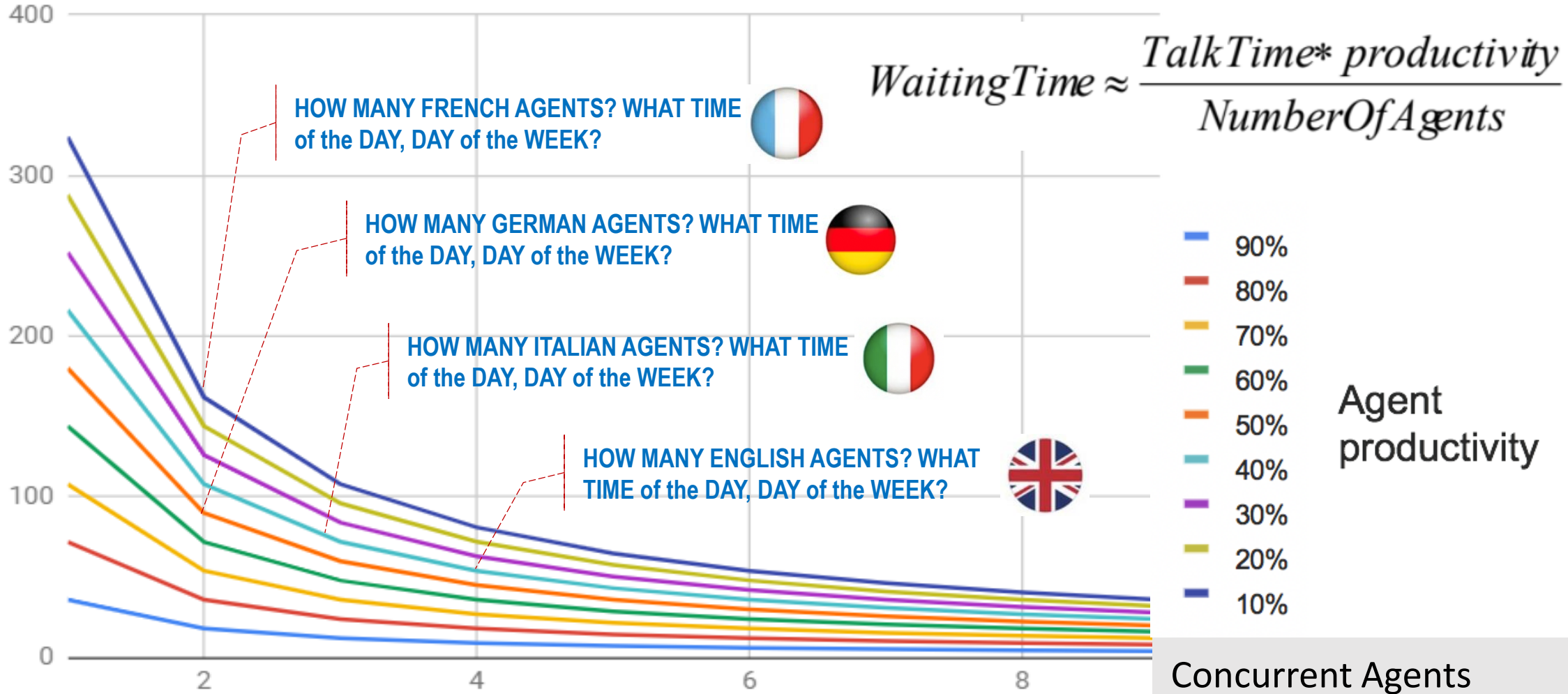# Contact Center architecture for automation of complex Business processes
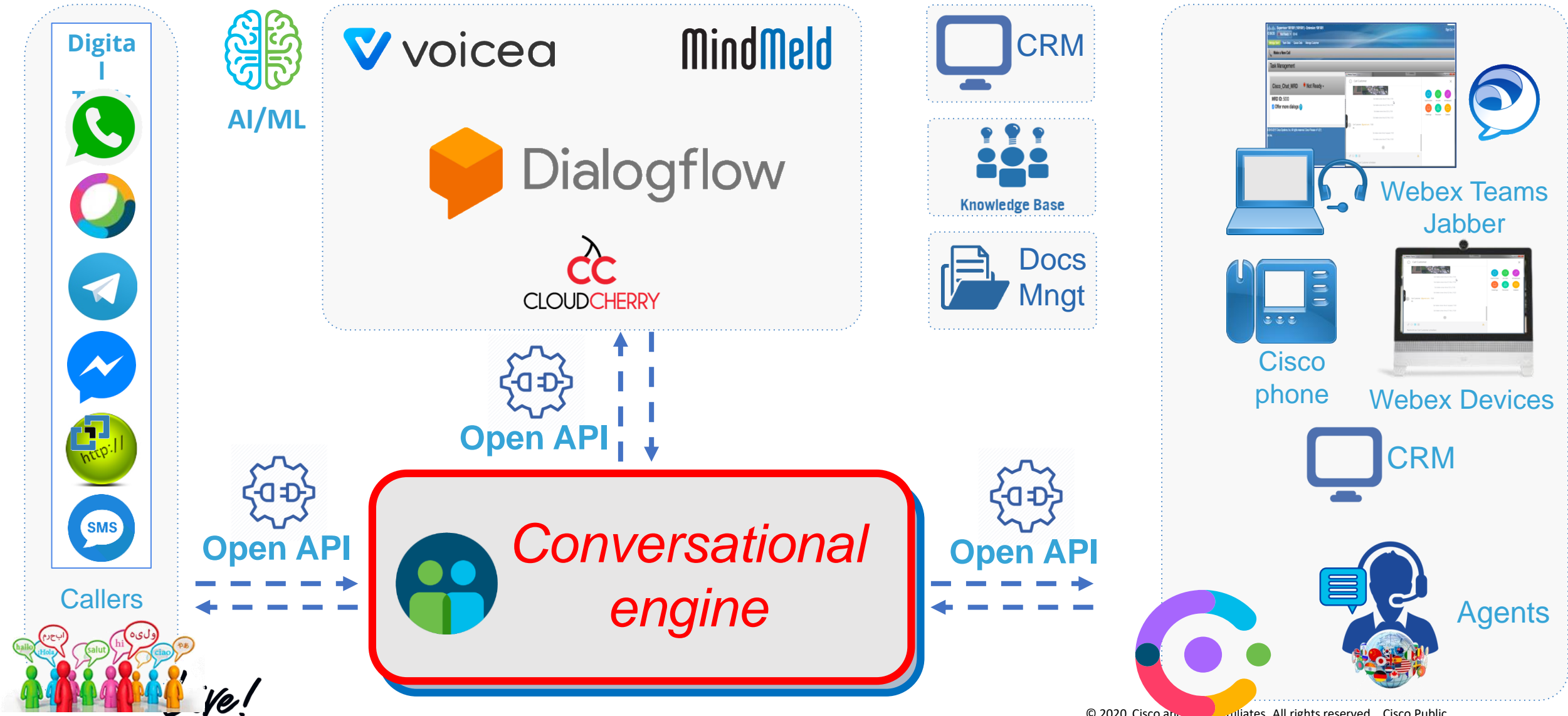
Agent Assistance Services:
Chat translation service

cisco *Live!*

Welcome to the WORLD… of GLOBAL business!

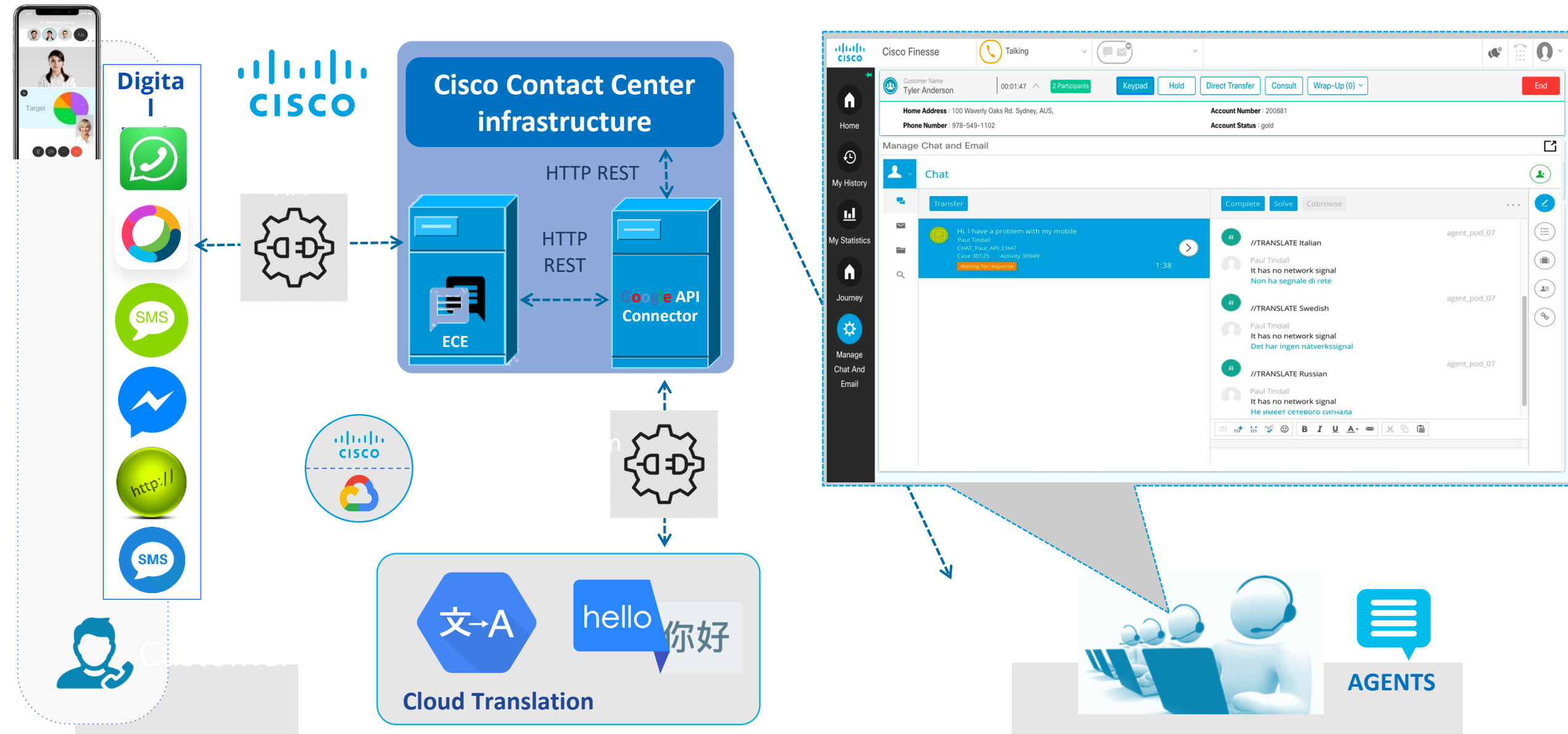# WFO in a Digital International Contact Center: the Erlang C nightmare!

Waiting Time (sec)

$$WaitingTime \approx \frac{TalkTime * productivity}{NumberOfAgents}$$

HOW MANY FRENCH AGENTS? WHAT TIME of the DAY, DAY of the WEEK?

HOW MANY GERMAN AGENTS? WHAT TIME of the DAY, DAY of the WEEK?

HOW MANY ITALIAN AGENTS? WHAT TIME of the DAY, DAY of the WEEK?

HOW MANY ENGLISH AGENTS? WHAT TIME of the DAY, DAY of the WEEK?

Agent productivity

- 90%
- 80%
- 70%
- 60%
- 50%
- 40%
- 30%
- 20%
- 10%

Concurrent Agents

Chat Translation assistance architecture

Agent Assistance Services:
Voice Translation
Trascription service

CISCO *Live!*

Voice Transcription&Translation assistance architecture

Cisco Contact Center infrastructure

HTTP REST

Google API Connector

CISCO

ORIGINAL AUDIO

TRANSCRIBED TRANSLATED Text

Speech To Text

Cloud Translation

hello

hello 你好

文→A

CUBE

Cisco Finesse — Ready 00:00:00

Transcriber

Italian | English

10:55 Buongiorno il mio nome è Max. | 10:55 Hi, my name is Max.

10:55 Io non parlo inglese. | 10:55 I do not speak English.

10:55 Ho bisogno di supporto tecnico per un prodotto che ho acquistato la scorsa settimana si tratta di uno smartphone che ha dei problemi. | 10:55 I need technical support for a product that I purchased last week, it's a smartphone that has problems.

10:55 Aggiornando il firmware. | 10:55 Updating the firmware.

Vorrei parlare con un tecnico per decidere cosa fare potete richiamarmi al mio cellulare. Il numero è 328 79 56 328. Ti ringrazio, buona giornata. … | I would like to talk to a technician to decide what to do. You can call me back to my cell phone. The number is 328 79 56 328. Thank you, have a nice day. …

Transcript | Stats | History | Mobile | Chat And Email | Solve | Cobrowse | Tasks

AGENTS

Vision:
Live Audio
Translation services

Voice Translation echoing architecture

ORIGINAL AUDIO

TRANSLATED AUDIO

Speech To Text

Cloud Translation

Text to Speech

Google API Connector

HTTP REST

Cisco Customer Care infrastructure

Google Cloud
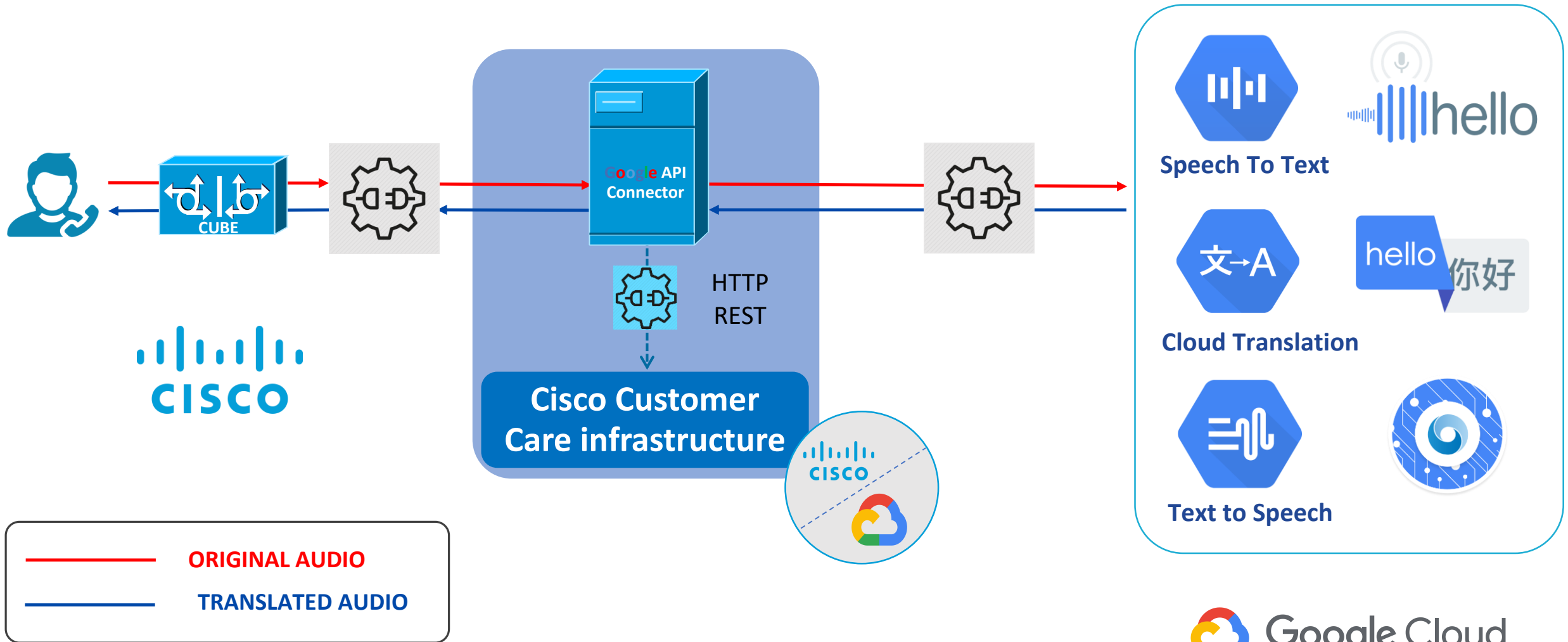
Agent Assistance Services: Knowledge base look up

Cisco ANSWERS agent assistance
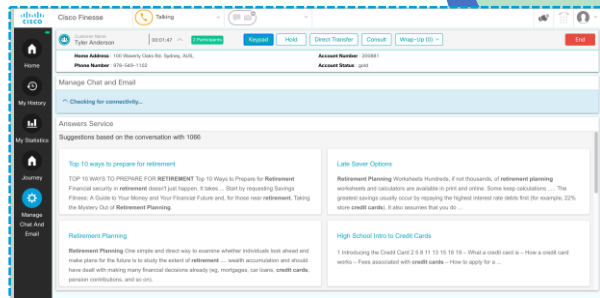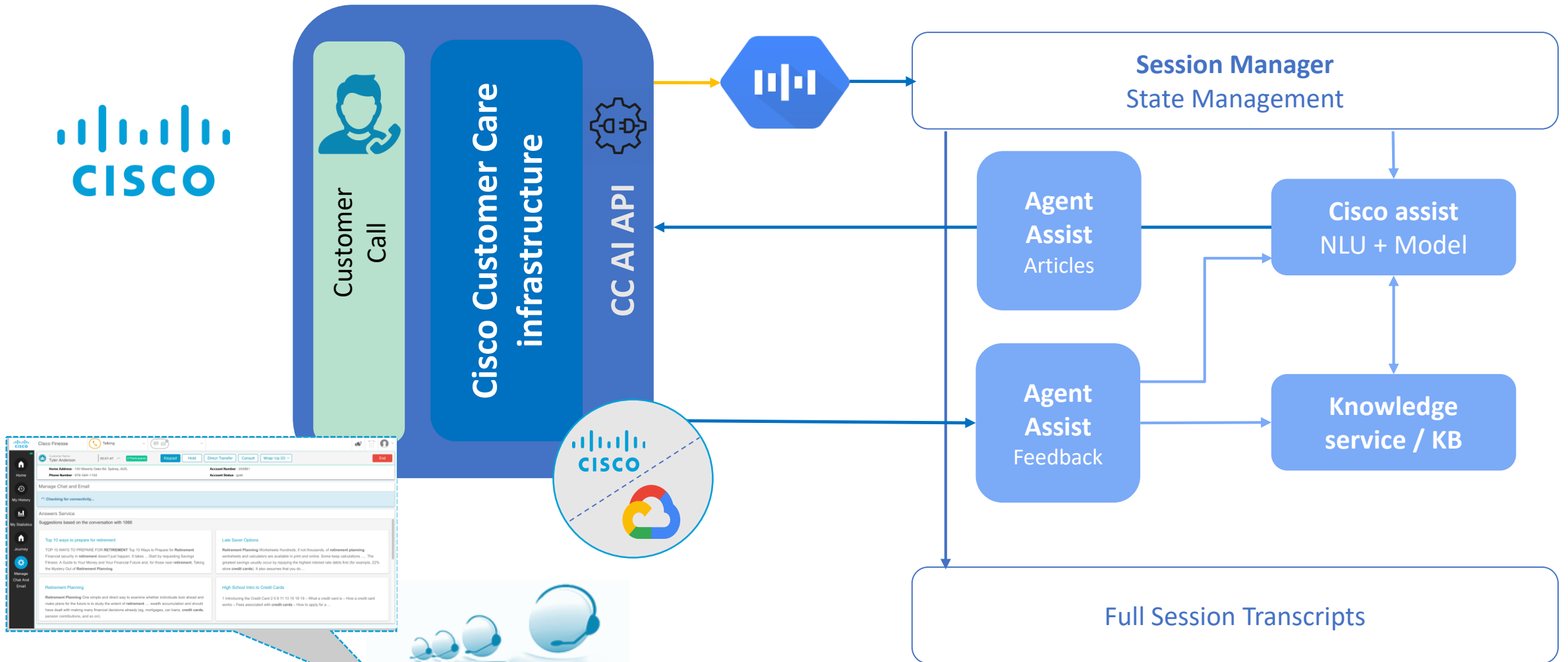
Virtual Agent

Cas d'usage Assistant Virtuel - Vocal
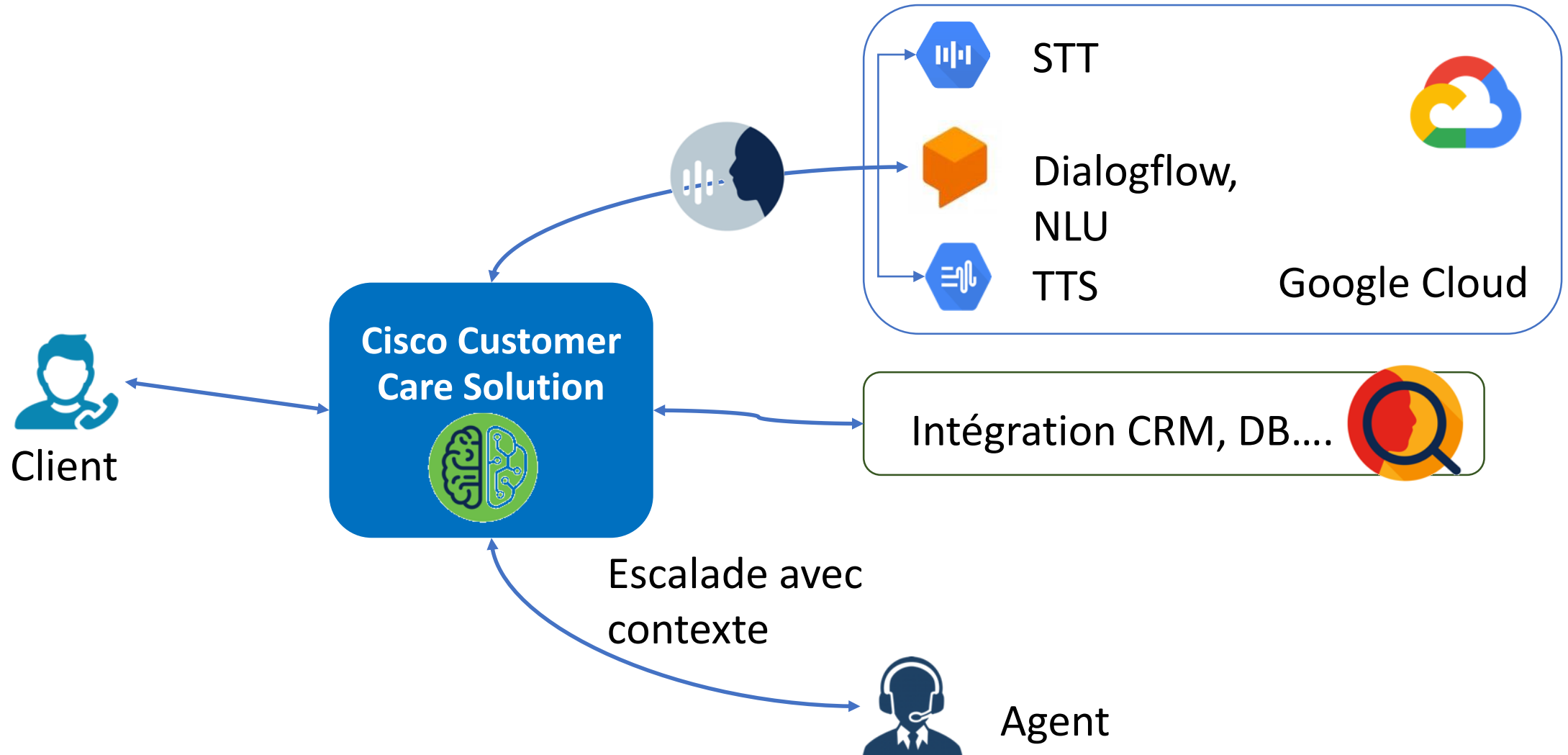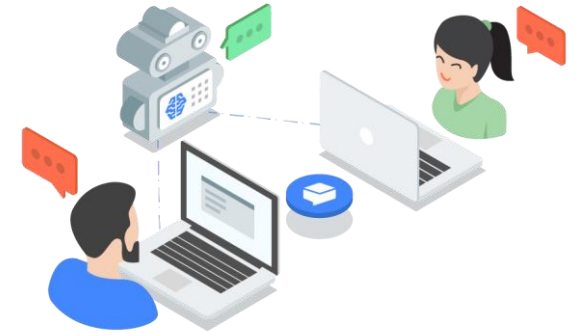
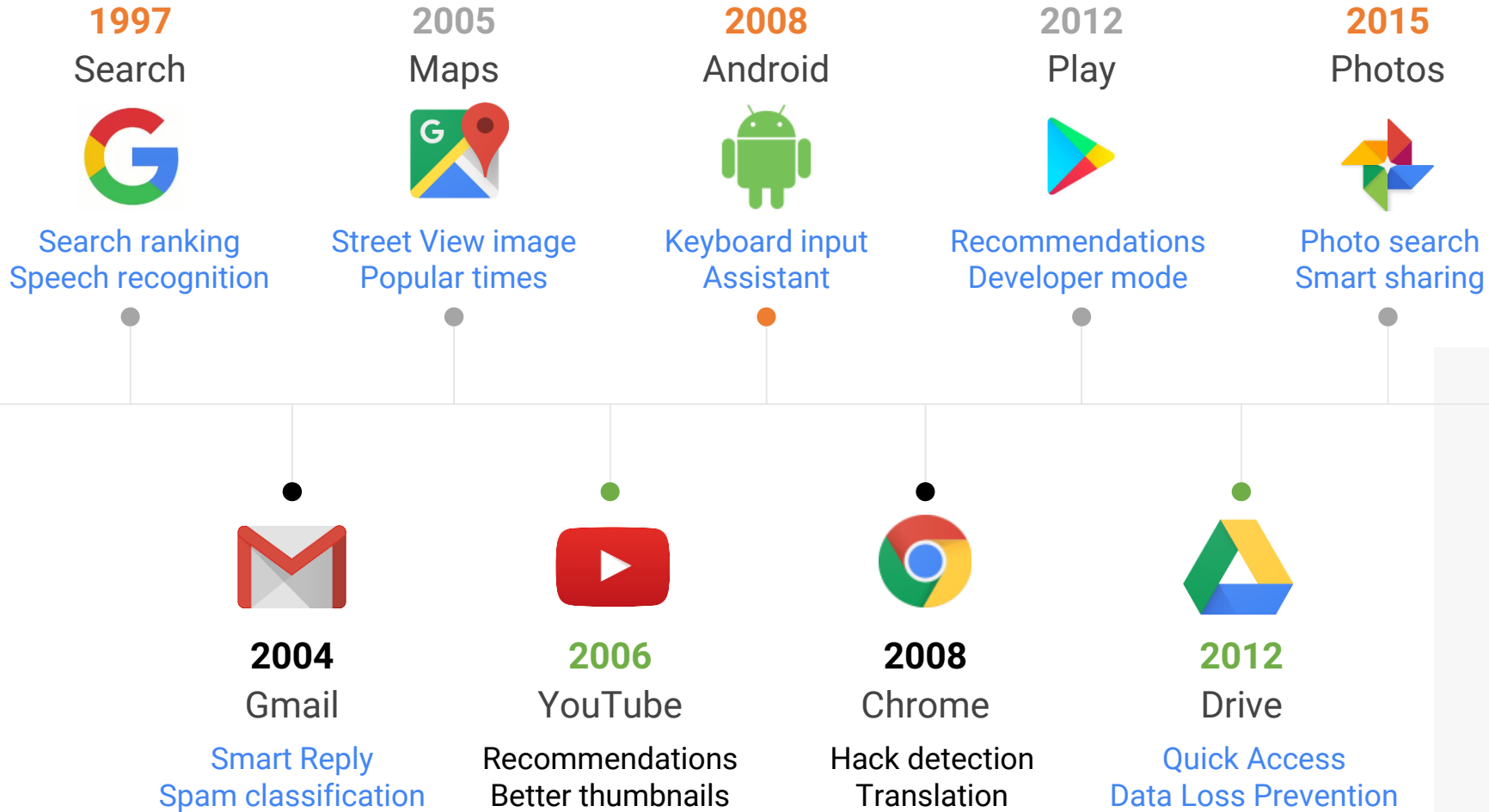# Cas d'usage Assistant Virtuel - Vocal

Thank you

Contact Center AI

Built with Google's human-like conversational AI

Dominique Pfeffer,
CCAI Technology Partners
Lead

Our products are **how** we innovate

1997
Search

Search ranking
Speech recognition

2005
Maps

Street View image
Popular times

2008
Android

Keyboard input
Assistant

2012
Play

Recommendations
Developer mode

2015
Photos

Photo search
Smart sharing

2004
Gmail

Smart Reply
Spam classification

2006
YouTube

Recommendations
Better thumbnails

2008
Chrome

Hack detection
Translation

2012
Drive

Quick Access
Data Loss Prevention

Google Cloud

9
Billion User
Applications

100%
Machine Learning
Powered

Introducing Cloud AI

Cloud AI solutions

- Cloud Job Discovery
- Contact Center **New**
- Document Understanding

ML professionals & service partners

- ASL
- Professional Services Organization

Cloud AI building blocks

Vision

- Cloud Video Intelligence
- Cloud AutoML Vision
- Cloud Vision

Language

- Cloud Natural Language
- Cloud AutoML NL **New**
- Cloud Translation
- Cloud AutoML Translation **New**
- Cloud Speech-to-Text
- Dialogflow Enterprise
- Cloud Text-to-Speech

Cloud AI platform

Machine & Deep Learning

- Cloud ML Engine
- Cloud Dataflow
- Cloud Dataproc

ML accelerators

- Cloud TPU
- Cloud GPU

ML libraries

- Tensorflow
- Kubeflow
- Spark
- beam
- R
- PYTORCH
- K
- Spark MLlib
- scikit learn

Kaggle/datasets

- kaggle
- Datasets

Less ML expertise

More ML expertise

Providing a consistent, high quality experience is expensive

$

- Average cost/call = $10-15

- Agent turnover/churn & training challenges

- Lost upsell opportunities

But you've had to make a tradeoff between great customer support and operational efficiency.

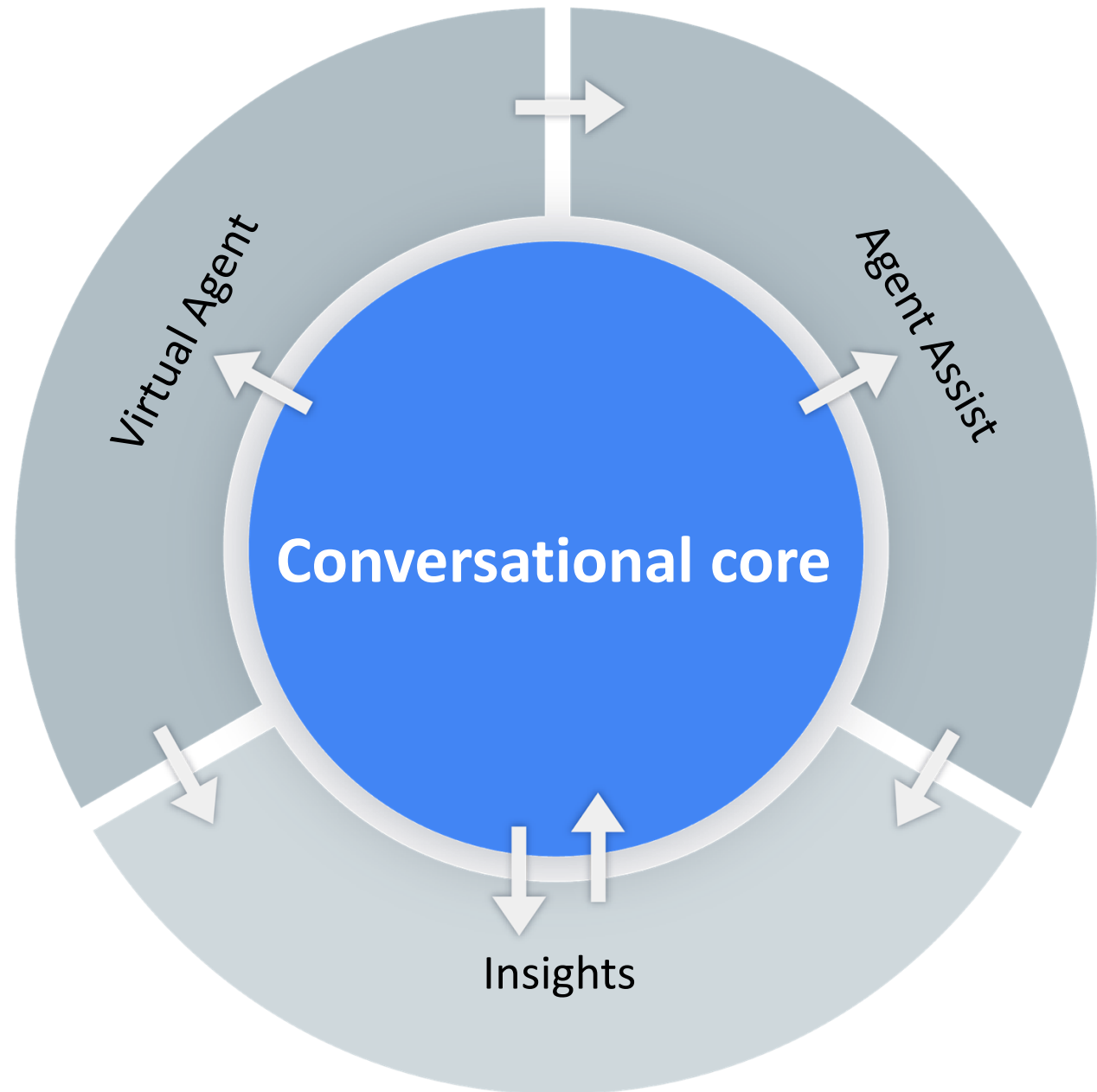Until now.

Think of the core as the 'brain'

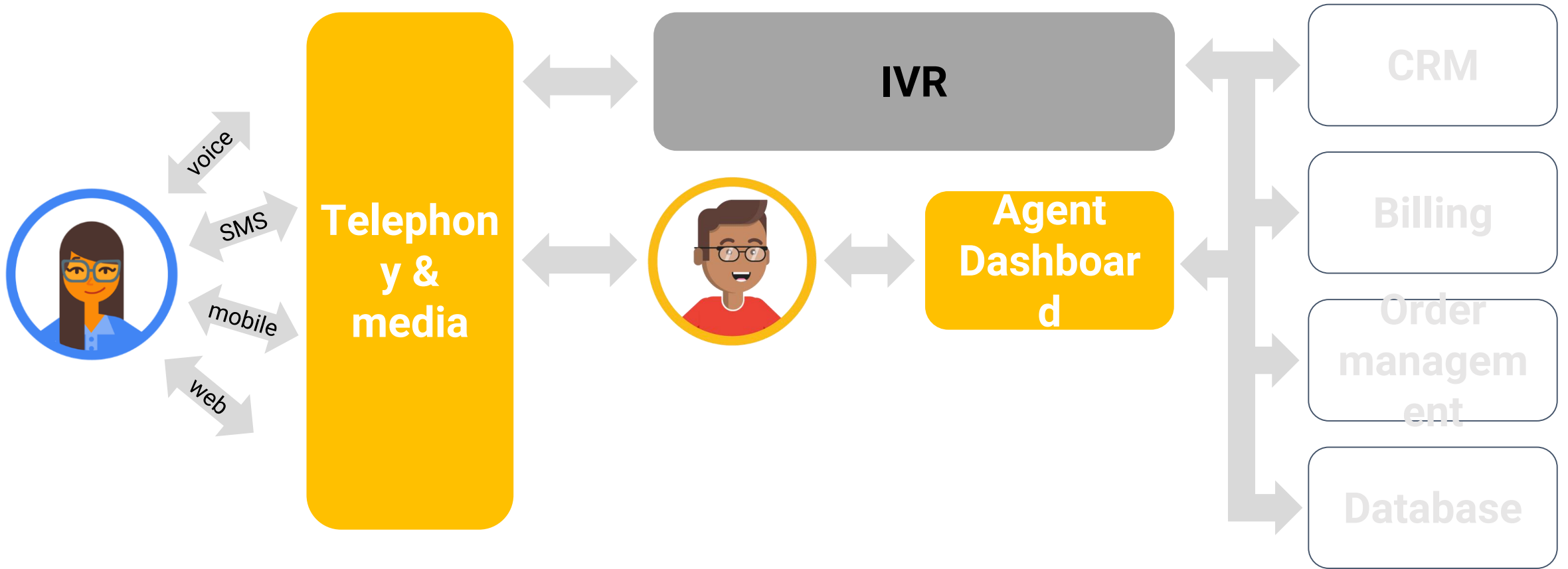**Understand**
- Speech-to-text
- NLP/NLU

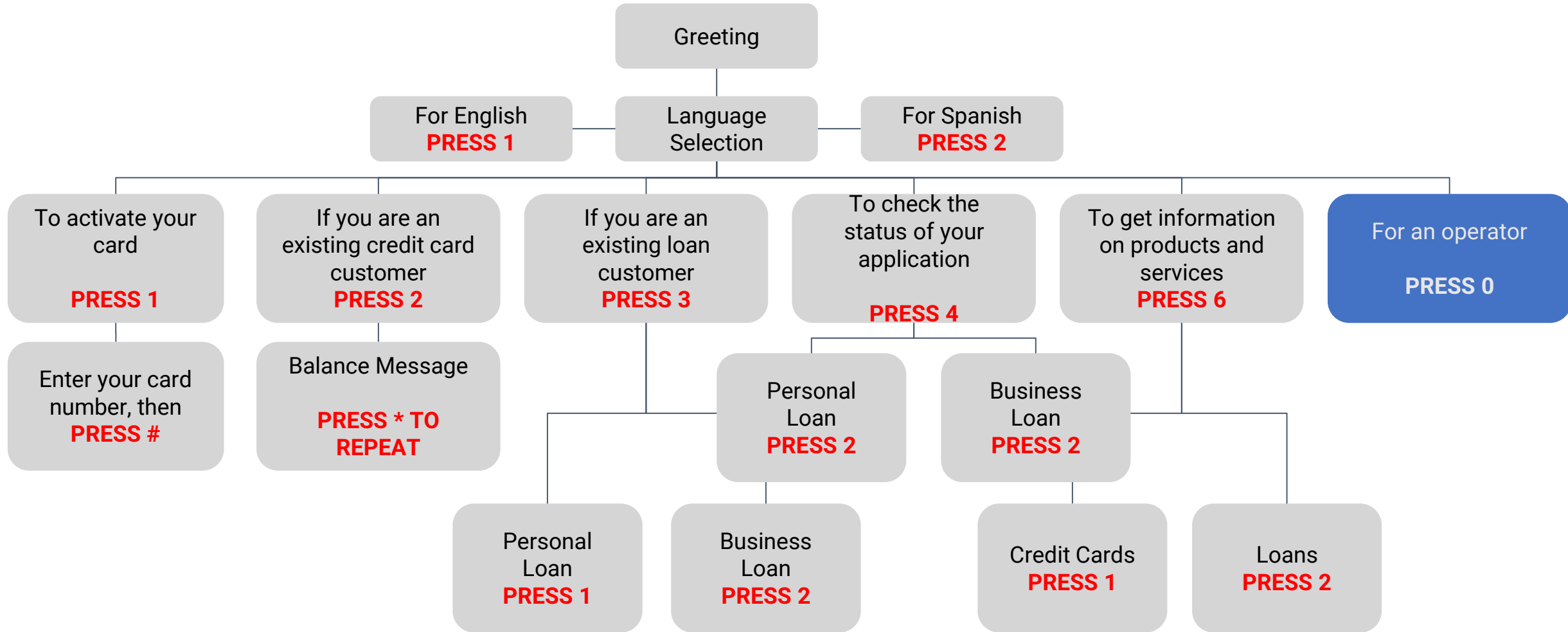**Talk**
- Text-to-speech

Interact
- Dialogflow

Contact center architecture

Telephony & media

IVR

Agent Dashboard

voice
SMS
mobile
web

CRM

Billing

Order management

Database

| go/ccai-cloudhub

IVR purgatory

```
                              ┌──────────────┐
                              │   Greeting   │
                              └──────┬───────┘
                                     │
    ┌─────────────────┐    ┌─────────┴────────┐    ┌─────────────────┐
    │  For English     │    │    Language      │    │  For Spanish     │
    │  PRESS 1         │────│    Selection     │────│  PRESS 2         │
    └─────────────────┘    └─────────┬────────┘    └─────────────────┘
```

| To activate your card **PRESS 1** | If you are an existing credit card customer **PRESS 2** | If you are an existing loan customer **PRESS 3** | To check the status of your application **PRESS 4** | To get information on products and services **PRESS 6** | For an operator **PRESS 0** |

| Enter your card number, then **PRESS #** | Balance Message **PRESS * TO REPEAT** | | Personal Loan **PRESS 2** | Business Loan **PRESS 2** | |

| | | Personal Loan **PRESS 1** | Business Loan **PRESS 2** | Credit Cards **PRESS 1** | Loans **PRESS 2** |

| go/ccai-cloudhub

IVR

Problems

- Navigating a complex IVR tree is a terrible customer experience.

- Customers may drop off before completing their request.

- Customers learn to find the escape route ("Operator") to talk to a human anyway.

- The agent often doesn't have the context from the IVR so the customer has to repeat the information.

- Companies often have 10s, 100s or 1000s of different numbers - which one to call?

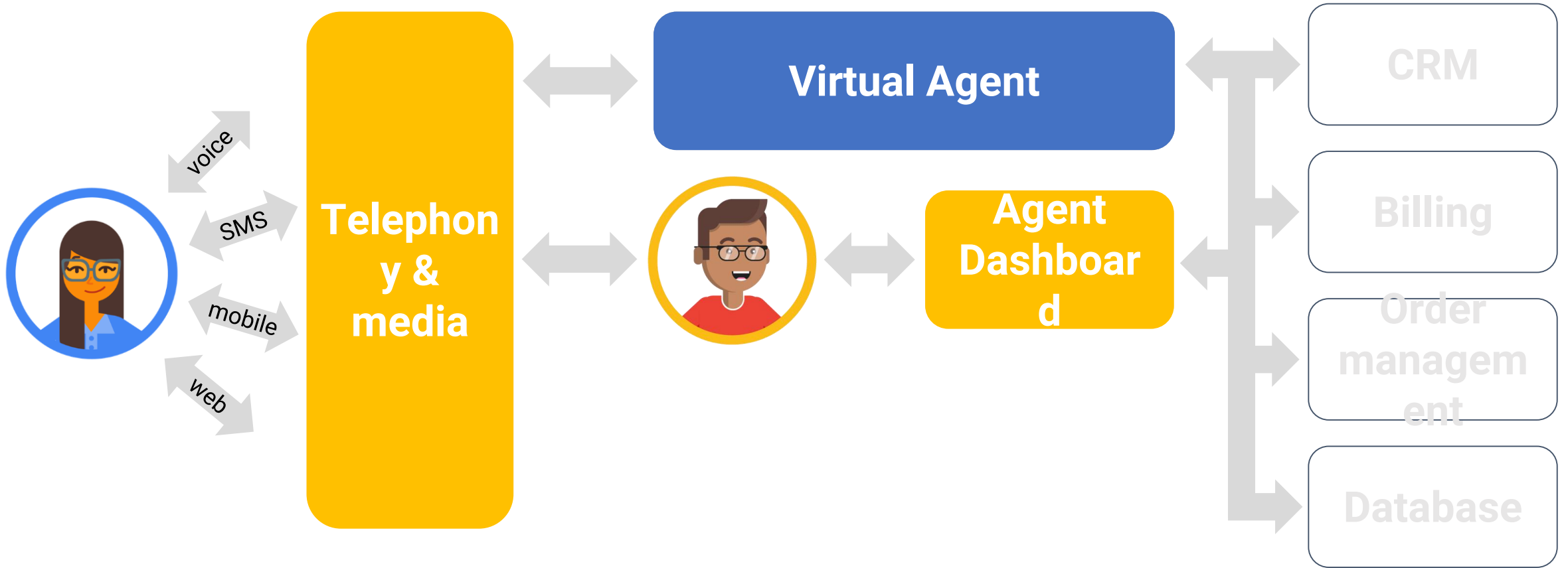- Trained human agents provide the best customer experience, but they're expensive.

Virtual Agent

Solution

Gives customers 24/7 access to immediate conversational self-service, with seamless handoffs to live agents for more complex issues.

Contact Center AI architecture

Telephony & media

Virtual Agent

Agent Dashboard

voice

SMS

mobile

web

CRM

Billing

Order management

Database

Agent Issues

Problems

- Agents don't have context from the caller
- Relevant information can be scattered across documents, CRM systems, databases, etc
- Every extra second an agent spends looking up information increases costs
- Products & services change frequently, and agent training often doesn't keep up
- Training agents is expensive
- Call center staffing turnover is significant

Agent Assist

Solution

Empowers agents with continuous support during their calls by identifying intent and providing real-time, step-by-step assistance.

Contact Center AI architecture

voice
SMS
mobile
web

Telephony & media

Virtual Agent

Agent Dashboard

Agent Assist

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Order management

Database

| go/ccai-cloudhub
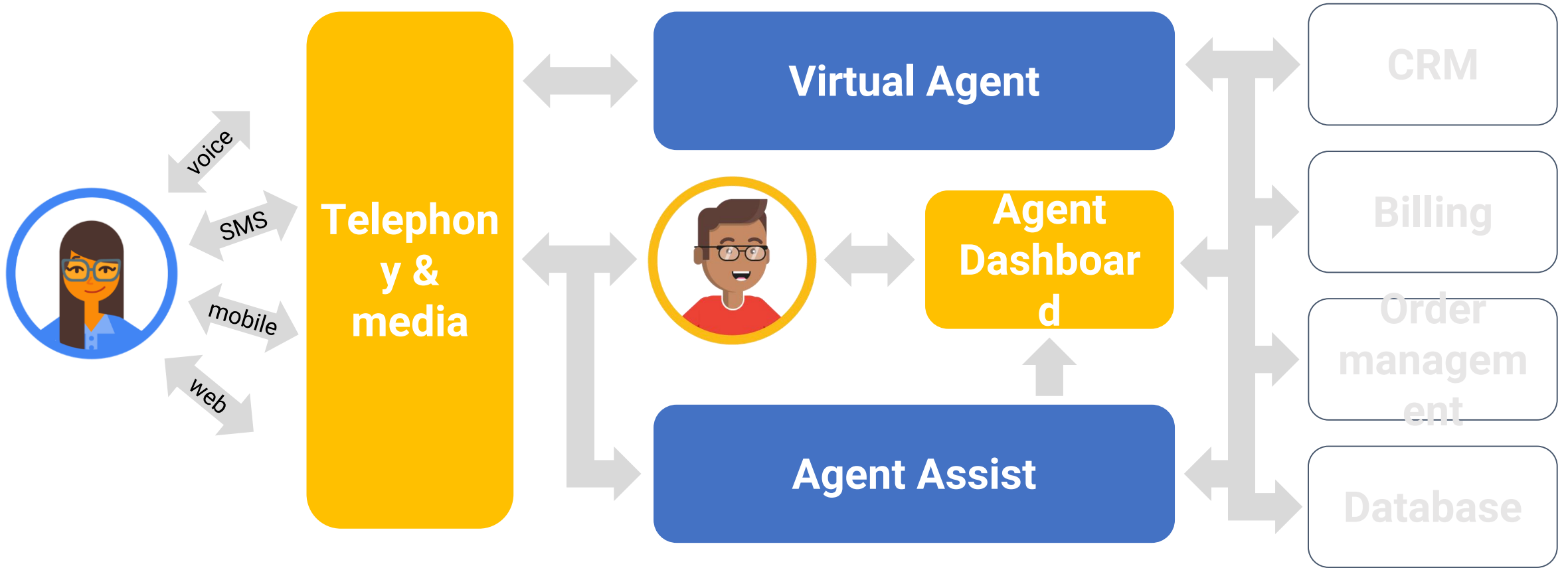
Visibility Issues

Problems

- Companies have little insight into customer concerns
  - Emerging problems
  - Market changes
  - Customer sentiment, positive or negative
  - Product interest

- Companies also have little insight into their call center attributes
  - Agent performance: Who's doing better?
  - What makes customers happy or unhappy?
- Companies need to track compliance: Are agents saying the right things?

Insights

Solution

Uses natural language processing to identify call drivers, sentiment and other KPIs that help contact center managers learn about customer interactions to improve call outcomes.

Contact Center AI architecture

CCAI
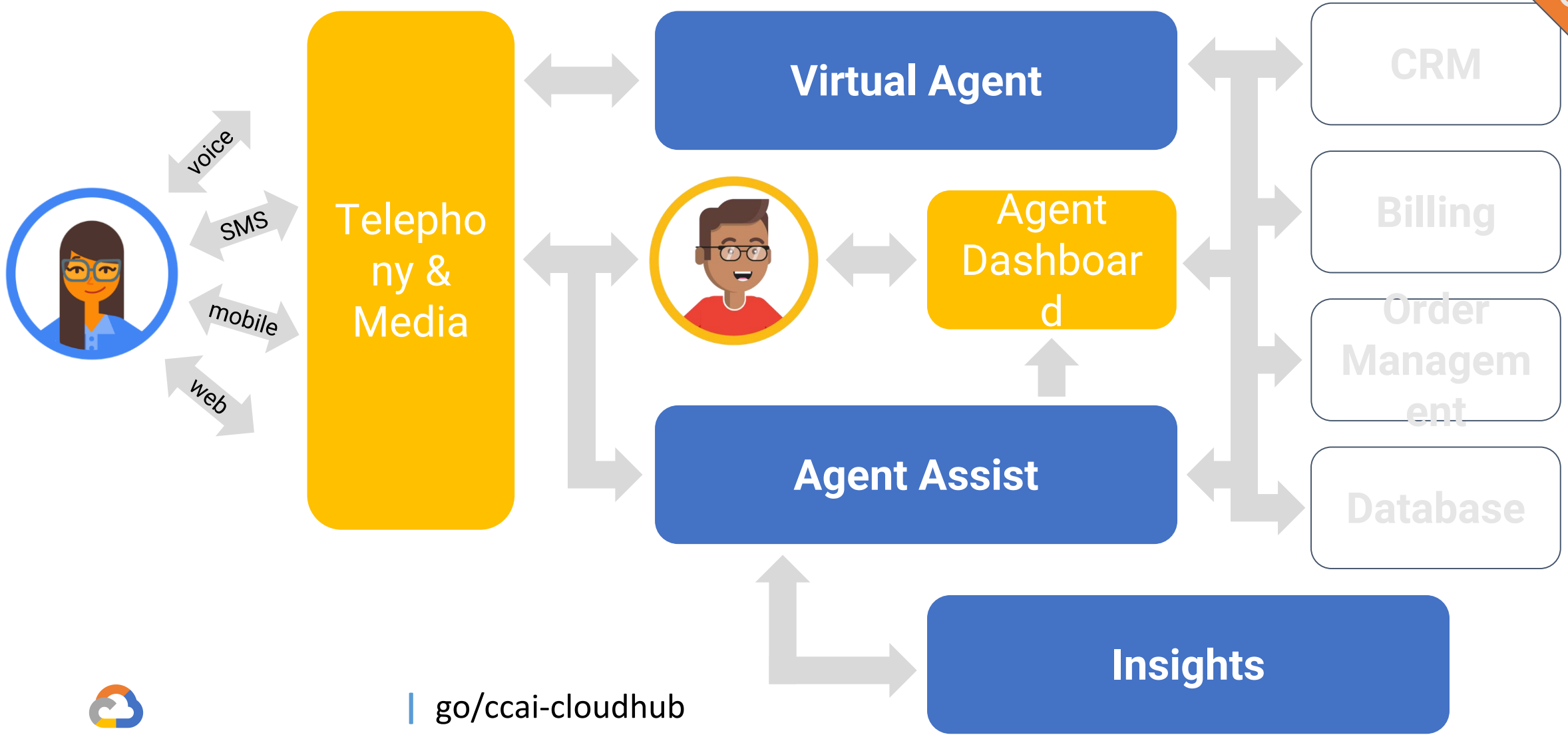
Dialogflow

Virtual Agent &
NLU for Chat and
Voice
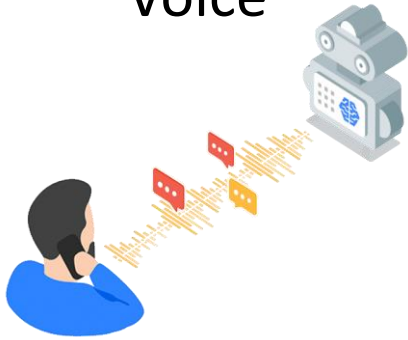
GA for over 2 years
1.2M Dev signed up
32 languages for Voice
1300+ paying Enterprises
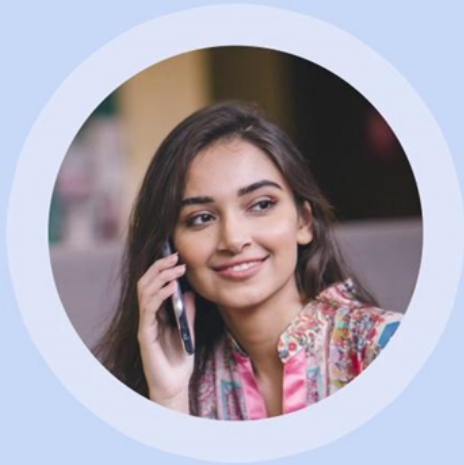187 Voices (92 Wavenet)

Agent Assist

Live call
transcription
Doc suggestions
Agent assistive

Just launched GA in Nov
Sold via CCAI Telephony Partners
eg Cisco

Insights AI

Call search, scoring,
and sentiment
analysis
~~Topic extraction~~
For P   &
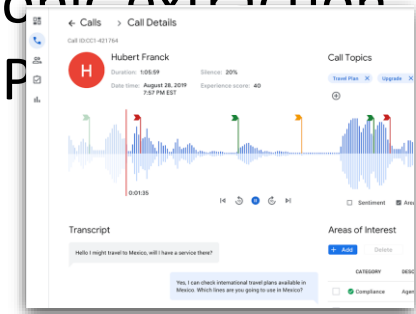
In design phase
Scheduled for 2020

Prisha Aggarwal
Call ID: CC1-421764

About Marks & Spencer
A leading U.K.-based multinational retailer with nearly 1,000 stores.

Challenges
Receives millions of customer calls per year about thousands of different topics. Understanding, routing, and responding appropriately to each and every one is critical for customer satisfaction and operational efficiency.

How Google Helped

text

intent detection   Dialogflow Enterprise Edition

Google Cloud Contact Center AI

Routed +6M calls
Within 9 months

Saved +10 sec AHT
With automated call disposition that mean advisors no longer had to record the Reason for Contact (RFC)

Thank you

Repenser l'expérience client à l'ère de l'augmenté – Facteurs de réussite

- Penser « métier » … et « technologie »
- Anticiper les « attentes clients »
- Appréhender tout le potentiel de l'IA
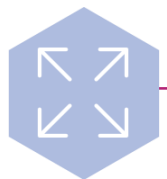- Identifier les « bons » cas d'usage
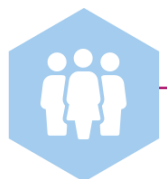- Penser « omnicanalité » des parcours
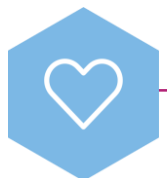- Accompagner les changements

IA ET RELATION CLIENTS

Anticiper les « attentes clients »

L'HYPER SIMPLICITE

L'IMMEDIATETE

L'HYPER CHOIX

LA RELATION VRAIE

LES 7 ATTENTES CLIENTS

LimeBridge

Help me do more | Surprise me

Value me | Trust me

Give me choice | Make it easy for me

Know me, Remember me
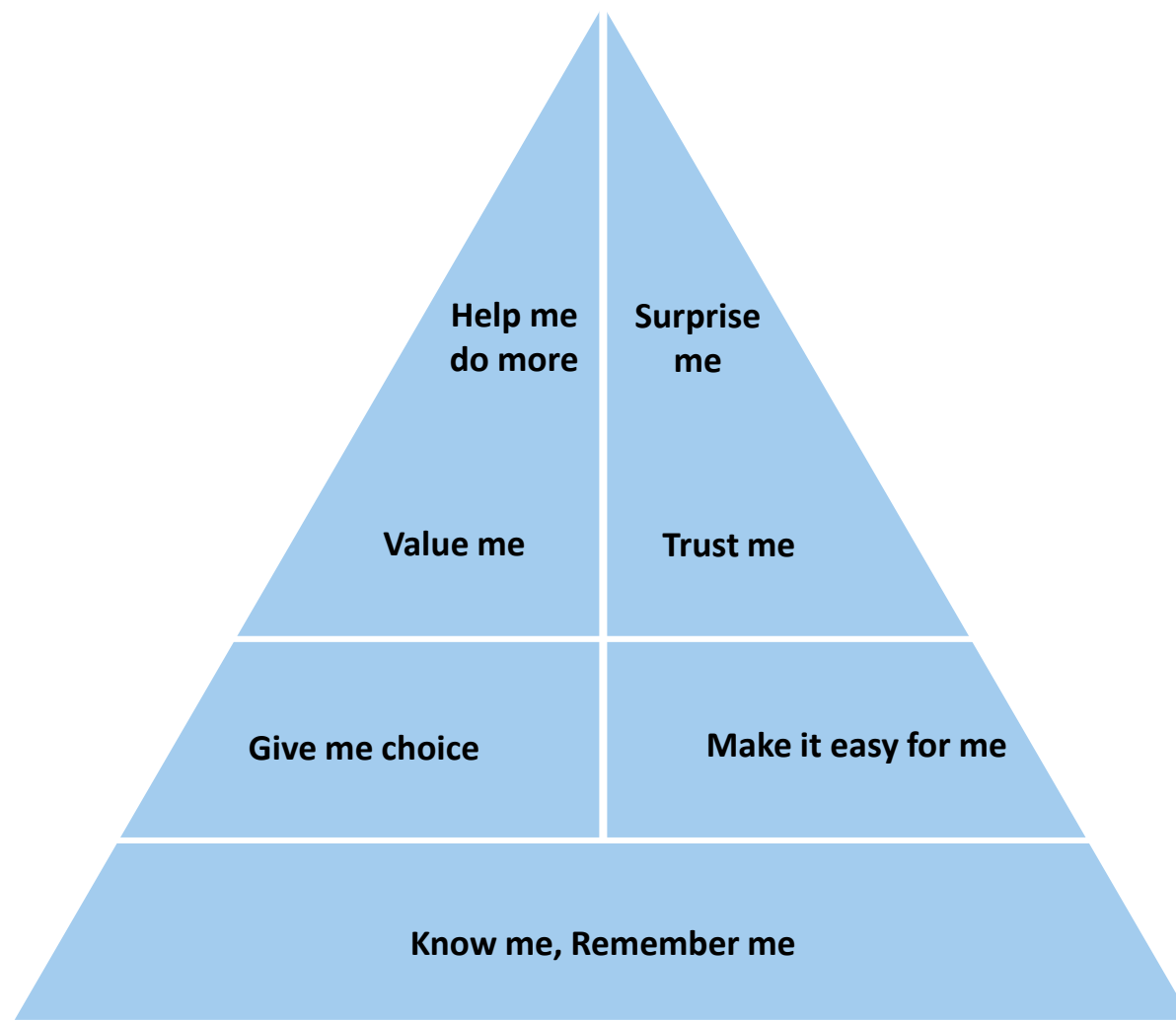
Appréhender tout le potentiel de l'IA

Client « augmenté »

- Any Time Any Where Any Device
- Autonomie
- Innovation

Conseiller « augmenté »

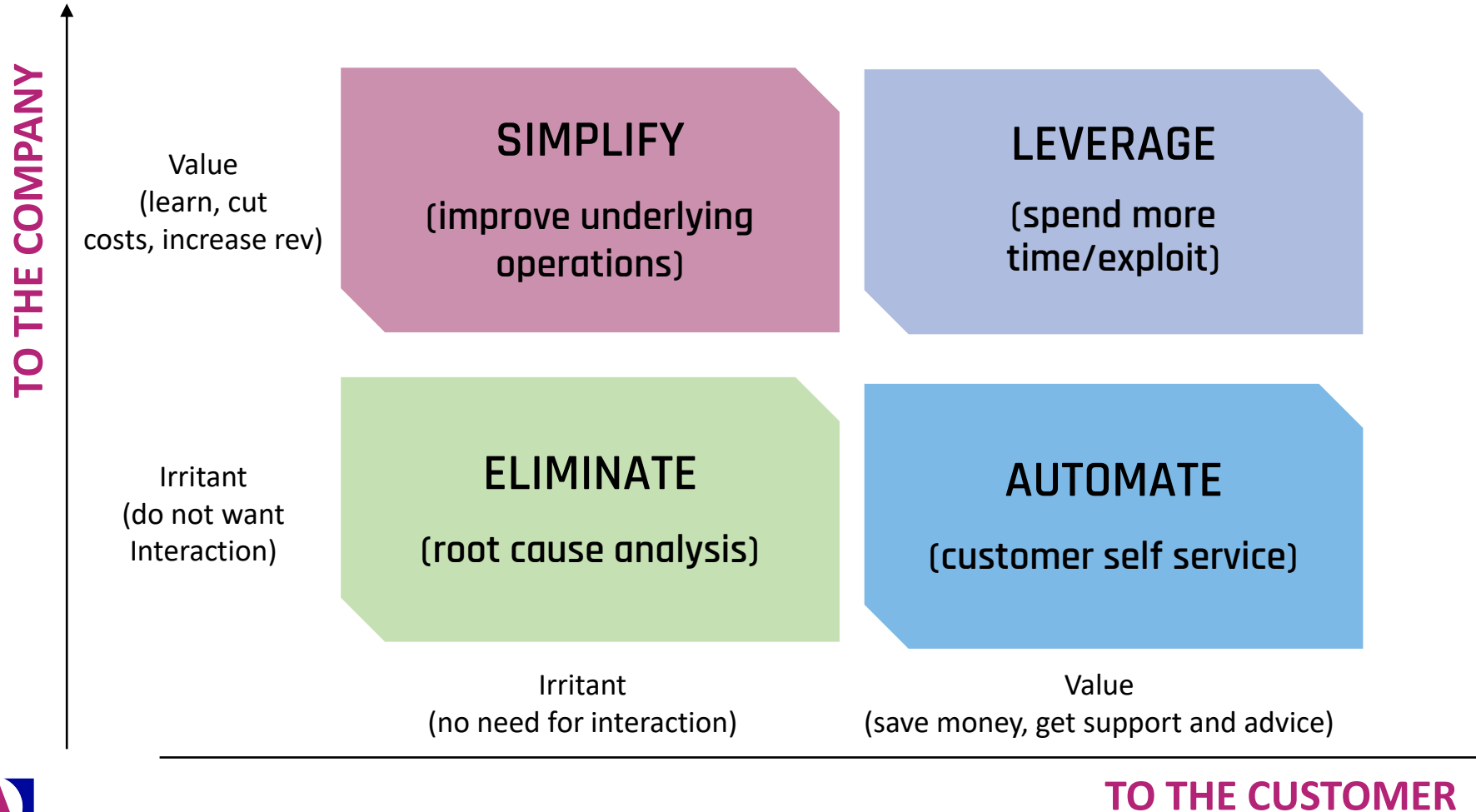- Polyvalence, FCR
- Valeur ajoutée
- Intelligence émotionnelle

Analytics

- Personnalisation
- Prédiction
- Proactivité

Identifier les « bons » cas d'usage

TO THE COMPANY

Value
(learn, cut
costs, increase rev)

SIMPLIFY
(improve underlying operations)

LEVERAGE
(spend more time/exploit)

Irritant
(do not want
Interaction)

ELIMINATE
(root cause analysis)

AUTOMATE
(customer self service)

Irritant
(no need for interaction)

Value
(save money, get support and advice)

TO THE CUSTOMER

BILL PRICE & DAVID JAFFE

THE BEST SERVICE IS NO SERVICE

HOW TO LIBERATE YOUR CUSTOMERS
FROM CUSTOMER SERVICE,
KEEP THEM HAPPY & CONTROL COSTS

activeo

IA ET RELATION CLIENTS

Accompagner les changements

... au sein de l'organisation
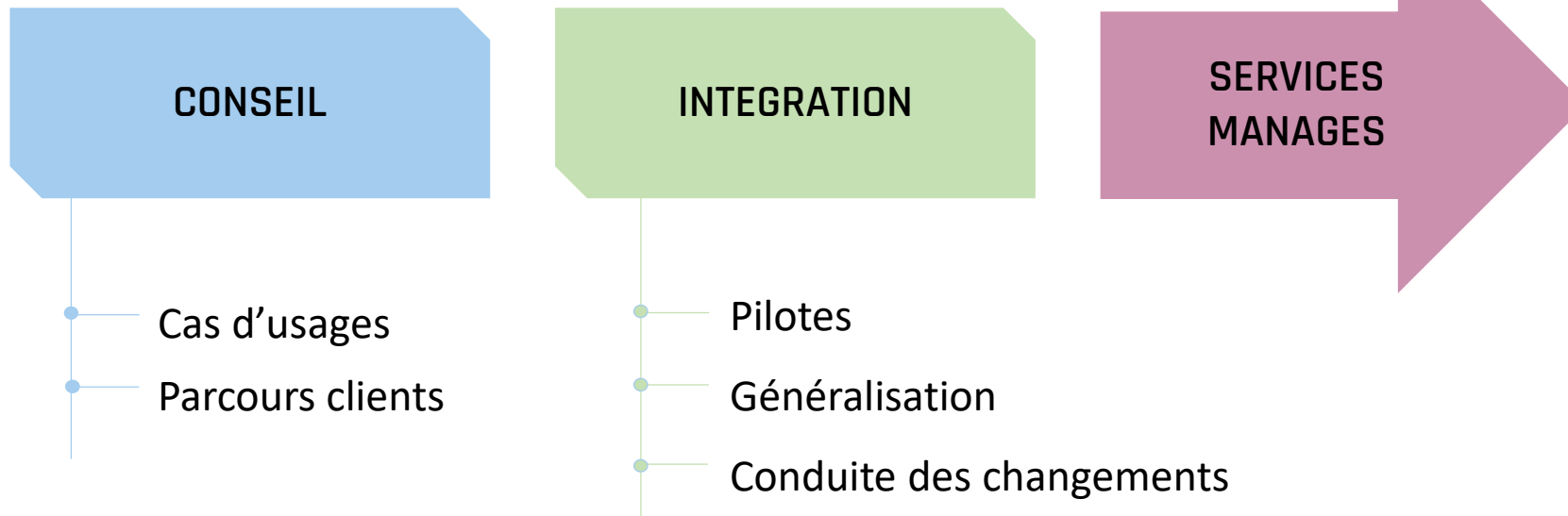
... auprès des collaborateurs

... auprès des clients

... dans la durée

IA ET RELATION CLIENTS

Une réalité opérationnelle

CONSEIL

INTEGRATION

SERVICES MANAGES

- Cas d'usages
- Parcours clients

- Pilotes
- Généralisation
- Conduite des changements

Accompagner nos clients vers l'excellence relationnelle

Expérience Client Multicanal

Performance Opérationnelle

Voix du Client

Open Collaboration
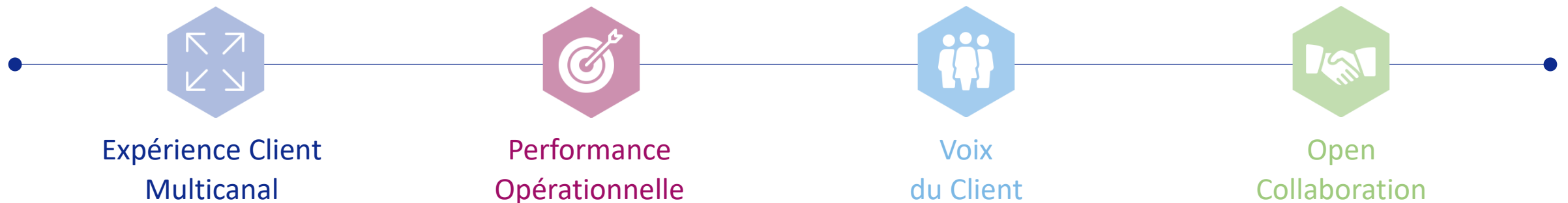
Merci pour votre attention

Nous suivre :

www.activeo.com

www.logepal.fr

Nous contacter :

info@activeo.com