



Trends & AI in the Contact Center

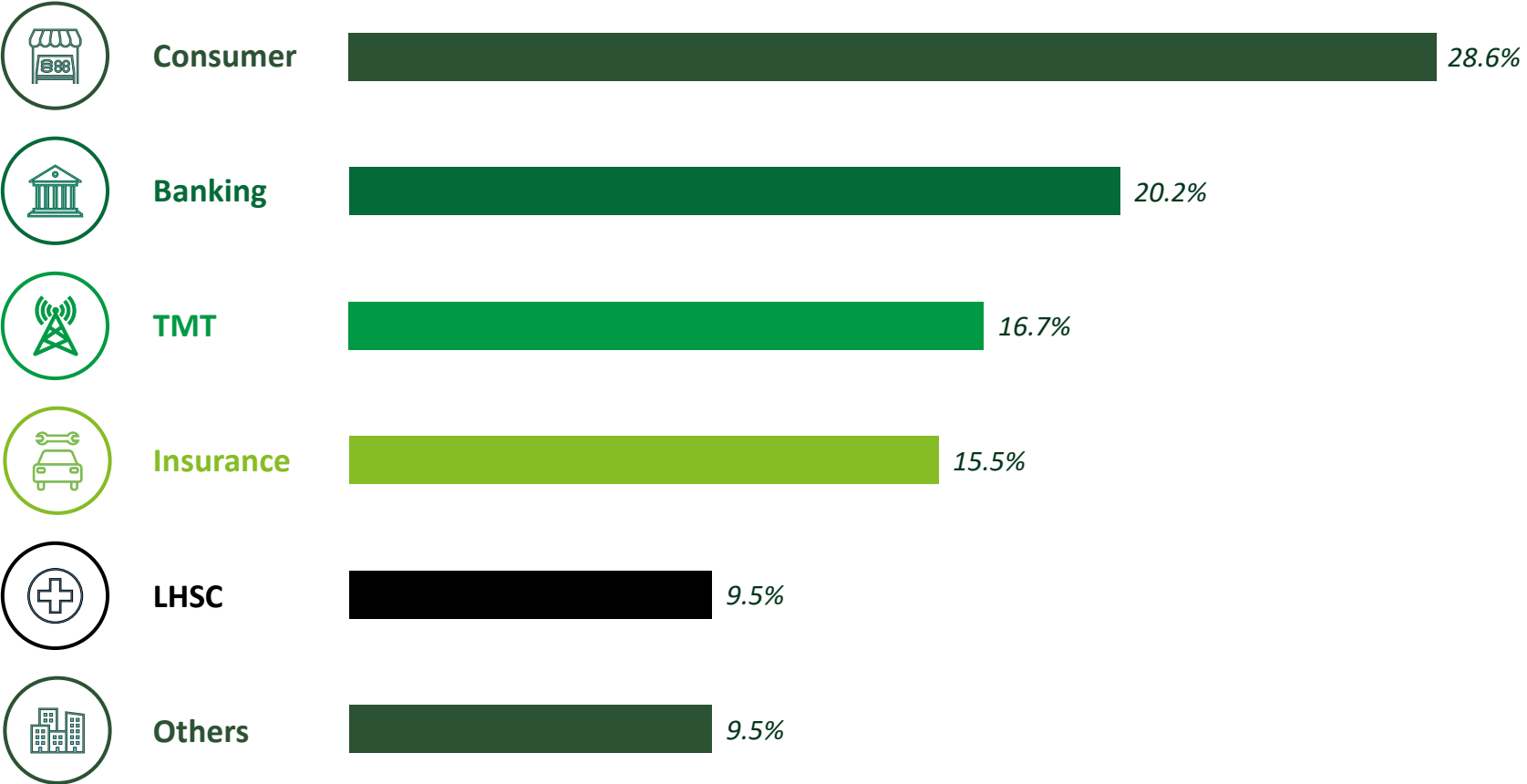
2023 Global Contact Center Survey

Survey Demographics –
Global Data



2023 Survey witnessed record participation!

Developed in response to a rapidly evolving contact center landscape, this survey was designed to help understand what's next in the contact center space across strategy, customer experience, and operational/technical capabilities.



Respondents represent **9** Industries

Headquartered in **11** Countries
Across **6** Regions

With varying customer bases touching both **B2C** and **B2B** and internal customers such as IT or HR

2023 Global Contact Center Survey

Survey Findings – Global
Responses





OVERVIEW

Customer Experience and Cost to Serve: A “Both/And” Imperative

While customer experience remains the top priority among contact center executives, leaders are still being challenged to meet the ever-changing expectations of their customers and differentiate themselves from competitors by improving the client experience while focusing on cost containment initiatives

Leaders are looking to implement strategies and corresponding initiatives that help to optimize CX and operational efficiency by investing in strategic initiatives where initiative benefits overlap customer experience and cost

Deploying additional self-service capabilities, modernizing contact center infrastructure and deploying agent enabling technology are the three highest priority investment areas

2023 Global Contact Center Survey

Survey Findings – Global
Themes



2023 Global Contact Center Survey Themes

Customer Experience and Cost to Serve: A “Both/And” Imperative

CHANNEL ORCHESTRATION



Contact center leaders are developing **3D Servicing Strategies** to create a seamless tech and talent experience across all service channels

Right-channeling

- **55% of respondents** who have implemented the strategy aim to **balance customer experience and cost**

Proactive Outreach

- **36% of respondents proactively reach out** to customers reducing inquiry volume
- Successful outreach programs eliminate high volume transactions with timely updates and solutions that **enhance the customer experience, improving brand loyalty**

Enhancing Self-Service

- **86% of contact center executives surveyed plan to deploy additional self-service capabilities** over the next two years as data suggests customers prefer options to self-serve

TALENT INITIATIVES



Contact center leaders are executing on **Future of Work initiatives** both from a work location and talent development perspective

Developing and Retaining Remote Workers

- **76% with a Work from Home program believe that bringing agents into the center for moments that matter helps to build culture/loyalty** and aids in the development and retention of employees
- Training and Culture Events are the most important in-person experiences

Job Enrichment

- Companies are **implementing salary adjustments 53%; and developing career paths 47%**; to attract and retain workers

Service Capacity

- **63% of respondents are working to fill staffing gaps** while leaders are worried about negatively impacting their service levels and CX scores
- **83% of contact center leaders are partnering with a BPO to provide flex capacity**

COGNITIVE ENABLED TECHNOLOGY



Contact centers continue to **migrate to the cloud with the adoption of AI enabled technologies** to elevate the agent and customer experience

Investing in AI

- **81% of contact center executives are investing in AI for agent-enabling technologies** to improve the agent experience and operational efficiency

Use of Analytics and Insights

- **81% of respondents have invested in voice and text analytics** (increased from 62% 2 years ago)
- Contact centers are using voice/text analytics for Call/Contact Driver Analysis, Insights for 'at risk' customers, and Service Quality

Re-evaluate / Refresh prior investments

- As few as **7% of respondents report their cognitive capabilities are delivering significant value** to the organization
- Expansion of use cases will offer the greatest ability to maximize benefits from technology investments

2023 Global Contact Center Survey

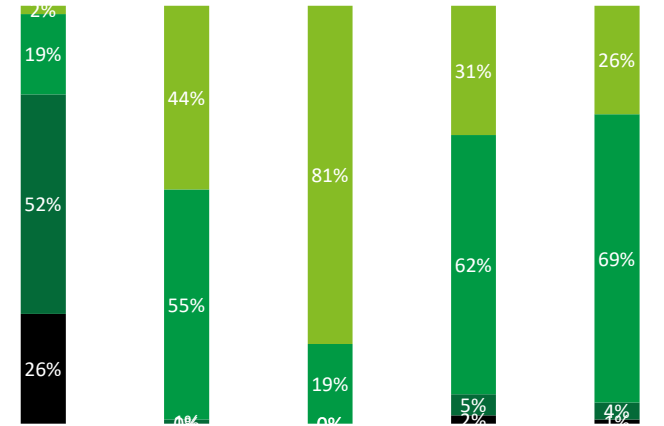
Survey Findings – Channel
Orchestration



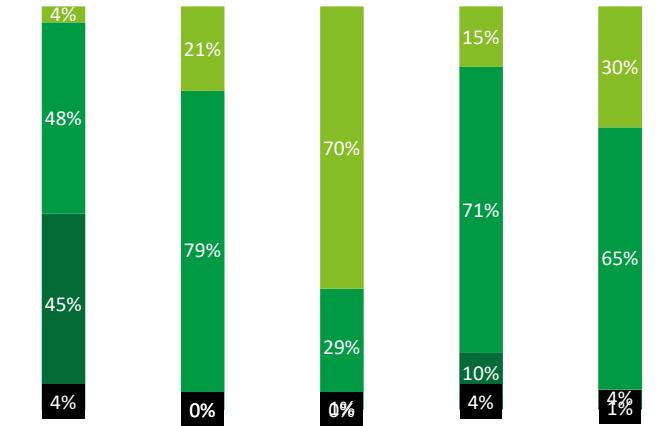
Survey Findings – Channel Orchestration

Distribution of contact centers for channel mix

Current State



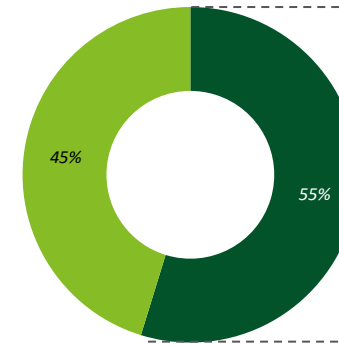
Future State (2 years from now)



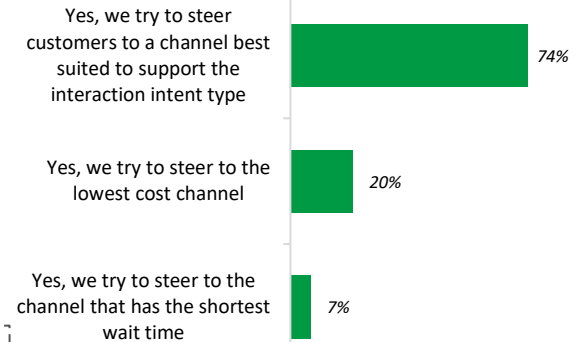
- High usage (80-100%)
- Medium usage (50-70%)
- Low usage (10-40%)
- Do not plan to use this channel 2 years from now

- Currently **78%** of contact centers have **high or medium usage of phone**
- The number is **expected to decrease to 49% in 2 years**
- Most phone volumes are expected to be **absorbed by real-time & asynchronous messaging - 24%, social media - 10%, and self-service channels - 9%** with investment in these channels

Usage of pro-active steering by contact centers



- Yes, we try to steer customers to a channel based on interaction intent type/lowest cost/lowest wait time
- No, we let our customer pick what channel to interact with us in



- 45%** of contact centers **do not steer** their customers to a particular channel pro-actively
- Of the **remaining 55%** of contact centers, **74% use right-channeling** to pro-actively steer their customers to **channel best suited to support the interaction type** whereas the remaining use a **static approach of steering based on lowest cost and shortest wait time**

2023 Global Contact Center Survey

Global Themes - Talent
Initiatives



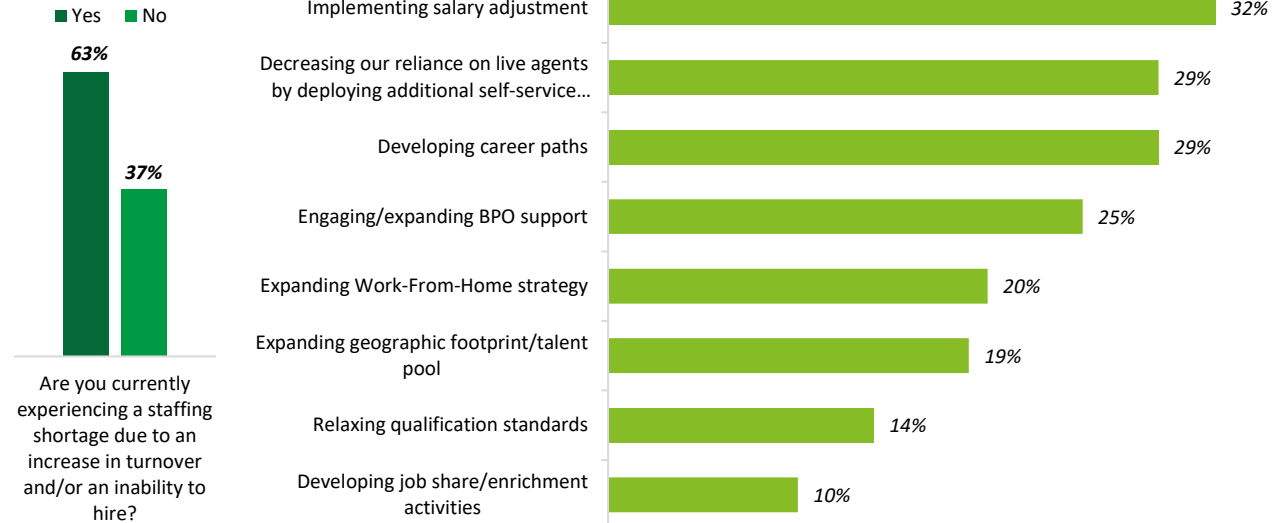
Global Themes - Talent Initiatives

WFH Program – In office activities



- **69%** of contact centers **have a work from home program**
- The number is expected increase to **73%** in 2 years
- Contact centers that have a WFH program and capitalize on onsite gatherings mention **training** and **culture events** are generally conducted **in person**
- **24% of respondents do not perform any training/ coaching/events/hiring/tech support related activities in person**, working in a wholly virtual environment

Staffing shortage and corrective measures



- **63%** of contact centers are **currently facing a staffing shortage**
- **64%** of such contact centers are **implementing at least three of the eight corrective measures** listed with salary adjustments, developing career paths and deploying additional self-service capabilities leading their efforts

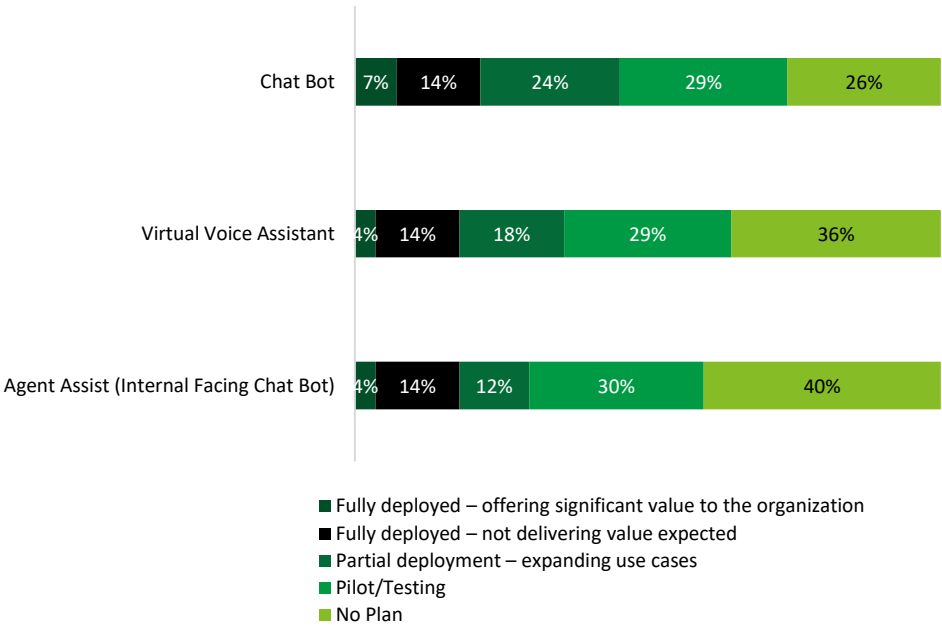
2023 Global Contact Center Survey

Global Themes – Cognitive
Enabled Technology



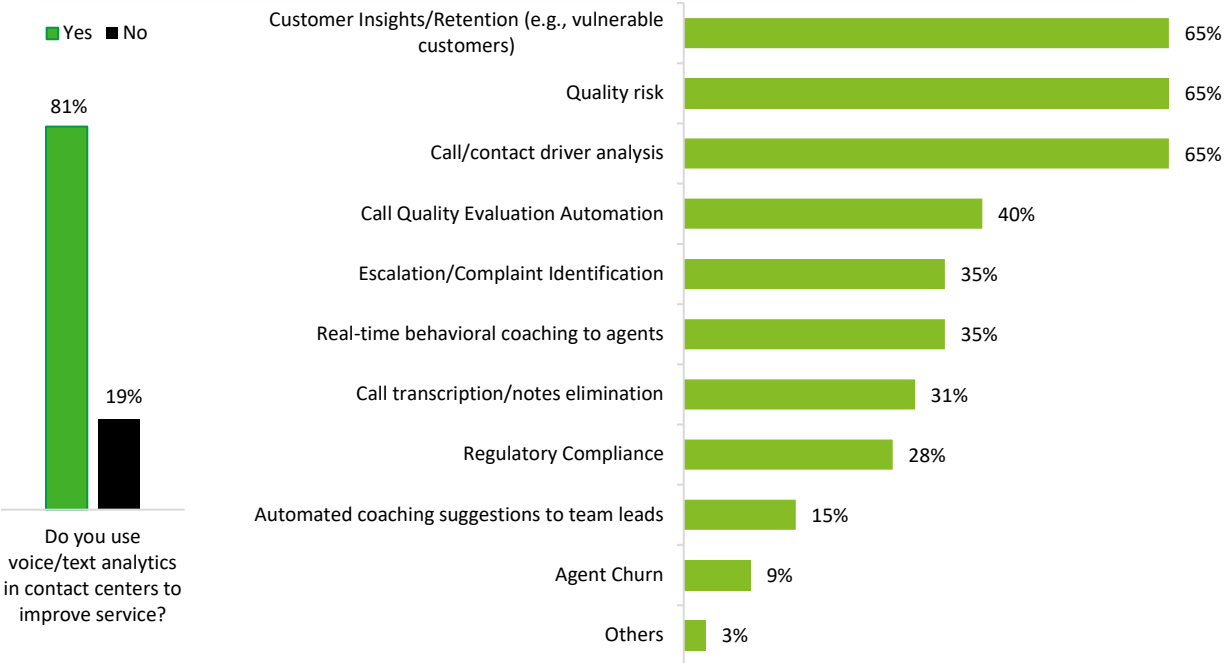
Global Themes – Cognitive Enabled Technology

Distribution of contact centers based on AI capabilities



- **80%** of contact centers are **actively engaging** in some stage of AI deployment
- **17%** of contact centers have **fully deployed all three AI technologies agent assist, virtual voice assistant and chat bot**
- **20%** of contact centers have no plan of investing in any of the three AI capabilities

Distribution of contact centers based on usage of voice analytics



- **81%** of our respondents indicated they **are using voice/text analytics to improve service**
- Among those using analytics, **65% use it for customer insights/retention, quality risk identification and call/contact driver analysis followed by call quality assessment at 40%**

Trends and AI In the Contact Center



Introductions

Today's Objectives

- How and why to use AI in the Contact Center
- Generative AI in the Contact Center



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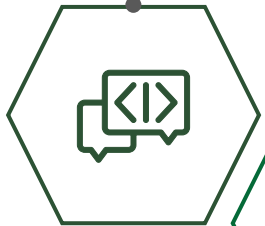
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Potential Conversational AI Use Cases

Traditional (Voice / Chat) AI
Virtual Assistant



Avatar-Based
Assistant



Summarization



Social Media
Moderation



Text-to-Speech and
Speech-to-Text



Content
Creation



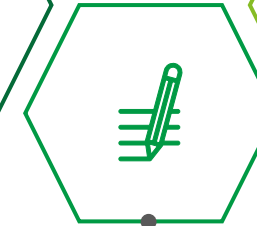
Translation



Knowledge Ontology
(Q&A Pairs)



Sentence Completion
& Paraphrasing



To discuss: What impacts customer care interactions

Transforming Customer Experience with Conversational AI

Imagine If You Could...



Provide on-demand 24/7 service with high CSAT

for customers to receive effective support when they need it for new reservations, change existing reservations, etc.



Simplify access to critical information for customers and employees to be more effective in their decision making and completing the business purpose



Leverage predictive ML models to accelerate getting to the *right* outcome faster, improving areas such as 'next-best-action'



Empower employees to complete core job functions more efficiently and accurately



Provide personalized and contextual recommendations to customers so they maximize their product or service usage

Up to 120 point NPS Improvement

NPS Scores improved for Deloitte client when shifting from traditional service to CAI enabled engagement

3x faster...

... self-service transactions via CAI vs. traditional UI methods

50%+ deflection

Deloitte has recognized through experience that AI bots can routinely complete 40-60% of customer business purpose without escalation to human support¹

Source: Deloitte Experiences

¹ Under the right conditions; Deloitte has achieved as high as 90% containment on targeted use cases

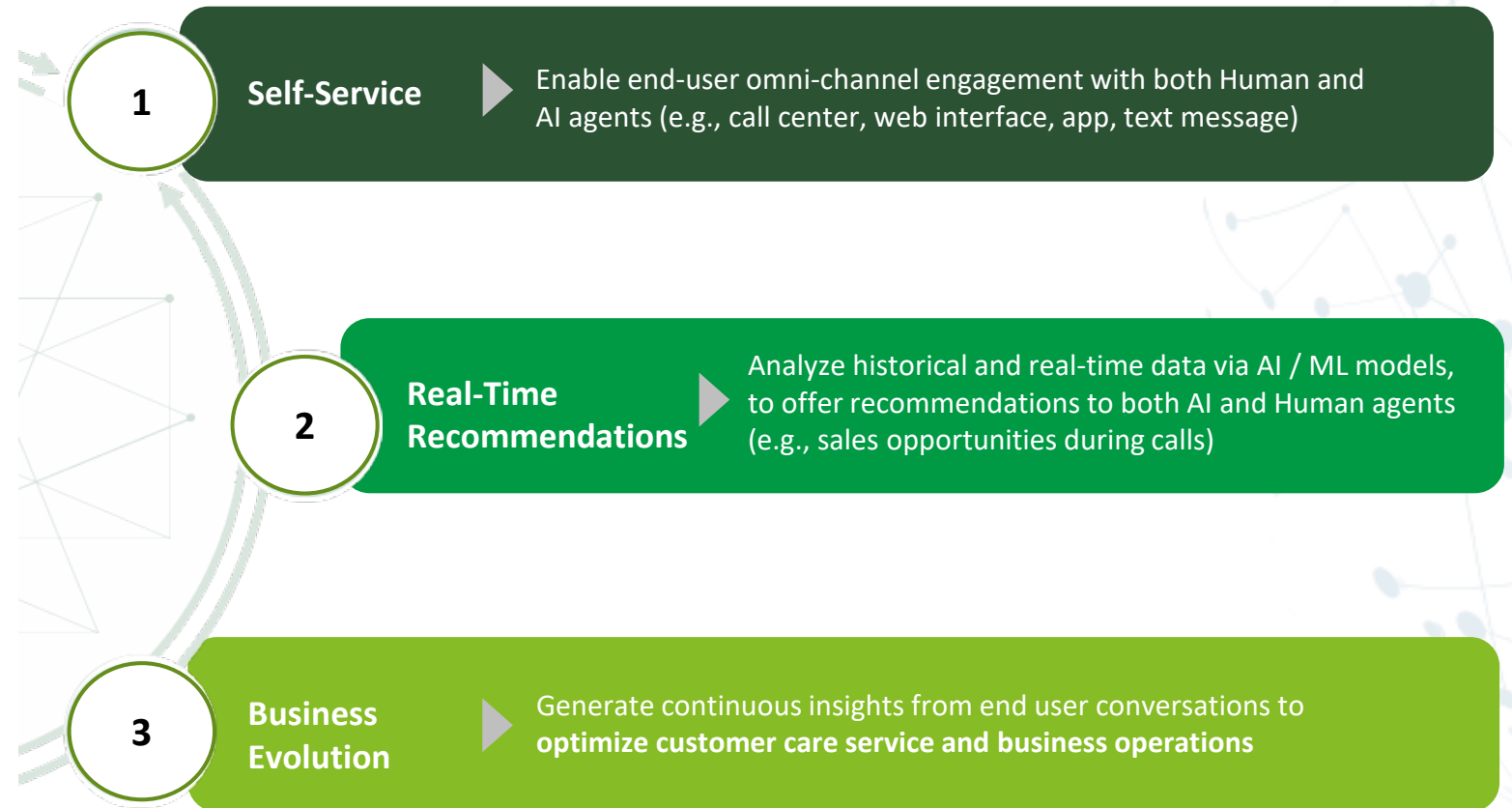
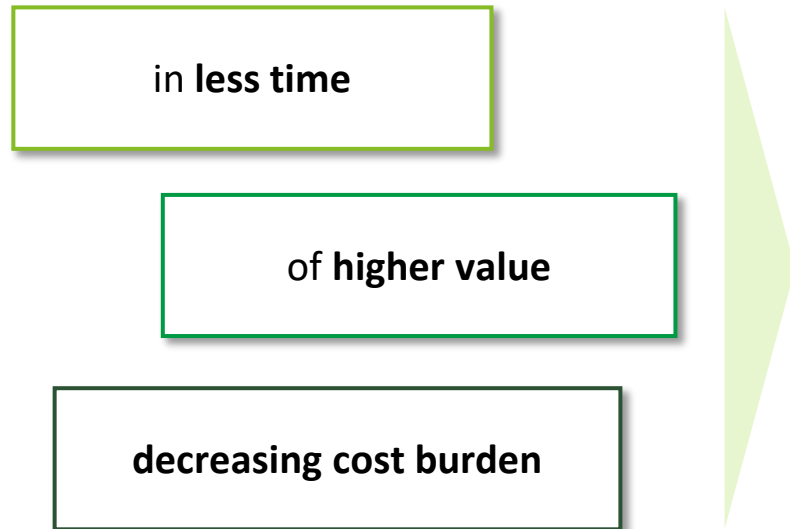
Primary Areas of CAI Impact

High-Level Impact

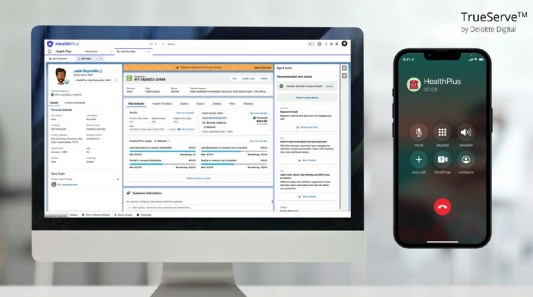



Solutions for clients, employees and business partners business problems...

Conversational AI Opportunities

CAI solutions can both solve end user problems and leverage end user data to create efficient business outcomes

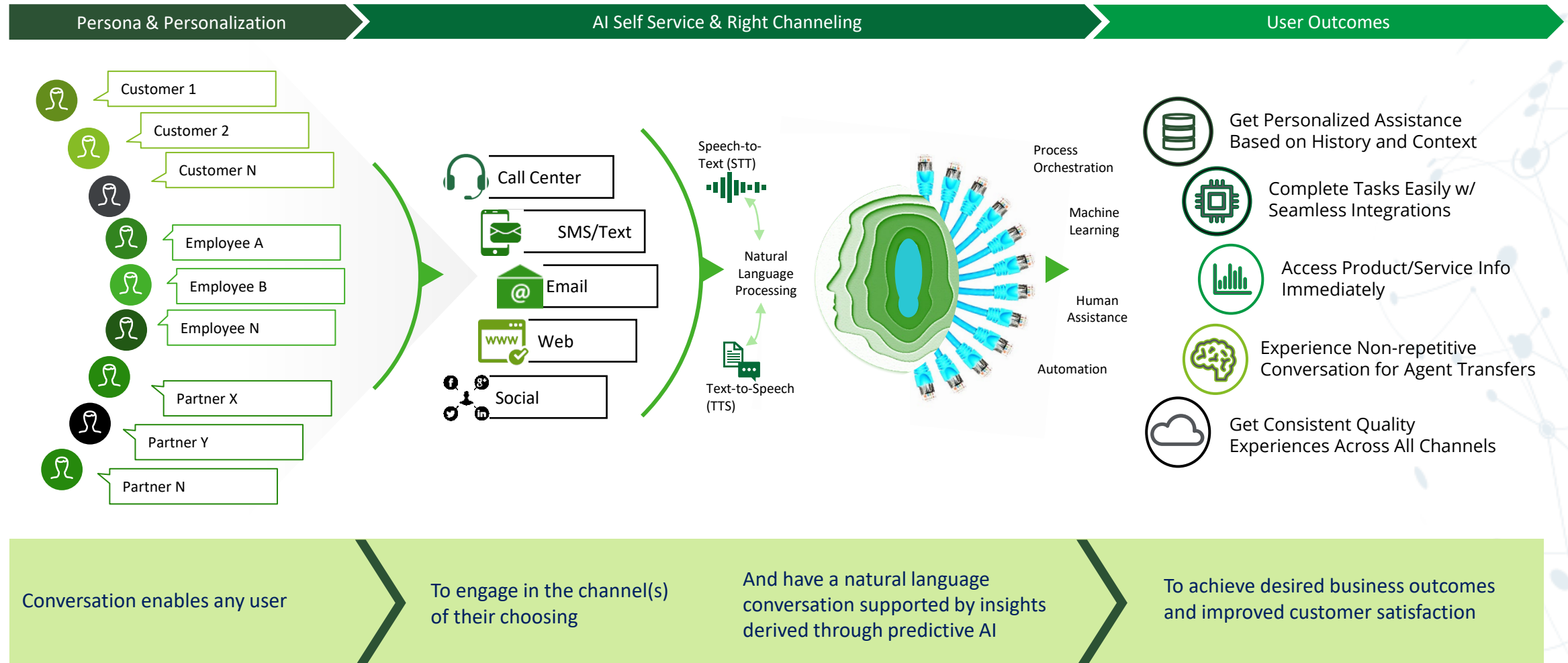


Conversational AI Solution Framework

Areas for Opportunity	Sales and Service Transformation	Customized Solution Development
Accelerator	TrueServe™	Trusted Vendor Relationships
Description	<p>TrueServe™ is Deloitte’s comprehensive Digital Contact Center solution suite which can be delivered as an all-in-one solution or in a modular fashion to meet Disney’s needs where they are in their service transformation journey</p>	<p>Deloitte has built relationships with CAI ecosystems vendors, helping serve clients interested in pursuing CAI initiatives on their chosen vendor platforms</p>
Examples	<p>Demo (video):</p> 	<div data-bbox="1633 505 2313 701">  </div> <div data-bbox="1080 791 1327 1025"> <p>Frontline AI</p>  <p>x</p>  </div> <div data-bbox="1370 772 2295 1072"> <ul style="list-style-type: none"> • Nvidia processing (supercomputer) capability • Lowest Word Error Rate in ASR/STT engine • Easy to customize LLM for business purposes • Edge AI with reduced latency and improved accuracy • Visual Conversational Capabilities powered by LLM • Higher accuracy of predictive analytics and pattern recognition • Dedicated Center for AI Computing with Deloitte • Certification of 100+ trained personnel in accelerated AI modelling </div>

Deloitte’s **assets, accelerators, and partnerships** enable robust CAI solution deployment

The Nuts and Bolts of Conversational AI



Definition for Generative AI and Large Language Models

Generative AI...

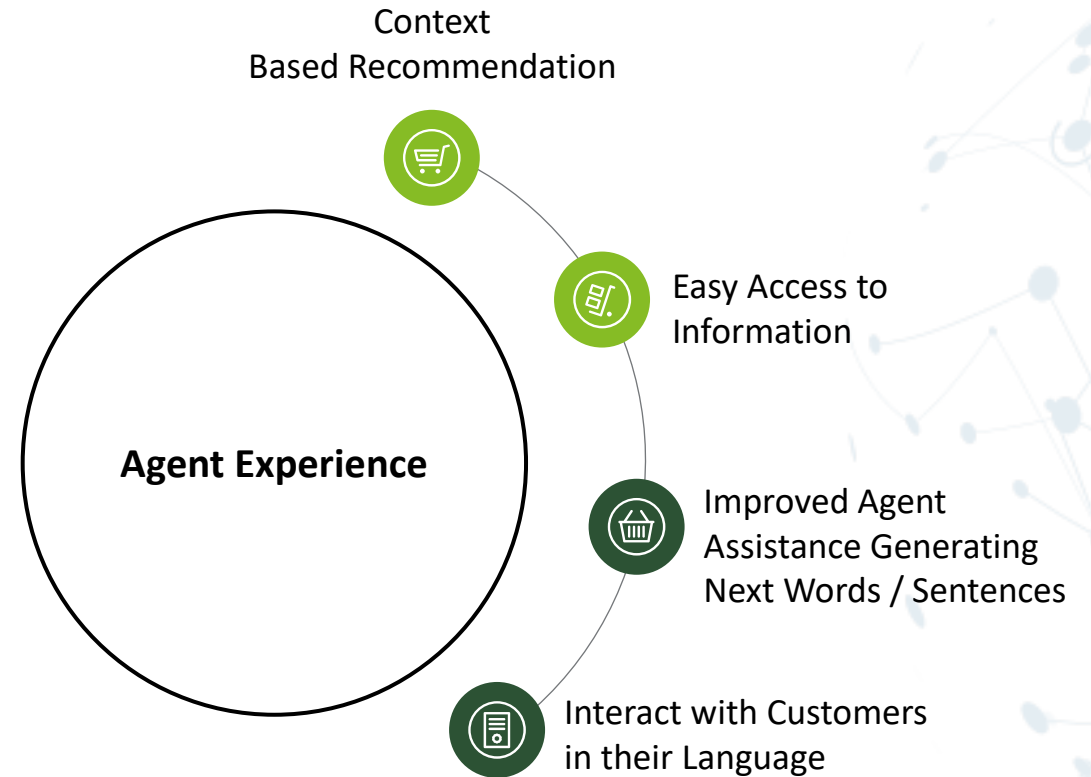
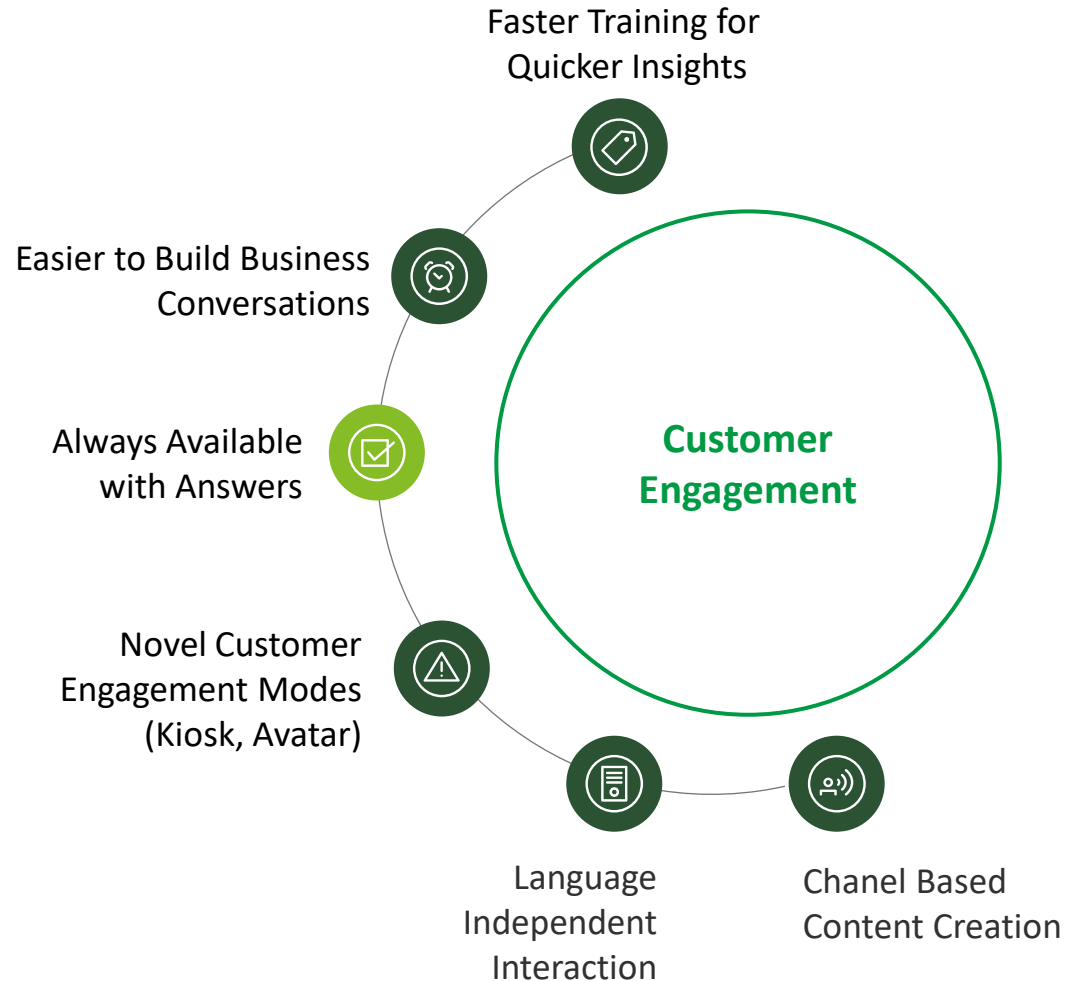
- Is an umbrella term for an automated process that uses algorithms to manipulate or synthesize data
- Produces images, audio, video or human-readable text
- Is different from discriminative AI, which draws distinction between different kinds of input and produces, same, predetermined output, for similar inputs, every time
- Is named so because the AI creates something that didn't previously exist.

Large Language Model...

- Is a Machine Learning Algorithm that can perform a variety of natural language processing tasks,
- It generates and classifies text, answers questions in a conversational manner, and translates text from one language to another
- Is large because it is trained on a large (billions of parameters) volume of data.
- Behavior changes autonomously, as it learns with continuous input of data.
- Can be further fine-tuned with business data to conduct specific business functions

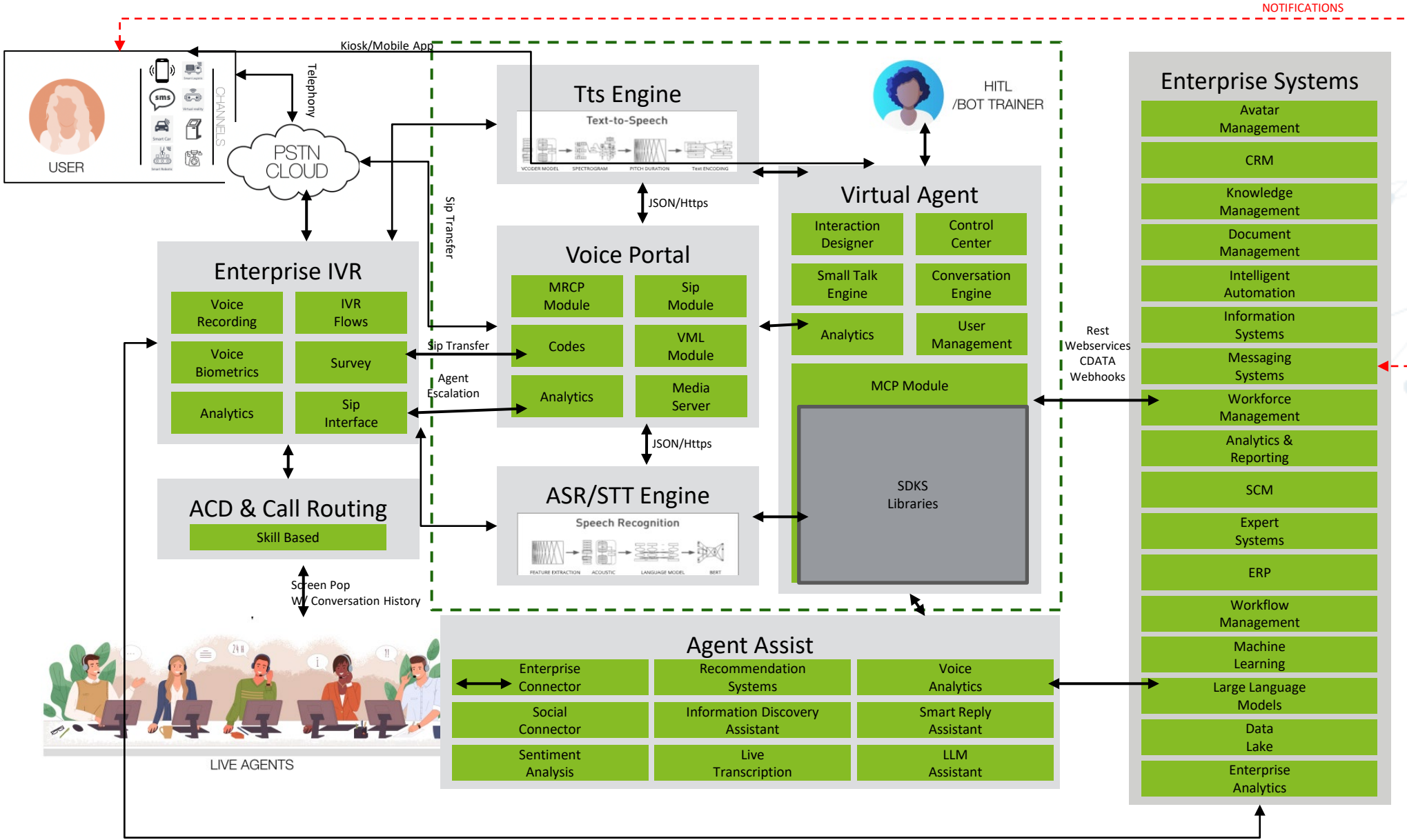
Generative AI is **not a replacement** for traditional conversational AI, but **an augmentation** to improve contact center operations.

Generative AI and Large Language Models applicability to Contact Centers



● Net New ● Improvement

Conversational AI Reference Architecture



Common Pitfalls to Avoid

WHAT TO AVOID



Analytics as an after-thought with poorly articulated business outcomes and minimal ways to measure benefits



Multiple, uncoordinated siloed experiences for different channels, products, & services



Insufficient talent, unable to understand, build, and work with AI



Lack of an improvement plan to incorporate a feedback loop and address model drift



Fragmented operations, carrying technical debt across the organization

WHAT WORKS



Integrate business outcomes & **analytics at the forefront**



Curate unified user experiences across channels, products, services with both centralized and federated components



Understand and plan for **talent implications** to support AI capabilities



Adopt a **mindset of continuous improvement** as part of discovery, testing, training, and tuning the system



Optimize technical readiness with the right infrastructure to meet data, security, and AI needs

Case study: US-based global telecom

AI digital assistant transformation

Issue

Call center operating cost has become prohibitive (~\$1.5 billion in OPEX), principally due to ineffectiveness of the current solution to efficiently address customer needs.

This situation resulted from an increased reliance on human agents contributing to increased spend. The technology with time was out-of-date, needing disruption, revamp, and rethinking, with increasingly higher expectation from customers.

The demography of the user was changing with time, including their modes/styles of interactions with the enterprise. The millennial's attention span and level of expectation from a service provider accelerated this need to embarking on transformation.

Client also faced a problem of ~\$750 million/year in uncollected debt and increasing over time.

Solution

The client engaged Deloitte to transform their call center into a contact center of the future and to map out architecturally significant customer user cases. Deloitte developed the enterprise application architecture, architecture decision records, and the capability map, centered around Google's CCAI platform, leveraging Dialogflow as the AI Brain for intent recognition, while integrating with client's IVR, CRM, and other backend applications through an API gateway.

Additionally, Deloitte built an 'AI in the cloud', voice virtual agent (VVA) in AWS Cloud that delivered a natural, more efficient and engaging customer experience, collecting payments from in-collection customers. This AI system leverages several ML models built for personalized negotiation with customers when they call in and are in conversation with the AI agent

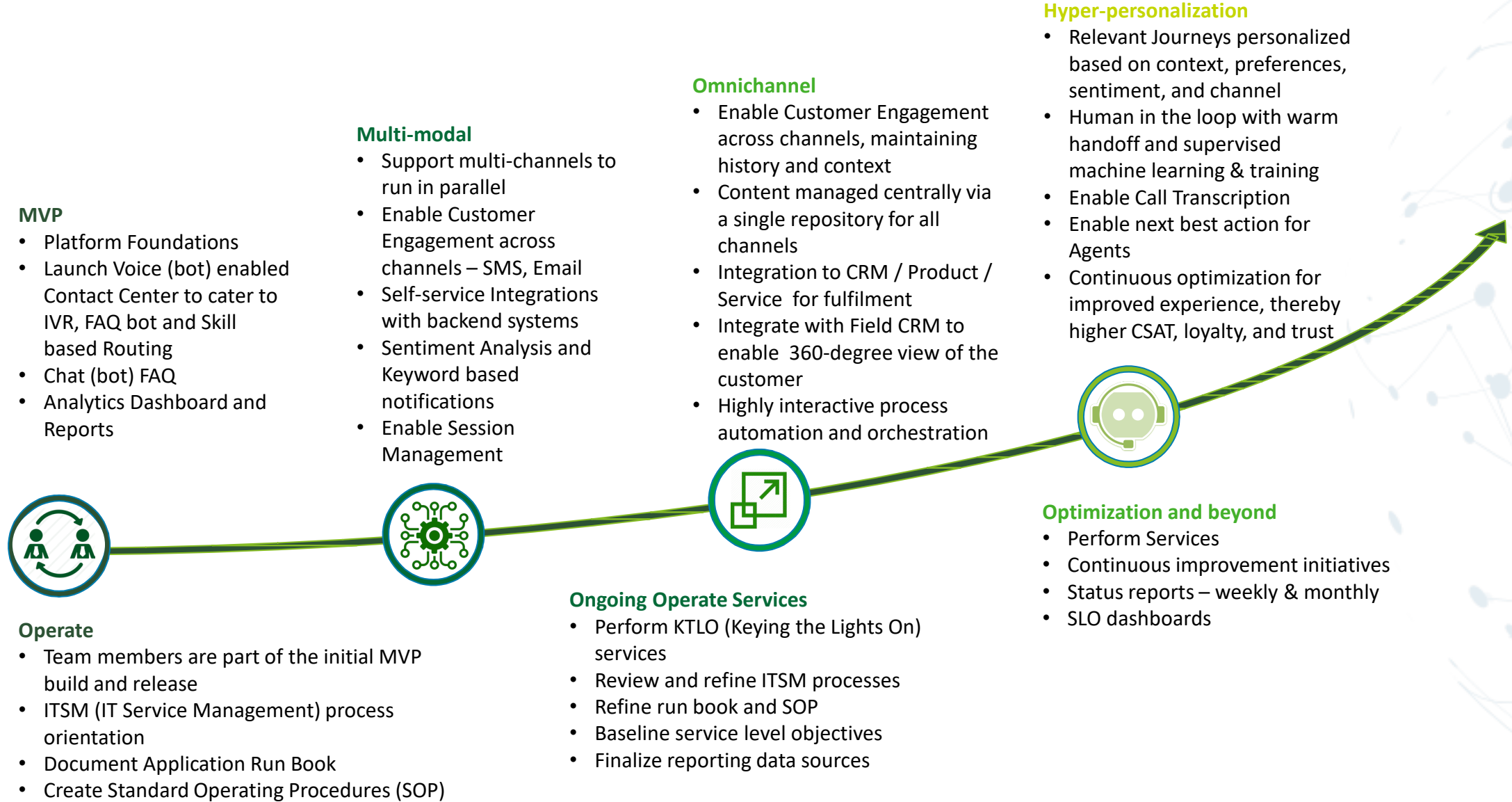
Impact

The Google CCAI enabled transformation is underway, and currently the AI brain is routing ~35% of the total call volume. After implementing all prioritized omnichannel use cases in the voice/chat/SMS AI channels, net saving is targeted to be \$500 million/year

Meanwhile, the 'AI in the cloud' VVA running in AWS Cloud is already generating exemplary results:

- More than 30 million annual calls handled by the VVA in production
- 90% containment rate (calls never get to a human)
- \$150 million in annual savings
- 2X rate of collection

What does an Evolutionary Roadmap look like?



What do Talent and Core Skillsets look like?



CAI Technical Delivery Manager

Elaborates end to end architecture and design from channels to agent integration. Ensures the development is in alignment with leading practices and will achieve the planned business goals; Guide all technical roles on the project, QA their work.



CAI Solutions Architect

Constructs the AI Platform architecture, including microservices, database, storage, CAI Platform Design & Build (e.g., Connect / Lex / Polly, CCAI / Dialogflow, OneReach PDE) Defines the telephony and SIP network architecture to support voice integration (e.g., Genesys, Avaya .



Conversation Designer

Designs non-linear conversations in accordance with leading practices for the key personas and channels, defines agent personality, writes scripts for natural conversations.



ML/Data Scientist

Develops machine learning models (complement NLU models) to inform the conversations driven by AI.



CAI Linguist

Creates intent libraries by data mining, and content understanding e.g., follow-up intents, evaluates NLU performance for automating the customer experience.



Data Governance Lead

Develops approach and structure for managing data models and identifies roles, responsibilities, data tools to develop insights for use by CAI solutions. .



CAI Platform Developer

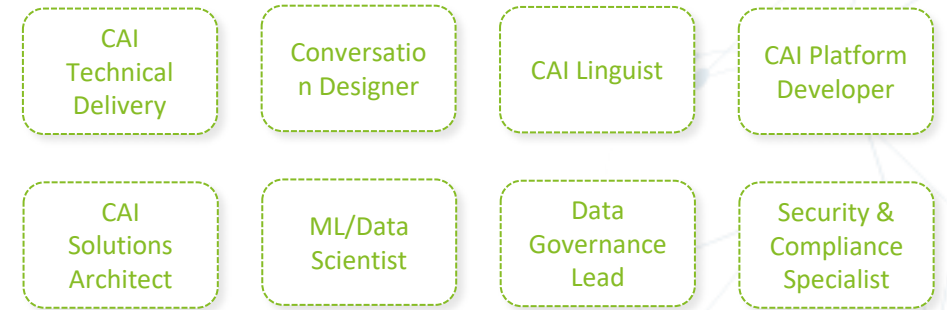
Builds conversation flows, collaborates on NLU Models, data integrations on the core AI platforms; as needed: API and frontend work.



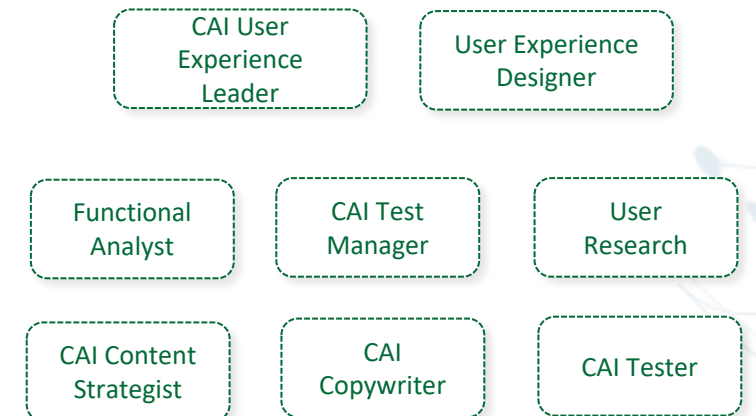
Security & Compliance Specialist

Develops implements, maintains, and oversees internal security policies and procedures.

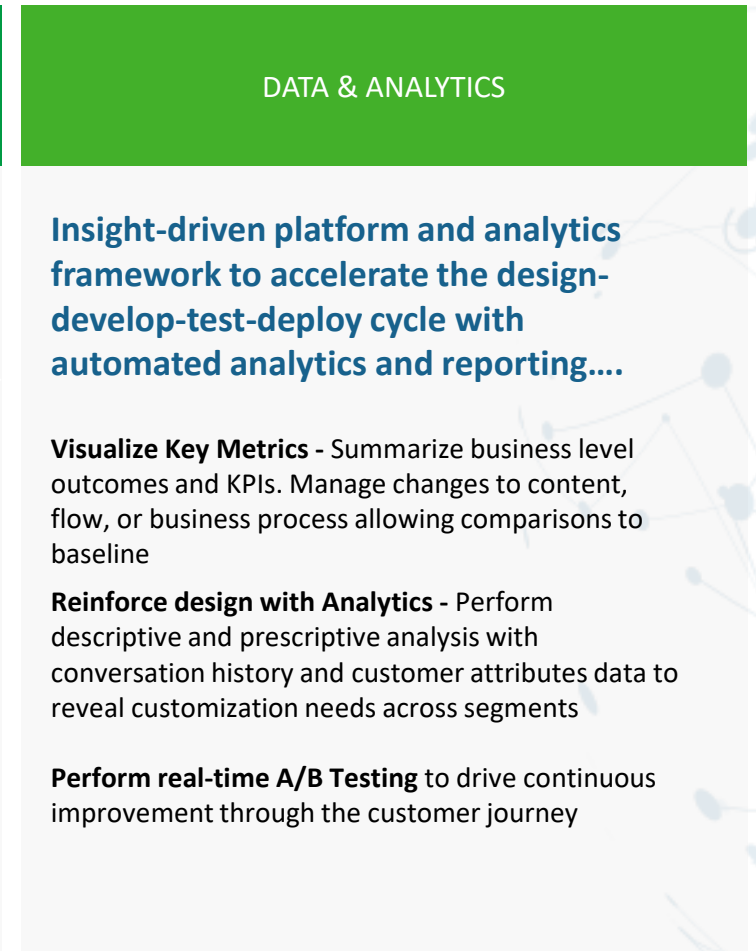
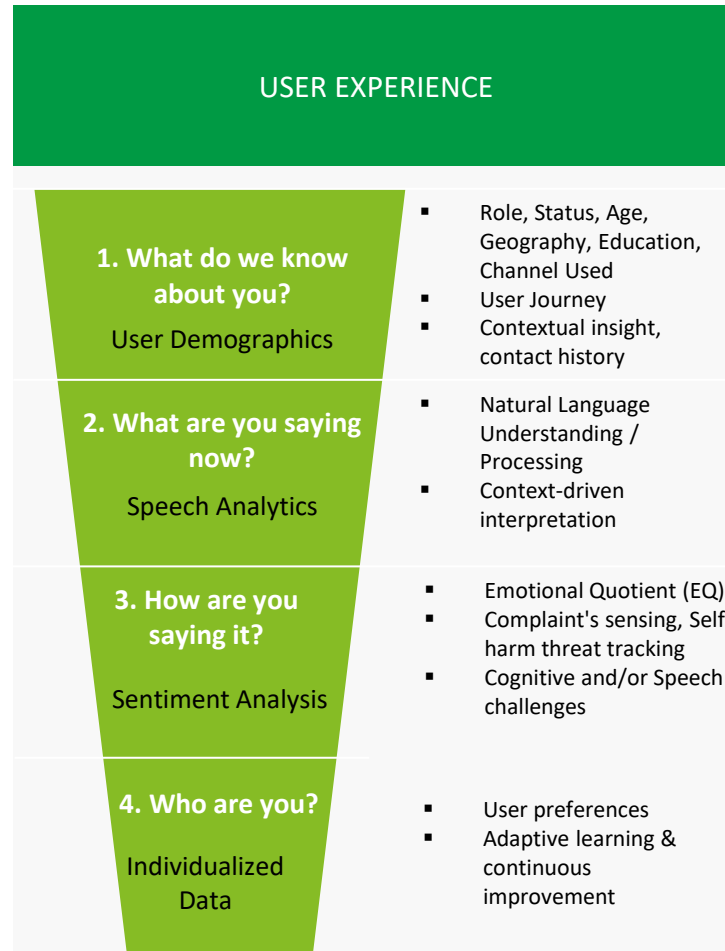
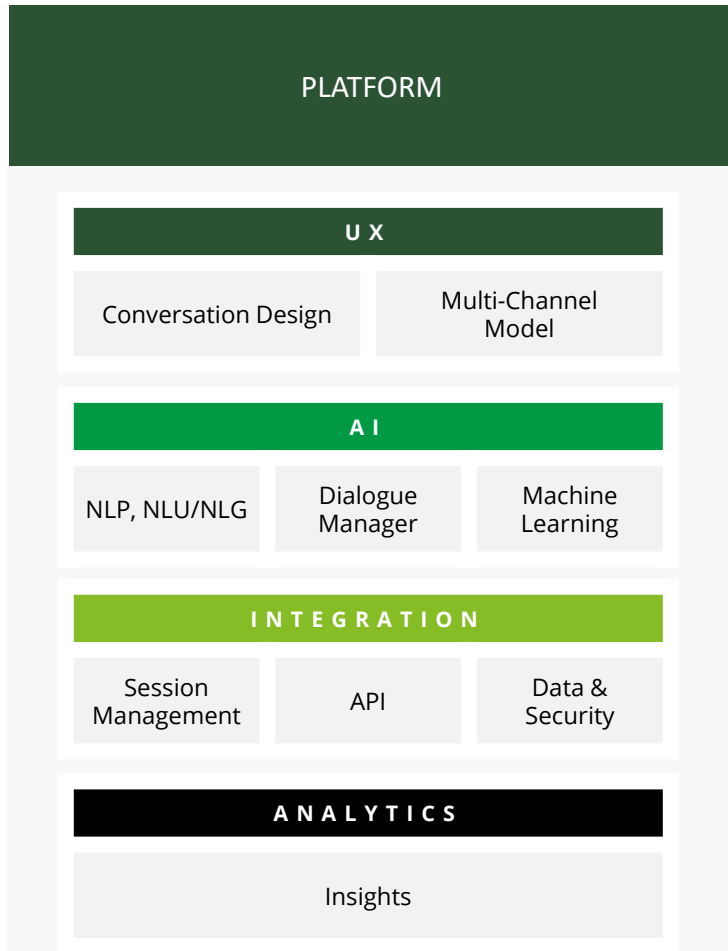
CORE TEAM



SUPPORT



What to Look For When Making **Solution** Decisions





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