



AI-driven Conversational Computing

Developing the fundamental AI technology needed
to make conversational computing a reality



Who is Avaamo?

The Company

Avaamo is a deep-learning software company that specializes in conversational interfaces to solve specific, high impact problems in the enterprise. Avaamo has developed fundamental AI technology across a broad area of neural networks, speech synthesis and deep learning to make conversational computing for the enterprise a reality.

Avaamo provides an enterprise AI platform that tightly integrates tooling, data, and enterprise connectors to ensure designers, data scientists, and developers can design and deploy complex conversational applications in weeks.

Founded by enterprise veterans from TIBCO, SAP, Genesys and IBM, Avaamo is based in Los Altos, California.

The Technology

Avaamo's industry-first patented capabilities include a comprehensive, easy-to-use AI platform that offers the following:

- **Advanced NLU:** Distills and discovers the purpose behind each user's message.
- **Machine Learning:** Supervised and unsupervised learning to learn from your proprietary data.
- **Knowledge Graph:** Ingests company knowledge—structured and unstructured data—to better answer complex queries.
- **Enterprise-grade security,** entitlements, and scalability including HIPAA & GDPR compliance.

“With over 80 customers in 40 countries, Avaamo has received broad customer validation for solving enterprise problems in banking, insurance, telco, and healthcare”

Investors:



The Building Blocks of Avaamo

A “full stack” platform

Advanced NLU

Avaamo’s proprietary NLU Engine helps process and understand complex user queries. With a specific focus on reducing false positives, the NLU engine classifies users’ intents and accurately extracts key entities from users. It distills and discovers the purpose behind each user’s message.

Machine Learning

Avaamo’s data science automation sifts through raw data like voice transcripts, understands top intents, and intelligently labels and categorizes your data. Our data science automation utilizes data mining and statistical analysis to determine trends and patterns in data. Data is classified into appropriate intents by using the suitable algorithms.

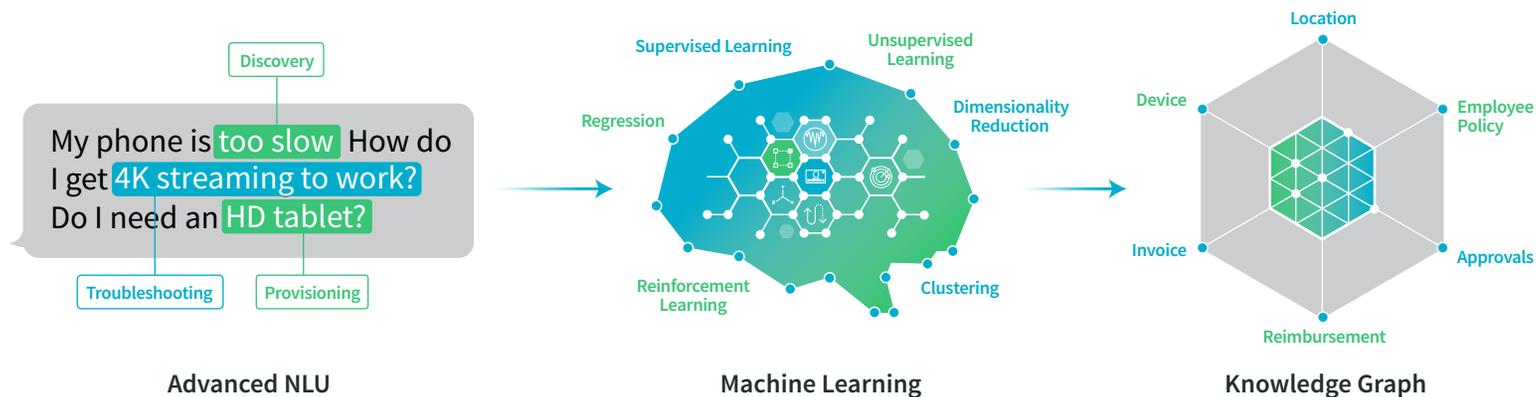
Avaamo’s platform incorporates the techniques of advanced data science to categorize the unstructured data. It eliminates many traditional machine learning pipeline activities using a combination of intelligent preprocessing, query identification, and unsupervised classification.

Knowledge Graph

Avaamo’s knowledge graph can ingest company knowledge sources like documents and websites and instantly enable your virtual assistant to learn and respond to a customer’s natural language queries about that knowledge.

Avaamo’s platform dynamically constructs a knowledge graph based on documents and other assets. The knowledge graph is the basis for responses to natural language queries. Avaamo’s platform uses the knowledge graph to store data flexibly and in a way that allows the platform to understand the meaning of information in the complete context of their relationships.

Figure 1: Avaamo’s fullstack conversational AI platform



Let's Pick Avaamo's Brain

How Avaamo works

Avaamo analyzes questions to determine what type of information is needed as well as various possible interpretations of the questions. Avaamo pores through system of record that may be connected or other repositories to arrive at a confidence score on the best possible answer. In the case of ambiguity, Avaamo asks for clarification using a technique known as disambiguation.

Avaamo's score can improve with time through learning based on interactions with the user or better training by using existing results.

The Easy Part

A question well formed grammatically and stated in terms that match information can be answered immediately and accurately.

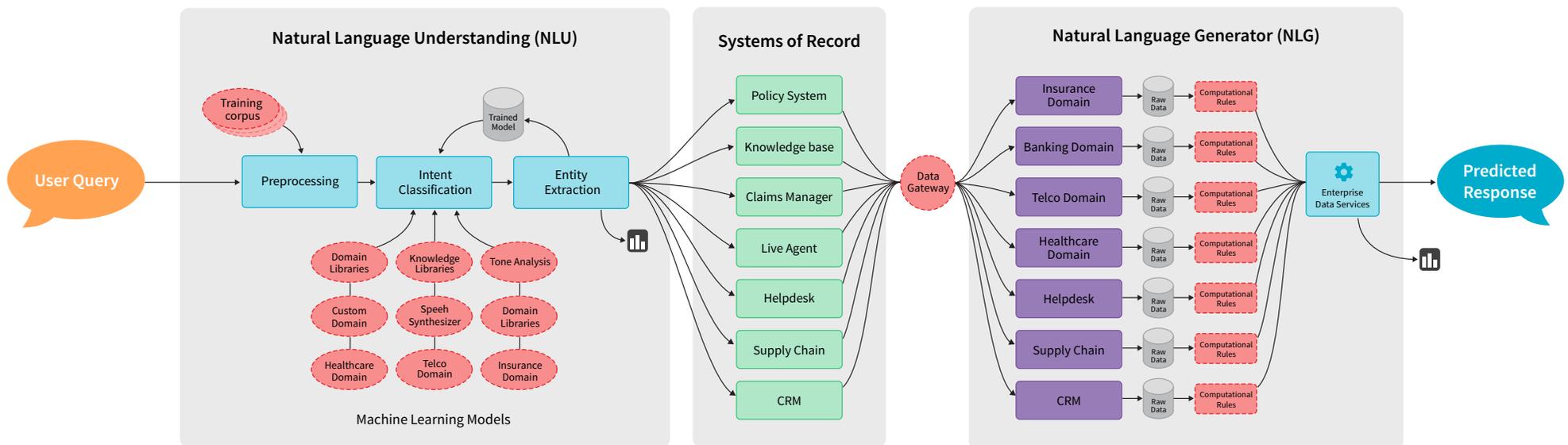
"Where is the nearest ATM?"

"Has invoice number 2343 been processed?"

The Hard Part

Humans, whether in text or conversations, do not create perfectly structured questions. They are subject to syntax errors, spelling mistakes, and ambiguity in meaning and context.

Figure 2: Avaamo's multi-layered, massively parallel conversational platform



A “Smart” Desk

Learn the power of intelligent service desk automation

Service desk costs are climbing despite countless cost savings maneuvers. A typical help desk department is underfunded and overloaded: there is an average of 15 agents for every 1,500 employees; each ticket takes 10 hours to resolve and there is a 120:1 ratio of tickets to technicians. Conversational AI has initiated a new turn in human-computer interaction that is radically improving the service desk. Users can talk, text or type a query to a virtual assistant and engage in a multi turn meaningful conversation to solve the problem.

Automating The Mundane

AI-driven virtual assistants can be built to handle repetitive service requests: unlocking accounts, resetting passwords, even complex tasks like troubleshooting email or increasing storage. This frees service agents to higher-level tasks. The virtual assistant does not need overtime and works Sundays. Scaling to higher volumes does not require bringing new headcount on board but just adding more servers.

Judgment Intensive Tasks

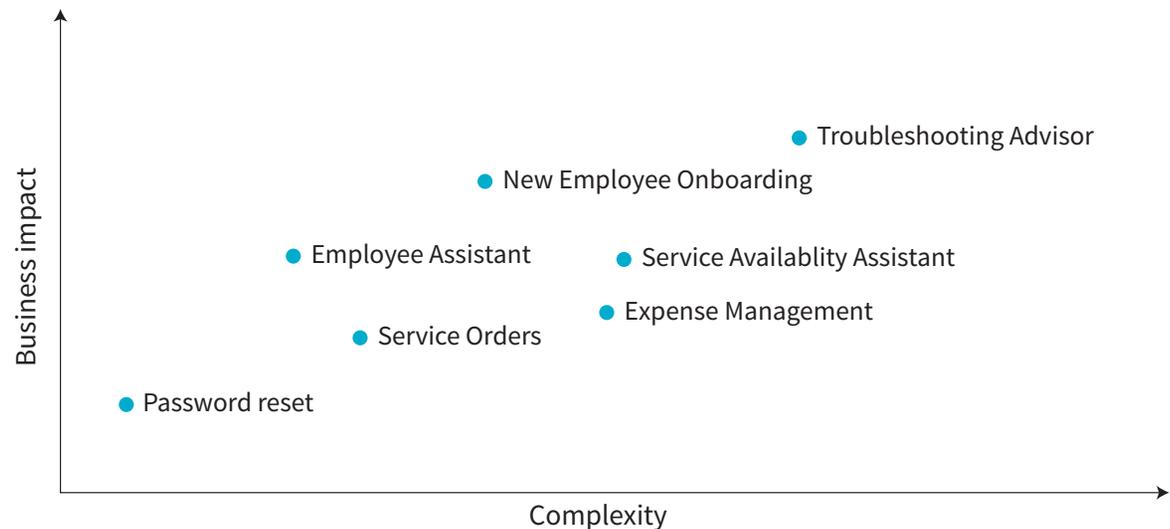
Second generation conversational AI solutions can now use the abundant history available

from existing enterprise interactions, including chat, voice transcripts, transactions and other preexisting enterprise data in your IT service management systems to learn. It can converse and discover using disambiguation technology to suggest, recommend and engage based on these learnings. Complex tasks like troubleshooting your Skype and upgrading your software become easier and are quickly becoming the new frontier of the modern help desk transformation initiatives.

44%

Reduction in Service Tickets

Figure 3: Service Desk Use Cases



Building the Bank of the Future

Conversational banking in the age of biometrics, bitcoin, and robo-advisors.

Avaamo's banking and finance customers use conversational AI to help their consumers quickly get to the most relevant financial product, entice them with in-the-moment predictive offers that have 30%+ acceptance rate, and remove friction in the typical loan initiation or mortgage origination process. Avaamo helps financial institutions enable their customers with biometric identification, digital currencies, and mobile payments through conversational interfaces through AI for business.

Account Servicing

You are able to do much more when your bank uses Avaamo's conversational AI enabled virtual assistants to provide seamless access to your financial accounts: check your balances, track your trades and review your monthly mortgage. Avaamo is also helping wealth management customers provide intelligent and personalized access to their investment portfolio for high-net-worth individuals.

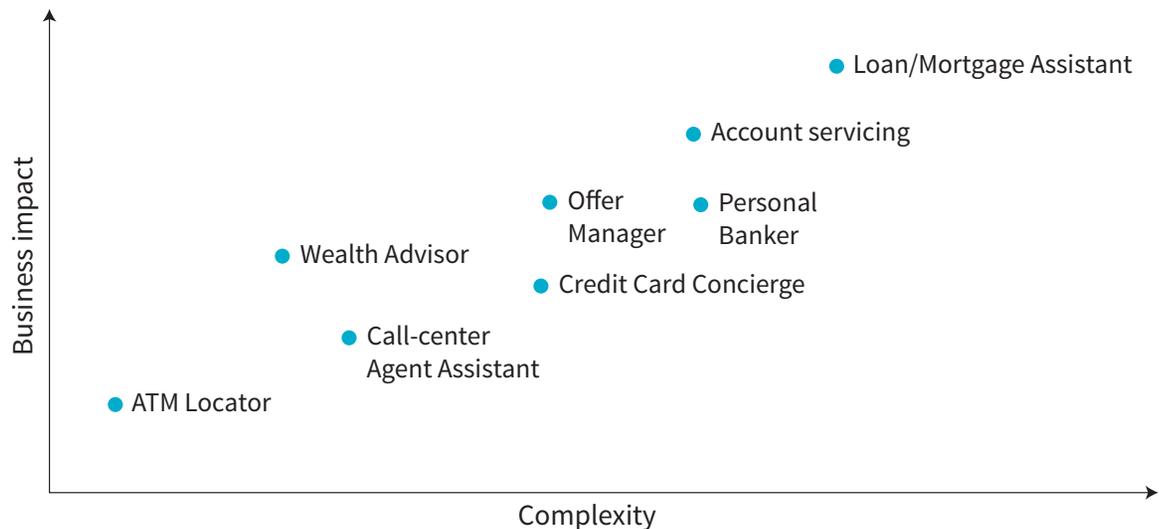
Fraud Detection & AML

Avaamo's customers use intelligent markers generated through millions of conversations to track fraudulent and money-laundering activities.

If a consumer is identified as a potential victim of a fraud, Avaamo's conversational AI platform navigates through a detailed troubleshooting process to pinpoint the relevant transactions and immediate kickoff remedial actions. By automating tasks, banks can cut down inbound calls, resources in branch offices and transaction costs by nearly 60-70%.

30%
Improvement in offer acceptance

Figure 4: Financial Services Use Cases



Insurance: Streamlining Claims, Helping Customers

Intelligent Interactions in Insurance

Insurance claims is a stressful process. Members don't remember what plan they purchased and can't recall their deductibles. Conversational AI can communicate with people via phone or text in a way that feels authentic, even human. It simplifies the insurance process for the customers, assures them that the insurance companies are here to help, and answers every question with nary a tinge of irritation.

Simplicity and Clarity

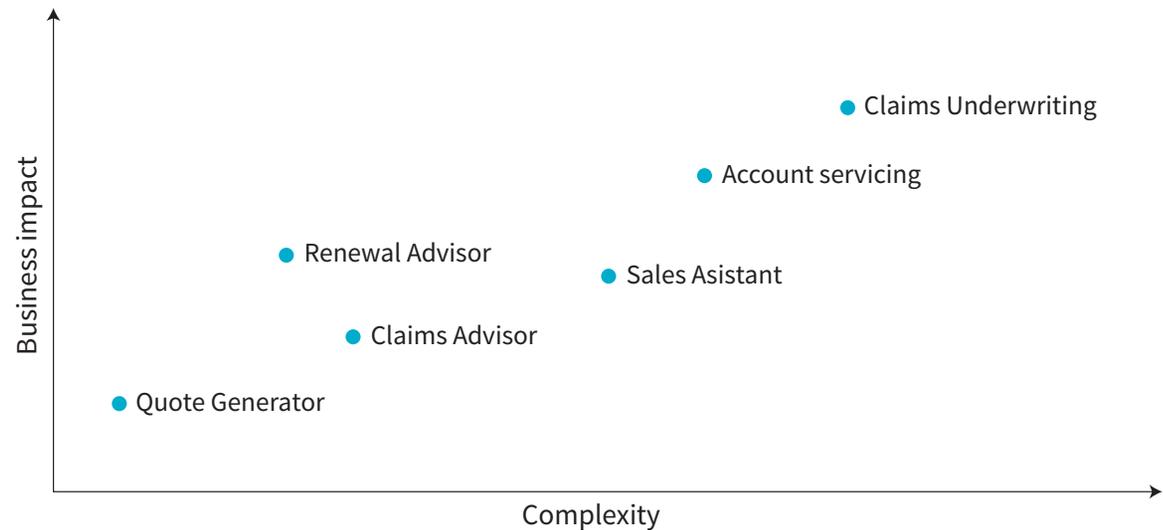
Virtual assistants can simplify plan choices, clarify industry terminology and generate a quote in minutes. Once the member purchases an insurance policy, conversational AI can onboard the member efficiently and help her understand what she has bought. By guiding members to the appropriate claims forms, clarifying their questions about details required in those forms, and ensuring that the forms get submitted to the right inbox, conversational AI can make this process a lot less painful for members.

Benefits For Companies

Conversational AI can deliver significant financial benefits to insurance companies by eliminating costly errors in the claims forms. Conversational AI changes the claims process from an adversarial situation to an empathetic conversation. Ultimately a claim resolved painlessly is a customer retained for life.

64%
Increase in Customer Engagement

Figure 5: Insurance Use Cases



Innovating Healthcare

One conversation at a time

The average patient spends 30 minutes trying to find the right service at the hospital and often has little idea how to manage chronic medications or when to refill prescriptions. Conversational AI will help overhaul and improve patient-provider relationships and improve medication management.

Fewer Readmissions, Healthier Patients

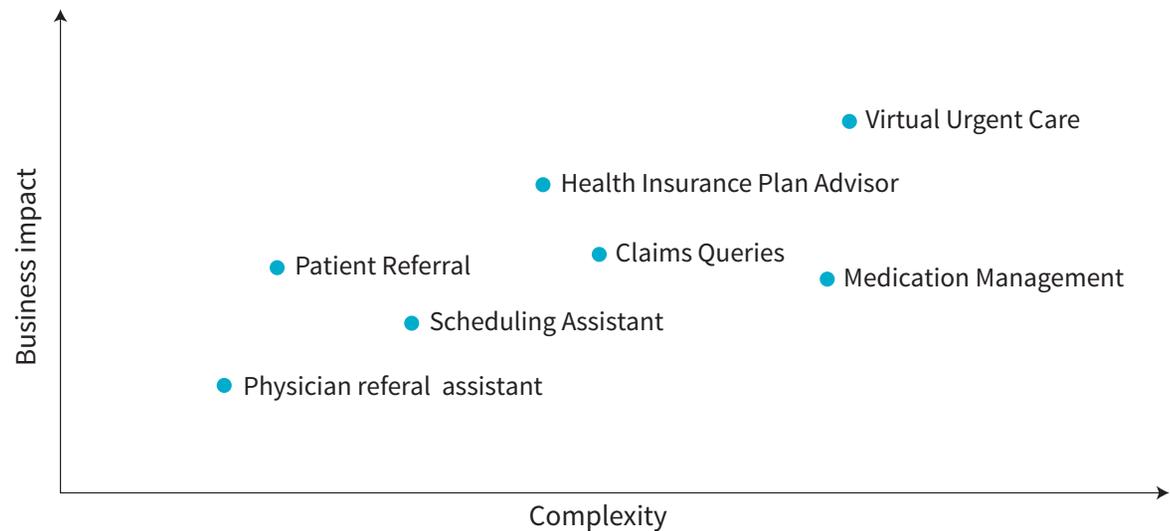
Health care providers will be able to automate simple queries and offer access to services like wellness program enrollments. This will mean increased patient satisfaction and a reduction in readmission rates. Conversational AI also has a considerable upside for chronic conditions like diabetes: patients will be reminded to check their insulin and stay on top of their health issues. The possibilities are enormous: patients will be able to track both their condition and treatment, quickly access their healthcare records when considering treatment options, and eventually even report new symptoms or concerns to see if they should schedule an appointment. Avaamo is the industry's only HIPAA-compliant conversational AI platform.

Curated Care

As AI becomes more commonplace and accepted in the healthcare field, there will be more developments that improve and personalize health care. One possibility with significant potential is conversational AI that uses simple diagnostics to tell patients whether to pursue treatment at home or visit a doctor (and then book an appointment).

60%
Decrease in Patient Calls

Figure 6: Healthcare Use Cases



Telecommunications

Peerless Customer Support

Upgrading your phone or inquiring about a questionable cell phone charge can be an endless process that bewilders customers. Avaamo’s Telco customers are using conversational AI to guide their subscribers through the bewildering choice of phone models (and EIPs), prepaid and postpaid plans. McKinsey estimates that telecommunications companies can cut customer service calls by 90 percent by adopting solutions including conversational AI.

Account Services

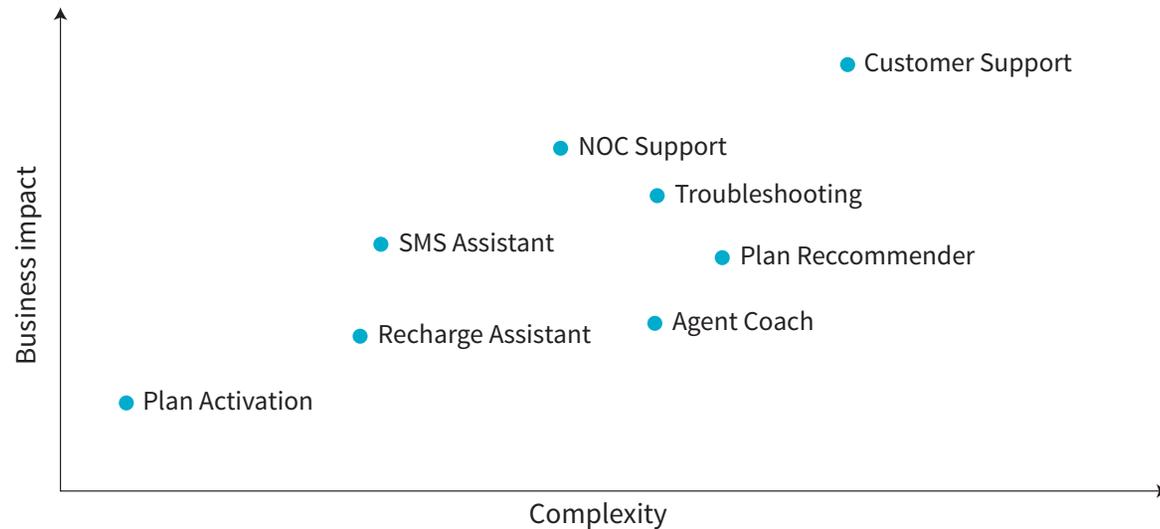
Avaamo telecommunications customers are using conversational AI to provide a wide range of account services through personalized conversational interfaces embedded in their websites and custom mobile apps. Whether it is activating plans, understanding data usage, doing top-ups, and paying off bills for individual subscribers, or understanding network utilization, latency, and error rates for wholesale and business customers,

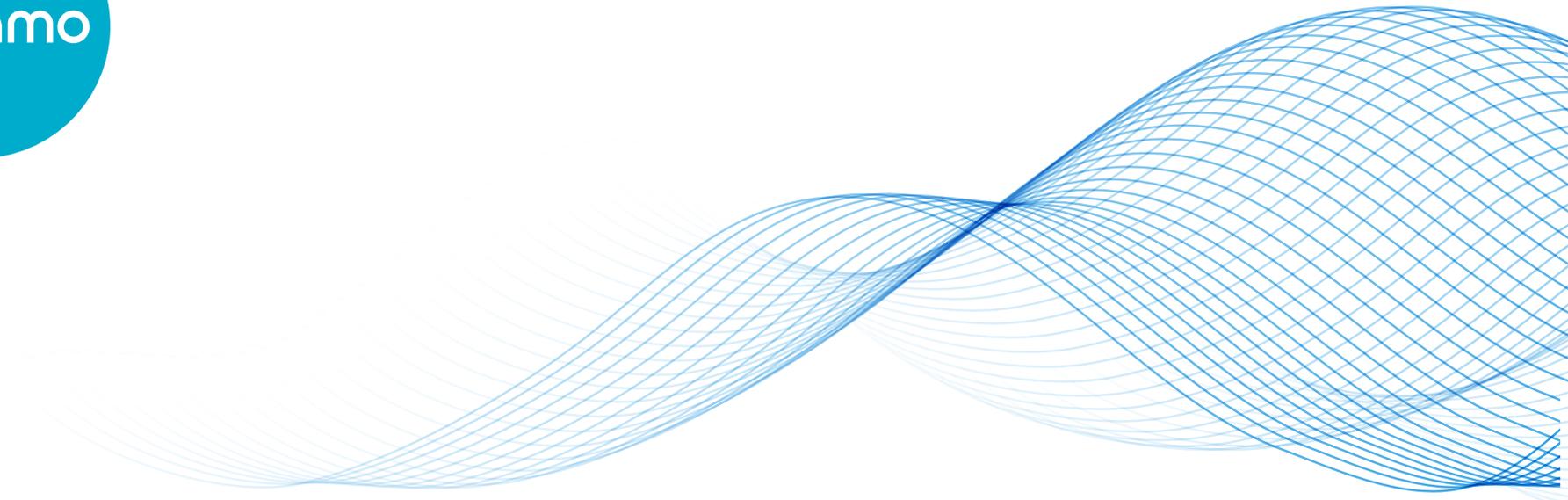
Streamlined Operations

As telecommunications companies embark on an ambitious agenda of 5G Network upgrades and process digitization, there’s a constant need to retrain and improve employee productivity, especially in customer-facing roles. Avaamo’s conversational AI will help telecommunications companies streamline scheduling and field operations and quickly train their enterprise sales teams on new skills.

25%
Increase in cross-sell revenue

Figure 7: Telco Use Cases





AI-driven Conversational Computing

Artificial intelligence makes simpler, smarter interactions with consumers possible. It also drives big wins for business. What will AI do for you?

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