

# Solution Brief

Interactive Media  
Artificial Intelligence



## NavAjna Technologies Bridges the Gap Between Virtual and Physical Customer Experiences with Avanta AI-Driven Hyper-Realistic Avatars

The Avanta AI solution leverages cutting-edge generative AI algorithms, optimized with Intel® technology, to revamp the customer experience through enhanced, life-like, digital interactions.



### About NavAjna Technologies

NavAjana Technologies is a global technology solutions company helping businesses navigate the challenges posed by rapid technological advancements and increasing business complexities. Based in India, their vision, "Innovation for a simpler tomorrow," is the driving force to provide clients with smart technology solutions that enable seamless operations and unhindered focus on core strengths. NavAjana's expertise lies in delivering global enterprise solutions efficiently; prioritizing timely, cost-effective solutions to address each client's unique challenges comprehensively. With 16+ years of delivery management and outsourcing experience, NavAjna ensures enterprise-level solutions of utmost quality.

### Humanizing Digital Interactions for an Elevated Service Experience

Picture the frustration of navigating a crowded mall without clear directions or the annoyance of being stuck in an airport queue, waiting for customer service support. These everyday scenarios are something every consumer has experienced, yet leave many asking why, with the advancement in technology, do these situations still need to be so inconvenient, frustrating, and often plagued with human error or subpar technology. In today's world where seamless, convenient, and personalized experiences are increasingly seen as the norm, failing to meet these growing expectations leaves customers feeling dissatisfied and unfavorably colors their overall experience. Negative experiences can taint customer perspective on certain brands and companies and influence their decision on whether to return to certain locations or purchase specific products. Companies recognize the need to improve customer experiences, yet traditional strategies, such as hiring additional staff or investing in lackluster technology solutions, can be expensive and cumbersome with little return on investment.

Many companies are embracing AI to support customer service and experiences, most notably when it comes to personal interactions. According to Salesforce, 88% of customers say the experience a business provides is as important as the products or services, and 94% say service influences repeat buying decisions.<sup>1</sup> AI-powered tools such as chatbots offer conversational abilities that address customer concerns quickly and can reduce customer service costs by as much as 30%. However, despite the convenience of tools like these, 60% of people cited the preference of speaking to a live customer service representative as opposed to a chatbot.<sup>2</sup>

Imagine a world where digital presence transcends the boundaries of screens and pixels to break down the barriers of inconvenience and facilitate a seamless experience for each individual. Where conversations are held with life-like avatars that possess the ability to converse and engage with people on a personal level. This is the world NavAjna Technologies is here to offer customers with their solution, Avanta AI. By offering a human-like substitute within industries where prevailing conversational tools often come across as mechanistic, Avanta AI emerges as a breakthrough solution. By bridging the gap between human and digital interaction, the solution fundamentally transforms the way consumers connect, engage, and communicate within service environments.

## Solution Overview

Avanta AI isn't just a solution; it's an embodiment of future interaction, where digital avatars enrich experiences and reshape relationships between humans and technology. This entails the creation of hyper-realistic, human-like avatars that are digitally projected to interact and converse with users. These avatars offer the convenience of real-time interactivity at service touch points, enabling two-way engagement between customers and AI avatars to offer support at a personal level and provide assistance based on individual needs.

But Avanta AI's potential extends beyond customer service and spans a variety of industries. Think of the impact the solution offers in the field of education – where historical figures like Albert Einstein could be replicated to walk students through complex scientific concepts and provide an immersive learning experience. Or consider the entertainment industry, where beloved characters could interact directly with fans in advertisements for new movies or video game installations, transforming the way individuals engage with media. Businesses across verticals also unlock the ability to retain a tireless digital workforce capable of providing service to customers, as well as training and onboarding for new employees, around the clock.

At the heart of Avanta AI lies generative AI, a pivotal technology that facilitates the human-like exchange between avatars and people. Avanta AI utilizes advanced generative AI algorithms that are trained on vast datasets of human interactions, facial expressions, voice variations, and body language.

These datasets allow projected avatars to learn and mimic the nuances of human behavior, language patterns, and emotional cues, providing the following core functionalities of the solution:



**Voice & Human Cloning:** Cutting-edge AI technology replicates voice and expressions, crafting remarkably lifelike experiences within the virtual realm.



**Conversational Avatar:** Avatars can engage in a variety of bi-directional conversation styles that span light-hearted banter, stimulating discussion, informative queries, and more.



**Integration with Knowledge Bank:** Infuse avatar's intelligence with personalized knowledge, whether it's for superior customer service, in-depth product or service insights, or expert guidance.



**Cognitive Intelligence:** Take advantage of instant access to a treasure trove of knowledge prebuilt into NavAjna's platform to equip avatars with a virtual brain that learns, thinks, anticipates, and empowers a quality digital experience.



**Avatar Teleportation:** Enter an era of instant global connectivity with the capability to project unique virtual presence worldwide with avatar teleportation.



**Multilingual Capabilities:** Overcome language barriers and nurture global connections with the capacity for multilingual communication.



**Adaptation and Learning:** Generative AI continually learns from each interaction, adapting to user preferences, conversational styles, and context. This learning process allows avatars to become increasingly sophisticated and accurate over time.



**Robust Data Privacy and Security:** All user-uploaded images, videos, and audio are encrypted before being stored in the database. Avanta AI employs a two-step verification process using a password and the user's phone number for identity verification.

## Avanta AI Spans a Variety of Industries:



### Retail

Offer customers the chance to utilize highly personalized virtual shopping assistants, enhancing their shopping experience and ensuring exceptional satisfaction.



### Banking

Transform the banking experience with AI-driven virtual bankers and personalized financial advisors, revolutionizing the way financial advice is delivered.



### Travel and Hospitality

Introduce lifelike virtual concierges, tour guides, and booking assistants, opening the door to a world of possibilities for tailored travel experiences from customized itineraries to insider recommendations.



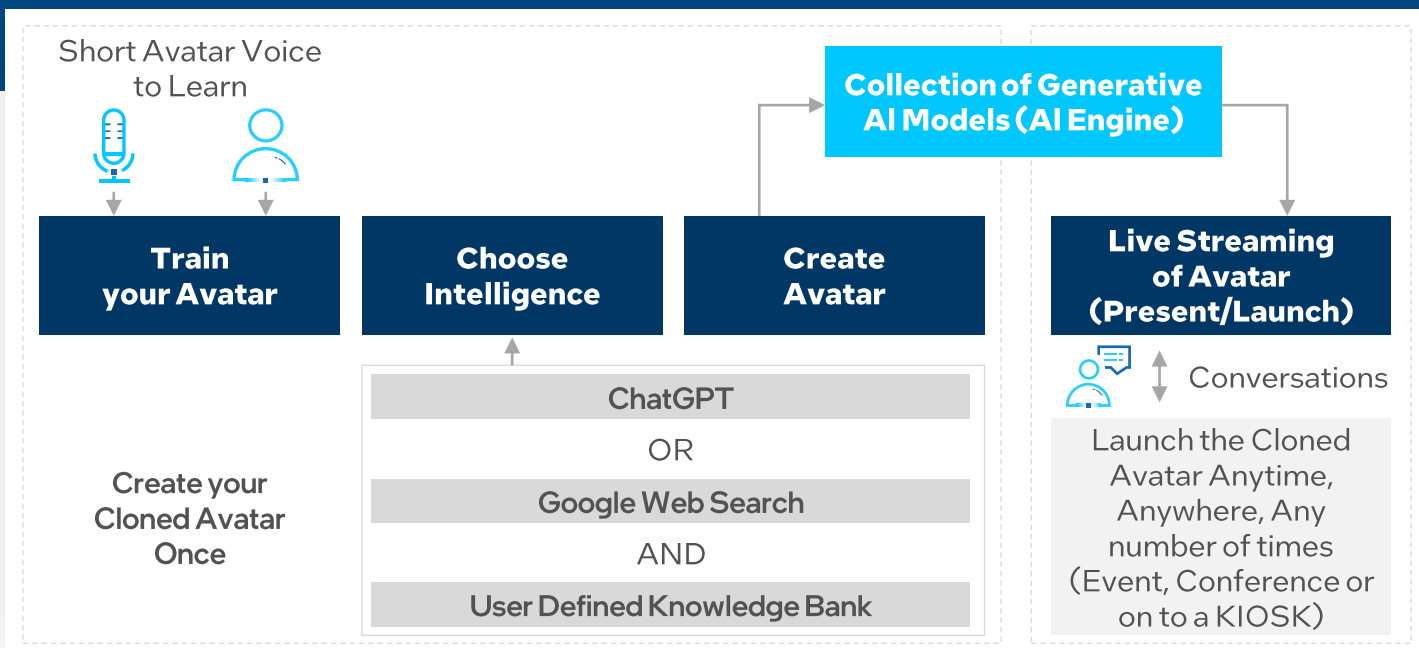
### Education and Training

Create realistic virtual tutors, trainers, and mentors to deliver personalized and immersive learning experiences that cater to unique requirements and skills development.

## From Vision to Reality: Crafting Digital Avatars

Avanta AI presents users with flexibility to choose between an on premise or cloud deployment. Users embark on a journey to craft their avatars in the following steps:

- 1 Upload a personal video or select a predefined character
- 2 Infuse avatar with your voice or choose from existing options
- 3 Remove backgrounds for a polished, standalone look or choose a customizable setting to project your avatar into
- 4 Add intelligence with conversational AI powered by Google Web Search or ChatGPT, and your Knowledge Bank to establish conversational capabilities
- 5 Verify your identity and register your mobile number for a 2-step verification process to protect user information and privacy
- 6 Submit your creation, ready for interaction. Avatars can be streamed on any type of projector or screen as long as it is equipped with a microphone for two-way communication
- 7 Deploy one or multiple instances of the created avatar across desired locations



## End Customer Benefits



**Enhanced Customer Experiences:** Avanta AI humanizes digital interactions, offering customers elevated and personalized service support that breaks free from the constraints of traditional technology for a more immersive experience.



**Reduced Frustration and Improved Satisfaction:** Customers can circumvent friction points within service environments and avoid the frustration of long wait times and lack of support, as the avatars offer real-time assistance to facilitate a seamless and convenient shopping experience.



**Consistency in Service:** Avatars have the ability to deliver consistent responses that adhere to predefined company guidelines and protocols to ensure that customers always receive standardized information and support.



**Cost Savings:** Companies can reduce labor costs associated with hiring and training additional staff, particularly for predictive, repetitive, and generic touch points with stakeholders like customers, audience members, and others. These financial resources can be redirected to more strategic initiatives.



**Around the Clock Availability:** Avanta AI provides businesses with a digital workforce capable of delivering services and assistance around the clock, ensuring constant availability for customers.



**Increased Productivity:** Launch multiple instances of the same avatar across different locations, allowing the reallocation of human labor to be utilized elsewhere.

## Intel® Technology Perfectly Complements Avanta AI

Intel® technology plays a pivotal role in optimizing the Avanta AI solution's development and deployment process, resulting in significant cost savings and expedited time-to-market.

**Intel® Distribution of OpenVINO™ toolkit** offers a comprehensive suite of features for AI model optimization on Intel® hardware. This results in faster inference and better utilization of Intel® processors, GPUs, and hardware accelerators. Optimized generative AI models enhance efficiency and reduce computational overhead, thereby minimizing hardware requirements and lowering overall costs.

**Intel® Core™ processors** are renowned for their high performance in complex tasks. These processors greatly accelerate AI model training and optimization, reducing the time needed for fine-tuning generative AI algorithms.

The synergy between Intel components streamlines the solution, shortening development cycles and minimizing costs. Intel® Core™ processors expedite training while the Intel® Distribution of OpenVINO™ ensures efficient deployment on diverse hardware. This synergy not only speeds up time-to-market but also reduces expenses by optimizing resource utilization.

Through collaboration with Intel, Avanta AI achieved significant strides in optimizing one of its generative adversarial networks (GAN) models, slashing development time from months to weeks.

### This partnership yielded impressive performance upgrades for the solution:

- A **9.4X enhancement in frame rate** from 5 FPS to 47 FPS
- A **2X enhancement of image quality** from 512x512 to 1080x1080
- **Improved precision from FP32 to FP16**
- **Maximized efficiency for Intel® Core™ processors** through asynchronous parallel processing

This collaboration substantially amplified the overall impact of Avanta AI's generative AI technology.<sup>3</sup>

3. \*Data from internal tests results of NavAjna. Intel does not control or audit third-party data. Please review the content, consult other sources, and independently confirm if the data provided is accurate.

## Conclusion

Customers are always looking for continuous enhancements related to convenience, engagement, and a personalized experience. Avanta AI responds to this demand by seamlessly integrating virtual reality into mainstream enterprise operations with the power of generative AI. Pioneering the connection between physical and virtual realms, Avanta AI generates digital avatars that facilitate tangible experiences to assist and engage individuals during their service journey. With the ability to provide authentic and informative conversations in real-time, Avanta AI sets a new standard for customer engagement and interaction.

Visit the [NavAjna Technologies website](#) to learn more and book a demo today.

## Learn More

To learn more about the NavAjna Avanta AI Solution visit:

- [Avanta AI Website](#)
- [NavAjna & Intel Strategic Partnership Announcement](#)

To learn about Intel® technologies visit:

- [Intel® Core™ Processors Product Page](#)
- [Intel® Optimization for PyTorch Product Page](#)
- [Intel® Optimization for TensorFlow Product Page](#)
- [Intel® Distribution of OpenVINO™ Toolkit Product Page](#)



## Sources

1. [Nearly 80% of High-Performing Field Service Organizations Use AI — Here's What Else They're Doing Right](#), Salesforce, 2023
2. [30+ Artificial Intelligence Statistics and Facts for 2023](#), CompTIA, 2023
3. Data from internal tests results of NavAjna. Intel does not control or audit third-party data. Please review the content, consult other sources, and independently confirm if the data provided is accurate.

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