

Case Study

20% Sales Uplift with BytePlus Digital Avatar at Yamada Denki



How Japan's largest electronics retailer boosted tourist conversions with BytePlus' multilingual digital avatar.

A Familiar Name Takes a Bold Step Forward

Walk into a Yamada Denki store in Tokyo or Narita Airport and you're greeted by rows of gleaming electronics, attentive staff, and — at select counters — a 40-inch screen featuring a human-like digital avatar.

This is no futuristic gimmick. It's part of the retailer's quiet but decisive move to modernize customer service for Japan's growing population of overseas visitors. Yamada Denki, with 975 stores nationwide and commanding nearly 30% of the country's consumer electronics retail share, has long been known for its expansive selection of appliances and home goods. But as tourism to Japan surged, the company recognized that its traditional service model—reliant on human staff and handheld translation machines — was being stretched thin.

"Serving inbound tourists effectively had become a real challenge," recalls Shun Kim, Director of the Inbound Promotion Department at Yamada Denki.



"Language barriers, long queues, and inconsistent information delivery were dampening the experience we wanted to offer."

The Challenge of Serving the Global Shopper

While Yamada Denki prides itself on in-person service, it faced a confluence of issues:



The cost and availability of multilingual staff in Japan's tight labor market.

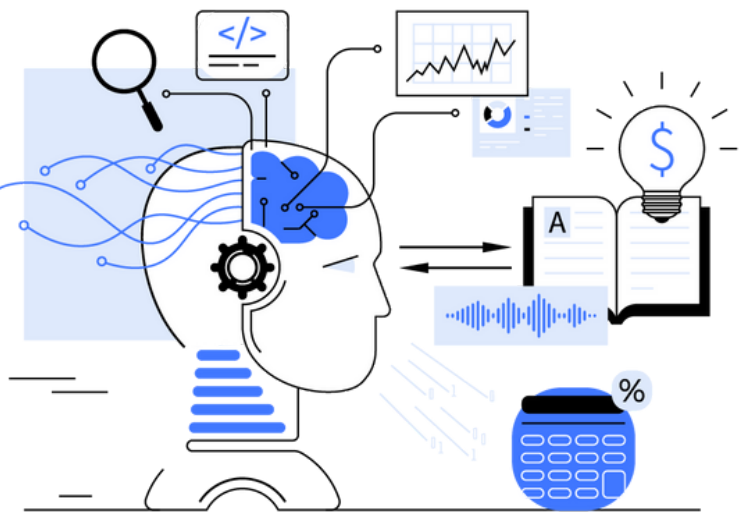


Uneven service quality across locations, especially during peak tourist seasons.



Limited tools for tourists to navigate duty-free processes, digital payment methods and product recommendations for high-interest items such as beauty electronics.

The retailer needed a solution that could **scale hospitality without diluting it** — one that felt natural in Japan's service-oriented culture while bridging the language gap.



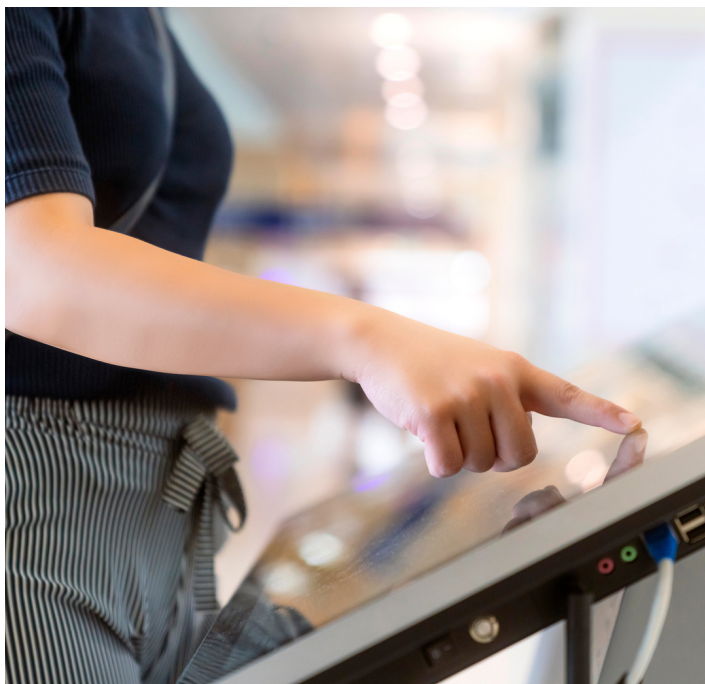
Choosing BytePlus: A Partnership Rooted in Adaptability

Among several AI vendors evaluated, **BytePlus stood out for two reasons: its multimodal LLM-backed Digital Avatar and its hands-on engineering support.**

The Digital Avatar offered **speech-enabled, real-time multilingual conversations** in Japanese, English, Chinese, and Korean, making it immediately practical for airport-side stores. Equally important was how the BytePlus team approached deployment.

“The deciding factor was the team’s flexibility,” says Kim. “They adapted to our store operations data and product master right from the start, and they worked alongside our staff to fine-tune conversation flows for a Japanese retail setting.”

The integration wasn’t limited to language translation. The Digital Avatar could recognize **model numbers**, share **product benefits on the spot**, and even issue **friendly ‘call-out’ phrases** that enticed passers-by to step closer to the kiosk.



A Digital Concierge in Action

The first roll-out began at Narita Airport and key Tokyo locations, where the Android-powered 40-inch Digital Avatar kiosks were placed in high-traffic areas. Tourists could ask about duty-free steps, store navigation, or even where to find coffee in the terminal.

The screen-based concierge quickly became a talking point. Shoppers were intrigued by its ability to hold a natural conversation in their own language, and staff noticed that it often acted as a shop-front greeter, encouraging visitors to come inside.

Results at a Glance



20%
Sales Uplift



975 Stores
Nationwide



40-inch Multilingual
Concierge Kiosk



4 Languages
Supported
(JA/EN/CH/KR)



Hybrid Service
Model



Proactive 'Call-Out'
Engagement → Higher
Foot Traffic

Impact That Goes Beyond Translation

The results showed tangible business gains alongside a noticeable lift in the in-store experience.

Yamada Denki reported that during the pilot period, sales rose by approximately 20%, driven largely by AI-powered conversational recommendations that better matched tourists with relevant products. High-margin categories such as beauty devices saw a measurable lift.

Store staff also observed that customer satisfaction improved, as tourists no longer struggled to communicate or felt overlooked during busy periods.

Repeat visits and overall engagement improved, and the corporate image shifted toward that of a forward-looking innovator in a traditionally conservative retail sector.

“Being able to converse in a shopper’s language changes the entire experience,” Kim reflects. “It’s not just translation; it’s about connection.”

The Digital Avatar also became a showcase of innovation, used by Yamada Denki’s leadership as a sales enablement tool when presenting the brand to partners and investors.

Technical Collaboration Behind the Scenes

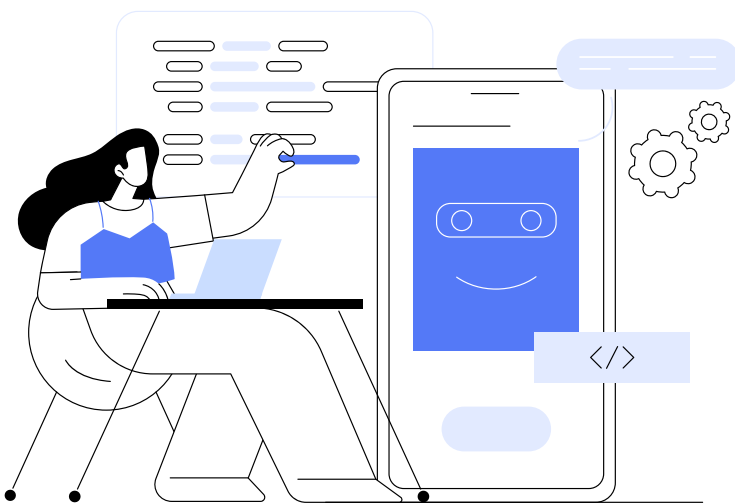
Behind the kiosk's polished exterior was an agile collaboration. BytePlus engineers refined dialogue flows and recommendation scenarios in real time, adjusting based on actual customer interactions.

When tourists mentioned a specific product model number, the Digital Avatar could instantly retrieve and highlight key selling points — something traditional translation devices could never achieve.

Regular joint review sessions ensured the system evolved in step with store promotions, seasonal campaigns, and even shifts in inbound tourist profiles.



Setting the Stage for Future Retail



For Yamada Denki, this initiative marks the beginning of a **hybrid service model**, one that merges the warmth of human hospitality with the **scalability and consistency of AI**.

"AI has changed how we think about customer service," says Kim. "We see the Digital Avatar as a sales assistant that complements our staff, not replaces them. We're already planning to expand into more Tokyo city stores."

The company now sees its Digital Avatar as a strategic asset for sustaining service quality in peak tourist seasons, reducing strain on human resources, and keeping pace with Japan's booming inbound tourism.



Conclusion: Hospitality Meets High Tech

Yamada Denki's journey with BytePlus shows how **technology can be woven into Japan's deep-rooted culture of omotenashi — gracious hospitality — without losing its human touch.**

The project illustrates that **AI in retail is not about replacing staff but enriching the customer experience**, offering consistent multilingual guidance, boosting conversions, and improving ROI.

With **BytePlus Digital Avatar's LLM-powered conversational intelligence, multilingual Text-to-Speech (TTS), and customizable backend integration**, Yamada Denki has taken a confident step toward the future of retail service in Japan — one that feels both high-tech and deeply local.

If you would like to learn more about our products and solutions, please reach out to our at www.byteplus.com/en/contact.

