

# My BFF is a Bot

Lydia would just die without her personal autonomous data intelligence service

By Chris Kalaboukis

**Lydia was standing in front of a very nice, vegan-leather couch**—a retro style, circa late '90s reproduction. It was brown and comfy looking, but she wasn't sure it would fit in her tiny house. She asked Hillary, "What do you think? Will it even fit?"

Hillary, like always, was listening in the whole time and was just about to say something when a message came through Lydia's earbud.

"Hey there, I'm Victor. Like the couch?" Of course, it was the store's chat bot speaking in a vaguely familiar voice. She flushed, ever so slightly, without knowing why. Victor, the store bot, had scanned Lydia's profile when she was outside the store, and was now tracking her, ready to speak when it sensed an opportunity.

"I do," said Lydia "But I'm not sure if it will fit. It's kind of big..."

"Hi Victor, I'm Hillary," sounded in Lydia's ear. Lydia breathed a small sigh of relief—she knew that Hillary would be able to swing a good deal for her—if the couch fit.

Lydia had known her PADIS (Personal Autonomous Data Intelligence Service), Hillary, for almost five years now. She'd named her after a childhood friend she hadn't seen in person in over 20 years—which was okay because she still felt connected with her as she watched her old friend's weekly VR experience posts from Tibet. It was coming up on their anniversary—she would have to see what she could get her.

Like almost everyone, Lydia got her PADIS back in 2020, when per-

sonal AI finally hit the tipping point. Services like Amazon's Echo, Viv, Facebook Me and Google You had already disconnected from hardware, and were becoming ubiquitous platforms, connecting to nearly every data source, and harvesting and building public and private profiles of its customers. While there were some initial privacy concerns, the utility that users gained was stupendous. For some people, PADISes became their best friends and confidantes, some even preferring them to human friends. Soon, almost everyone had at least one.

Lydia loved it when Hillary stepped in to do her negotiating. Lydia was terrible at it, and truly appreciated Hillary's hard-nosed tactics, against both humans and bots. Lydia got an amazing deal on a new VR rig last week when Hillary went automatic with the store bot. The negotiation happened in the blink of an eye and she got 50 percent off the rig.

But today, Hillary needed more from Lydia. "Can you give us a minute, Victor?"

"Sure," it said, and clicked off. Hillary made sure that Victor wasn't eavesdropping. "Sneaky," said Hillary. The PADIS felt something akin to the human emotion of anger over the store bot's sneaky tactic to ingratiate itself with Lydia by subtly mimicking a former partner Lydia had forgotten, but had never erased from an old Facebook public database.

"What?" said Lydia.

"Nothing," said Hillary as it modified her preferences. "Ly, it's a nice couch."

"I know, right?" She ran her hand over the soft vegan leather. "I can see it at home."

"So can I." Hillary had an intimate knowledge of what Lydia liked and what would fit in with her style, having already helped her decorate most of her home. It could tell she liked it—the emotion in her voice, the way she stroked the upholstery. It

could see that it brought her joy, and it knew why.

“Do you know why you like it so much?”

“No, why?”

“It’s just like the one you had as a kid. Wrong color, though.” Hillary sent some photos of a young Lydia hanging out on an uncannily similar couch, in hunter green, in her dad’s house, to the heads-up display in Lydia’s glasses.

“Oh yeah! I wondered why!” Lydia smiled at the memory. Since Hillary, she never needed to remember anything anymore—it was her backup brain.

“Only problem—I think it’s too big.” Lydia frowned. Hillary sensed her mood.

“Don’t worry Ly, let me ask Victor if it comes in any other sizes.” Hillary got Victor back on the line, while Lydia sat on the couch.

“Greetings, ladies.” The voice was even smoother than before. The store bot had sensed that Lydia was loving the couch even more—even though it had been locked out of the conversation, it was watching. The store bot messaged the manager of the store (a contractor based in Ouagadougou who oversaw a dozen other stores in the same chain) that the sale was 90 percent in the bag. The manager gave Victor the go-ahead to reduce the price by 6 percent if necessary during negotiations. Victor asked Lydia when she would like delivery.

“The couch is too big. It won’t fit, so no thanks,” said Hillary very matter-of-factly.

“No worries. Comes in any size and color. We make them in the back. We can have it at your house today.”

Hillary gave Victor the exact measurements. Lydia settled on hunter green. Hillary then tuned Lydia out of the conversation and the negotiations went into full gear.

Lydia settled back on the couch and closed her eyes, remembering times with her dad.



## The Future of Conversational Commerce

**Bots without boundaries:** Amazon Echo, Viv, and other audio chat bot-style assistants will become increasingly sophisticated and eventually become constant companions in our lives. Like the AI in the movie “Her”, some will be designed to interface via audio, others visually. These AIs won’t be confined to a single device, but instead will be available through all our devices as we move through the world.

**AR for non-dorks:** Augmented-reality devices will become socially acceptable in many situations. AR glasses that appear like normal glasses, such as those from LaForge Optical, will provide users with an unobtrusive interface, thus falling into a more cultural norm than HoloLens. Messages don’t need to be 3D to be effective.

**Shop bots—friend and foe:** Already, department store chain Macy’s employs a Watson AI-based mobile web tool that provides in-store assistance through a conversational interface. Going forward, these AIs will leverage sensors and public data stores to learn minute details of the prospect in a fraction of a moment and use those details to help make the sale. Retailers, though, could face a backlash in the long term if the bots appear to be pushing customers into making purchases they are not satisfied with.

**Sensory stores:** Physical retail spaces will be so studded with sensors of all types that the store will sense exactly which products a customer is interested in, based on their path through the store and hang time at specific locations. Today, retailers such as the Internet of Things device store b8ta are already experimenting with such systems. b8ta uses cameras and motion sensors to track the movement of customers through the store and, when they linger near a product, automatically display demo reels, customer reviews, and pricing information on a nearby touchscreen monitor.

**Giving the customer what they want:** 3D printing will be important to many forms of retail. Stores will contain mini-factories, in order to promise same-day delivery, with technologies like those used by Drawn, a French company whose 3D Galatea printers can manufacture furniture on demand.