Commentary Alan Leong, University of Washington, Bothell

Sandeep Krishnamurthy once again provokes us, this time with his "Automated Wal-Mart". I want to congratulate him for writing a stimulating case. Whether you agree or disagree, it's engendering strong reactions.

I won't walk over already addressed topics regarding privacy or specific technology nits. I want to address two concepts that presage possible adoption of his "Automated Wal-Mart".

Technology-enabled Object Relations

How do we relate to objects within our environment? There is a general move towards interactive or "smart" objects. These objects customize their responses to us. This can be derived from our specific request, customer typology, context, or prior experience with us.

Furthermore, computing is becoming invisible. We're being conditioned to objects that cater to our needs. In the USA, there are hundreds of computer chips per person. An auto contains about 50 to 75 chips. There are chips in our refrigerator, toaster, and even in our washing machines. They're in toys for kids and adults, from stuffed animals to Tivo machines. Our Tivo remembers our choices and records "other" shows based upon our pattern. Will our homes do the same for us?

Homes have always been the site of increasing automation, from washboards to washing machines.

It's now becoming the site of a fully integrated system to promote entertainment or to reduce power usage. We're seeing: lighting control, entertainment systems, safety and security, access control, home monitoring, appliance control, irrigation control, pool and spa control. The difference is that a user-friendly master control system is becoming financially feasible for the middle class. We're seeing the first home installs being done. The sales are climbing fast.

A significant proportion of builders have already acquired the capabilities to make this happen.

I've already walked into two homes that integrated the entertainment systems through Windows Media Server. Last winter, one of these owners programmed his video recording systems through the web to capture one of my favorite events. We were in Oregon. His home is near Seattle, Washington. Hey, these aren't rich people. This will apparently be an integral part of the next Windows operating system.

Lots of "Smart Homes"? It won't be this year. It won't be next year. It will happen. It has been happening.

What does this have to do with shopping at stores or eating at restaurants? Commercial entities continually look for ways to cater to you. Some restaurants are already keeping an electronic profile on your ordering habits. Over 18 months ago, I saw it even at a mom & pop restaurant. I got an offer with my to-go order.

Privacy issues? Opting out? This won't be everyone's flavor.

Which Ocean for You?

Enough people, however, use their grocery store loyalty cards so that every major chain came on board. The stores are watching how we relate to objects in the home.

Amazon did it through your home; QFC is getting ready, T-Mobile is almost there. Customized offers to match your consumer pattern, designed to make you happy.

Integrated electronics in the home? Someday, we'll have an integrated system serving the customer experience at a store.

When early versions of "smart" have entered enough homes, the consumer becomes conditioned. Is your home Windows-ready? Is your Wal-Mart also Windows-ready? Can I retrieve my grocery list on my cart? Can I get an optimal map through a superstore like Wal-Mart?

Self-service boomed for the Boomers. Will automated smart service do the same for Generation Digital?

I'm not personally comfortable within Professor Krishnamurthy's brave new Wal-Mart. I prefer the presence of smiling employees that hand out Costco samples or Home Depot advice. I'm a terrible barometer because I'm also not into Myspace.

The current march forward, however, favors Professor K rather than me.