



CES 2017 for Brands

a Skeptical Review

by

Brad Berens, Ph.D.

special report for
The Ascendant Network



Executive Summary

- With 3800 exhibitors CES is now too big to summarize: it would take a month to see it all. Yet it's still important to point out the important companies that don't come to Vegas.
- Despite a successful 2016 holiday season, Amazon's Alexa virtual assistant has not won the war to own the Internet of Things and the automated home: that war is just getting started.
- Brands need to approach spending on Alexa with caution and as a way to learn how consumer behavior is evolving.
- CES 2017 was the year of new interfaces, which is a much bigger business-of-marketing story than Alexa.

The Details

For the past few years I've been a Story-Tech tour guide at CES: one of those people purring into a microphone as we lead gaggles of headphone-wearing executives around the show floor trying to make sense of it all. I lead tours because I'm a futurist working a research beat that covers the intersection of new technology and user behavior. CES is a grand collection of hypotheses about both, but it's also a circus (even a Circus Circus).

Here are two sample hypotheses from this year's CES, both from the North Hall, which focuses on automotive and which has made CES the world seventh largest auto show:

#1: Mercedes Benz displayed a huge, white, prototype delivery van that had drones connected to the roof. The roof opens, robots attach packages to drones, whereupon drones helicopter packages to neighborhood homes. The hypothesis, here, is that battery life will continue to be a vexing problem for drones, so twinning them to a vehicle with built-in charging stations solves that problem.

Implications for Brands:

- The use case for drones is now expanding beyond the enterprise and consumer toys and aerial photography (for real estate agents, stalkers and the like) into more practical applications like delivery.
- Amazon, which has tested drone delivery in the U.K. (<https://nyti.ms/2koGrQJ>) and filed for an autonomous-vehicle patent (<https://goo.gl/y7vi9p>) just last week, has potential partners and/or rivals in auto manufacturers. New partnerships/rivalries always redraw competitive landscapes.
- Expect same-day delivery (by Amazon and others) to expand beyond dense urban areas in 2017.

#2: Toyota displayed its prototype Aisha car. Aisha (beloved car in Japanese) aims to be half car and half trusted family retainer. The car monitors the driver's emotions via cameras and sensors and also — strikingly — via the driver's social media. Yes, you now have to sign into your car with Facebook and Twitter. If you're cranky, Aisha will recommend a more scenic route to drive to lift your mood. If you're tired, Aisha will chat to keep you alert.

Toyota's hypothesis is that, in an age of increasing TaaS (Transportation as a Service) commodification via get-a-ride services like Uber and Lyft as well as car-sharing services like ZipCar and Car2Go, auto manufacturers need to differentiate the benefits of car ownership. I am skeptical— how many will find a chatty-Kathy car enticing?

Implications for Brands:

- Toyota recognizes that its most deadly competitor isn't a direct rival (e.g., Honda, Mazda, Hyundai) but a cheaper substitute that allows customers to *satisfice* rather than *optimize* (in Herbert Simon's terms). Toyota recognizes the threat posed by TaaS services. (Who's been reading *Blue Ocean Strategy* and *The Innovator's Dilemma*?)
- From the Remarkable Partnerships Department: pay attention to the relationship between Toyota and Social Networking Services like Facebook and Twitter. How were these relationships negotiated? Who is the buyer and who is the seller? Who owns a driver's GPS data? Will Facebook be able to use GPS data to target or personalize ads more effectively, thus competing with Google Maps?

Alexa and the Street Lamp Effect

CES 2017 had 3800 companies exhibiting a cornucopia of appliances and gadgets, but it's still important to note who *isn't* there. Apple, the most valuable company in the world doesn't attend. Likewise, Google, the fourth most valuable company, skips CES. And Microsoft—the fifth most valuable company and the annual keynote for years—no longer attends.

And Amazon—which pundits are crowning the big winner of this year's CES with its multitudinous Alexa integrations—only mounted a small Alexa exhibit at Aria (no Kindles, Fire Sticks or Dash buttons).

If you only look at the companies that exhibit at CES then you are engaging in what psychologists call a Street Lamp exercise. The name comes from the classic joke where a drunk is looking for his lost keys under a street lamp, and a cop gets down on the sidewalk to help him. "Do you remember where you dropped your keys around here?" the cop asks. "Oh no, it wasn't here," the drunk replies. "I dropped my keys in the alley behind the bar." "Then why are you looking for your keys here, under the street lamp?" the cop asks. "The light is so much better here," replies the drunk.

The Street Lamp Effect is one reason why so many people have heralded CES 2017 as the year of Alexa, Amazon's voice-activated virtual assistant rival to Apple's Siri, Microsoft's Cortana and the nameless Google helper built into Android phones, Google apps and the new Google Home product. Of those, Amazon was the only one to show up.

So so why should brands care about Alexa?

Amazon, Morgan Stanley reports, sold over 11 million Echo and Echo Dot devices (which come with Alexa) before the holidays and millions more since. Alexa integrations were everywhere at CES, notably with Ford, Volkswagen, Samsung (a refrigerator), LG's smart home hub and possibly as many as 1,000 other integrations.

It helps to compare Alexa's more-than-11-million units sold with the 2016 more-than-90 million installed base for Siri, (<https://goo.gl/vIVS74>) and the nearly-108 million Android users with Google's voice-activated assistant (<https://goo.gl/iNi6CR>).

As Google ramps up its Google Home initiative (which will integrate seamlessly with Android phones and Google apps) and as Apple invests more and more in HomeKit with Siri integration, expect the platform war among these non-interoperable walled gardens to intensify.

Implications for Brands:

- Branded Alexa "skills" are another gold rush, like Facebook pages, Pinterest boards, Twitter handles, smart phone apps, tablet apps... even websites back in the day.
- Brands should approach this landscape with caution, as not every product will benefit from Alexa. For example, Glad Recycler is interesting ("Alexa, Ask GladRecycler if I can recycle my pizza box...") but it presumes both that Alexa is within earshot and that the user won't think simply to turn the pizza box over and look for the "recyclable" icon.
- The most intriguing thing about Alexa for brands isn't the collection of branded skills, it's how Amazon will combine the data generated by voice queries with a user's search history. When I recently asked my Echo about buying a stereo, Alexa replied with information about my search history and headphones and then suggested a stereo system, and then directed me to the Alexa app on my phone for more options.
- Expect Amazon to launch Google-like paid or sponsored search results to advertisers, and be ready to ask how Amazon will disclose to users when the results are sponsored versus "natural."
- Alexa is just one example of voice-interaction. Those brands that do pursue Alexa "skills" should create or contract out for voice-interaction capabilities generally, rather than Alexa-only capabilities. Savvy marketers will plan to create multiple versions for Google Home, Apple HomeKit and other automated home providers... just like they create different versions of iOS and Android apps.

The Year of New Interfaces

The most important thing about Alexa, Siri, Cortana and other voice-activated digital assistants is how they create what my friend Jeff Minsky of Unruly has dubbed "the ambient internet." Being able to say, "Hey Siri," "Okay Google," "Alexa?" or "Hey Cortana" means you don't have to stop doing whatever you're doing with your hands in order to ask a question, send a text, stream a song, order a book or set an alarm. Making interactivity so pervasive that you don't have to lift a finger creates new opportunities for interaction, and also for distraction.

However, the focus on Alexa at CES 2017 has obscured another trend: the proliferation of other new and exciting interfaces beyond voice.

These interfaces can be as obviously important as the many, many Virtual Reality products arrayed in Tech South (as well as Augmented Reality and Mixed Reality), but there are other, more modest new interfaces that are important but easy to miss.

One of my favorites is **H.P.B. Optoelectronics**, a Taiwanese company that has created a gestural interface for inside the cabin of your car. When the phone rings, you swipe left through the air and your stereo accepts the call, or swipe right to send Mom to voicemail. Can't hear your music? Twirl your finger clockwise in midair and the volume goes up; go counterclockwise and, you guessed it, things get quieter.

Likewise, **ODG (Osterhout Design Group)** has smart sunglasses that take heads-up display away from the weird, Borg-like design of Google Glass and move it closer to Tony Stark's glasses in the Iron Man movies. Many people crow that Google Glass was a failure (as opposed to a bold experiment), but Augmented Reality is getting better, cheaper and more useful with each passing year. Like Microsoft's HoloLens, ODG's smartglass have most of the capabilities of a smart phone in a much different shape. And, as we've learned, new form factors enable new behaviors.

Swedish **Tobii** deploys its eye-tracking technology into R&D, special ed and as a technology partner to other manufacturers, but at CES it highlighted its gaming uses. Tobii lets a computer or game console understand where a player is looking so the player can use her eyes as a new input device. (See also Jim Marggraff's **Eyefluence**, which didn't exhibit at CES 17 but is another innovative eye-tracking technology.)

Perhaps the most important yet terrifying under-the-radar new interface comes from **FreerLogic**, an Asheville, North Carolina company. FreerLogic partnered with giant Chinese appliance maker Chang Hong to create an astonishing no-contact Electro Encephalogram (EEG) designed to fit inside a car's headrest. So long as the back of the driver's head is within 10cm of the headrest, FreerLogic's technology monitors the driver's level of attention by scanning brainwaves! If the driver isn't paying enough attention, the FreerLogic technology can sound an alarm to make the driver pay more attention. Perhaps one day the car will be able to pull itself to the side of the road.

FreerLogic also demonstrated a brainwave sensor that users could put on their arms in order to play a no-touch video game. Simply by training your attention in an easily learned way, players could focus to make a dolphin dive to the bottom of the ocean, or stop focusing to have the dolphin rise back to the top. This is their "Play Attention" technology.

FreerLogic has dramatically shattered a barrier between the brain and the body: if you can control technology just by thinking about it, and have that technology monitor your thoughts by extrapolating from brainwave activity, then this makes the ambient internet completely ubiquitous.

Implications for Brands:

- The main currency for marketers is attention, so interfaces that change, grab or monitor attention do so at the expense of other interfaces, like TV or laptops or smartphones.
- More interactivity across more dimensions—where we are, where we look, what we're thinking about—on top of our already screen-filled environments means that

customer distraction will only continue to increase as users flit from alluring stimuli to alluring stimuli.

- Media fragmentation is turning to media disintegration. Capturing a person's attention with advertisements will become even more challenging from both creative and media strategy perspectives. SIMM (simultaneous media consumption) worries from ten years ago about the laptop competing with the big screen TV in the living room now seem almost Amish in their quaintness.
- The data implications—which on the flip side are terrifying privacy implications—are profound: if surveillance now exists not only on every street corner but in every room and even between your ears, then this presents brands with unprecedented opportunities to know what customers want, and to learn what communication works in what situation.
- But who owns the data and who owns the relationship with the customer are open questions. Expect to hear ever-increasing “that’s mine!” squabbling between brands and agencies, manufacturers and retailers, media companies and technology companies as well as among third party mar-tech and ad-tech companies.

Conclusion

CES has become a self-fulfilling prophecy. Agencies put themselves forward as expert guides in order to give brands a reason to keep them around when other entities (technology companies, management consultancies) clamor to take their work.

Meanwhile, marketers do need to understand user behavior in order to create the right messages for the right people at the right times and in the right places. But while savvy marketers should visit CES every few years to get a sense of what's happening there, it's important to bear in mind that CES represents only one piece of the consumer technology puzzle.

Sincerely,

A handwritten signature in black ink that reads "Brad Berens". The signature is written in a cursive style and is underlined with a long, sweeping horizontal stroke.

PS: Please don't hesitate to reach out with questions or comments via email as berens@digitalcenter.org.