THE RELEVANCY RESOLUTION:
How brands can adopt technology to stay relevant

Every year we see an overwhelming amount of technology at CES - whether it’s the never-been-seen before or an evolution of an existing model, it can be challenging to find the most relevant and scalable opportunities for a brand. We’re also all too often focusing on the technology itself, rather than how it will impact consumer behavior.

As consumers are adopting technology faster than ever, consumer behavior is changing at a rapid pace. For brands to stay connected and relevant to consumers we need to keep up. For marketers, CES is not a conference for technology, but for relevancy.

Consumer relevance has been dropping for most brands over the past few years. It was recently reported that 77% of brands could disappear and consumers wouldn’t even care. In 2019, 58% of consumers believed that content from brands is ‘irrelevant to them’. As consumer relevance has dropped, so has revenue. Harvard Business Review and Accenture predicted that $1 trillion is lost by companies to their competitors because they are not consistently relevant to their consumer.

To stay relevant, our industry needs to keep up with consumers when adopting technology. For example, marketers spend less than 2% of search spend on voice, despite 65% of 25-49-year old’s in the US using voice search every day. In turn, advertising commercials continue to have a high value in our industry, all the while 60% of consumers are making efforts to avoid them. We often create one size fits all messaging, even though 90% of consumers state that messages that are not personally relevant to them are ‘annoying.’ Adoption of technology and innovation – or even the perception of innovation - drives great benefits for brands. Research from Kantar has shown that brands who are even only perceived to have high levels of innovation grow at over 3x the rate of those who have medium levels of innovation and over 7x the rate of those who are deemed not to be innovative. Those with the highest level of innovation - and therefore growth - follow a simple rubric in their approach to adopting technology.

They adopt technology to:
• fulfil their purpose
• become culturally relevant
• be personally relevant

As marketers we need to think of technology as a conduit for relevance, and in the following pages filter the technology using these three lenses of the Relevancy Resolution.
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Drones, autonomous self-driven delivery vehicles, blockchain, digital wallets, voice search... you've seen it all before, right? Well, yes actually. Every tech buzzword in retail was certainly well catered for in this year’s show and while there were some shiny new toys, determining how much of the tech on display offered a valid business solution was a different story.

eMarketer predicts global consumer retail spending will rise 4.1% in 2020 to $26.074 trillion. There is a lot to play for. Therefore, nailing the right kind of tech to drive and help fulfil your brand purpose, while also enhancing your customer experience is crucial.

One interesting theme which took center stage was high-tech in-store experiential retailing over and above pureplay DTC innovations. Retail businesses have by in large recognized the need to shift to more customer centric strategies with an emphasis on the consumer experience, whether in-store or online. Deploying such strategies is a different matter. This emphasis on genuinely boundaryless, omnichannel retail this year could be seen in Haier’s Smart Closet concept designed to take personal biometric information and use AI integrations to offer virtual styling and fitting advice before deep-linking straight through to an eCommerce offering where the customer can buy the outfit. This Clueless-esque highly personalized shopping experience opens the door to multiple use cases, not just helping customers within in-store changing rooms, but also allowing brands to interact with potential consumers in their own bedrooms.
Building on this example of frictionless omnichannel shopping were a number of companies specializing in beauty, offering AI integrated mirrors for businesses and personal customer use. Designed to analyze skin Lululab, offers a lifestyle assistant to provide personal skincare advice and product recommendations. YouCam, from Perfect Corp were offering augmented reality beauty makeovers, allowing customers to virtually try on makeup and new hair colors and then buy directly from the app. While beauty AR is not a new concept, this year’s demos showcased how far this sector has come from slightly clunky stock images of eyelashes and lips to really in-depth, bespoke analysis and recommendations.

Obviously to really make any of these installations come to life in a retail environment, businesses need the appropriate hardware and there were certainly plenty of digital signage exhibitors. Sero, by Samsung was marketed primarily as a TV which offered both horizontal and vertical orientation. In itself, the novelty of this concept will likely wear thin pretty quickly. However, when you apply the same principle to retail, for the Gen Z group of digitally native shoppers, brought up on vertical screens, the opportunity to deploy interactive, digital signage which also allows addressable media inventory opportunities, they suddenly become more interesting. Further to this, Sannova, were offering similar screen-based innovations, specializing in point of sale digital shelf markers which allowed consumers to scan the item at the shelf for additional information. As 5G gains traction and is further scaled, these screens could help turn traditional retail stores into highly personalized, experiential shopping destinations.
Logistics and delivery are going to become key differentiators in retail as they compete for the last mile of delivery. Walgreens Boots Alliance spoke to their partnership with FedEx in building out a portfolio of these solutions that will allow them to deliver fast moving products to customers within 8 minutes.

Parcel Guard, a smart mailbox developed by Canadian company, Danby is designed specifically to prevent package thieves who steal home deliveries left visible to the street. With motion sensing cameras to record when a parcel has been delivered, it also facilitates phone calls between the customer and the courier to open the box remotely. It’s interesting that this tech is consumer facing and has seemingly leapfrogged over existing business solutions in this space, lockers, alternative delivery options etc. to put control into the hands of the consumer.
From an eCommerce perspective, a company exhibiting which makes it easier for businesses with digital product catalogues to address a genuine business challenge was Scanblue. They are able to take a physical product and create a 360, 3D scan which can be rotated to every angle. Insider Trends research has found that customers expected 3 images on a product page in 2016, vs. 6-8 images and 2+ videos by 2018. It’s proven that high quality, informative product imagery aids conversion rates and as such is a valid area to optimize. However, the production costs of generating such a high number of images especially for large retailers with thousands of product SKUs has a massive impact on ROI. Therefore, using a 3D image with a one-off cost which answers this business challenge, but can also be repurposed as a digital asset for other advertising collateral, including AR and VR use cases starts to become a worthy cost-saver.

Retail technology is constantly changing the goal posts for brands and has created a market in which every company becomes a point of comparison, not only those selling similar products or services.

Technological innovation is really enabling a new gold standard for boundaryless commerce where businesses have the opportunity to improve the customer experience at every stage of their journey.

However, testing new, innovative tech is not an end goal in itself; it’s a means to an end and should only be considered with an entirely customer centric lens.

eMarketer predicts global consumer retail spending will rise 4.1% in 2020 to $26.074 trillion.
While the global digital health market was valued at US$ 144.2 billion in 2018, the healthcare industry has been reluctant to embrace digital in the past due to costs, privacy, security, and fragmentation.

Nonetheless, the past decade has seen innovations such as big data, telemedicine, and virtual reality accelerate disruption in consumer wellness and healthcare, pushing the tipping point where benefits outweigh the costs (Digimind), and the proof was CES 2020.

According to Digimind, an analysis of digital health companies at CES suggests that AI-powered digital health services will be the dominant subject. Prominent categories on display focused on health monitoring, fitness tracking, sleep hygiene, virtual care, artificial intelligence, and bio-hacking devices, and even femtech took center stage.

The MedWand™ while still waiting for FDA approval in the USA; the MedWand fulfills the potential of telemedicine by hosting multiple diagnostic tools in a single device with a SaaS solution. Measure heart rate, conduct ECG, check the temperature, plus there’s a camera enabling a remote doctor to look inside the nose, through and mouth. Initially intended as a B2B play where MedWand would supply devices to the insurance company, I can see a scenario where a community center or church in a medical desert would purchase equipment to support the community — estimated at $499 plus ~$70/month subscription.

Withings™ is a beautifully designed wearable that is a medical-grade electrocardiogram that also identifies sleep apnea. An advanced and very stylish AI health wearable, the end market will probably be more the fit bio-hackers, who want a health tracker to improve their health goals. It’s curious because bio-hackers tend not to need ECGs and usually don’t have sleep apnea. Most consumers will not realize they are wearing a medical device that is capturing their data. Estimated cost is $249.
There was an array of devices to aid both virtual care while caring for aging adults. The Welt™ Smart belt aids in helping track gait markers, so you have predictors of falls in older adults; it also tracks activity, waist size, and prolonged sitting.

The OrCam MyEye™ ($3,500) is a wearable camera for the visually impaired, uses AI to recognize human gestures and faces. It can even read and scan a page. This tiny device clips on to one’s eyeglasses. The OrCam Hear™ uses AI to amplify hearing aids and helps users isolate and identify a speaker’s voice in a loud environment.

Opte Precision Skincare scans your skin, analyzes your complexion and camouflages skin discoloration, light scars, and age spots. It basically photoshops your face. This device has a built-in camera that works on a very safe LED light to find the spots, it then analyzes the skin through AI technology and then applies tiny dots of skin color serum that camouflage and fade over time. It’s a printer for your face with no shade matching required. For fun I had them cover my tattoo not wholly possible due to pigmentation, but it did temporarily lighten it. Made by P&G LifeLab, this device has so much possibility for aiding people with skin-discolorations who are seeking support to feel more comfortable in their skin. This device is estimated at $599 comes with 30 days of serum.
The AI device that gave me some pause was the DNANudge™. The concept is that the wearable and app use your DNA to nudge you towards healthier choices. You supply your DNA, scan all your barcode purchases, and the AI taps into the trend of "small step changes" and makes recommendations based on your DNA. Bonus, if you are wearing a Nudge wristlet, you can "bump" a friend to see you have shared DNA. Talk about finding out surprising results!

In addition to products that allowed in-home DNA analysis, there were also vision testing for in-home use or more importantly in-store use at retailers.

One such company doing this was EyeQue, a company that is changing how eye exams are conducted. With EyeQue’s products individuals can perform the exam at home on themselves or others.

The most disruptive innovations were in the Sex Tech category. AI devices by Lora DiCarlo won the 2020 CES innovation award. And then they didn’t. But then they did. An array of pleasure tech devices, designed to mimic all kinds of human touch, the Ose uses robotic tech to achieve full-body pleasure. The Onda and the Baci is a robotic stimulator designed to provide sensations and mimic the feeling of the mouth. According to the founder, Lora Haddock, the product’s purpose is to aid people in feeling comfortable in their skin and sexuality while ensuring more diverse points of view have their place in tech.
What does digital health mean for the consumer experience? There is so much fragmentation in this space. Imagine if you needed a different device for every video streaming app? Most of the devices I saw had a corresponding app, but none of those apps were part of a greater eco-system or Electronic Health Record (EHR) due to a mix of competitive and privacy concerns. This fragmentation leaves the user with true but partial information, and like all data can project unnecessary weight towards one input. Apple’s Health app is leading here and is capable of populating with information from other apps on your phone. Watch for Google to also make strides toward interoperability and breaking data silos.

Among Fortune 500 companies, 84% now have healthcare capabilities (Chartis Group The New World of Healthcare Partnerships: Technology Companies Report). The positive news is that many of the tech companies Amazon, Google, Apple, and Microsoft, have continued to move into the healthcare eco-system. Such companies are seeking to gain a share of the growing healthcare sector by creating innovative solutions to improve healthcare operations, engage consumers, and develop linkages across patients, payors, and providers.

As these companies have traditionally offered information, products, and services directly to consumers, they will need to help harness the value-based demand and advocate for better reimbursement for tech-enabled care (or underwrite it).

Since consumers (somewhat) trust and rely on these companies for solutions, the hope is that healthcare and health tech companies begin to aggregate and adopt technology that is secure, opened-sourced, yet privacy-proof while being connected to the Internet of Medical Things (IoMT).

Like any trend in health the adoption process can be slow, compliance questionable, and the reward debated. Some variation of what we are seeing today will stick and will be optimized within a preventative health model.

Valued $144.2 billion in 2018, the healthcare industry has been reluctant to embrace digital in the past due to costs, privacy, security, and fragmentation.
CES has transformed over the past decade, nevertheless the core of the show remains consumer electronics and TVs. What we watch on those TVs and the way in which we watch has been revolutionized by Netflix, YouTube, Hulu, Disney+, Apple TV+ and other streaming services along with streaming boxes such as Roku, Amazon Fire TV and Apple TV. Data from eMarketer.com shows that cord cutters (and cord nevers) continues to rise. Two of the eight keynotes at CES this year were being headlined by streaming services –Quibi and NBCUniversal/Peacock streaming service.

With the promise of 5G, still on the horizon, one can see that making it easy to consume content across devices will continue to be a focus of many companies and brands. And let’s not forget the gamers--time spent gaming continues to increase, with gamers averaging over 7 hours/week. The volume of chatter around the PS5 logo reveal (nothing but a logo) should give folks an indication of how big 2020 is going to be for gaming. A key example from the show floor was LG, who is integrating AI technology to help provide an ideal viewing experience based on genre, face recognition and audio adjustments.
8K TVs are already available (for those who still haven’t gotten the 4K version). Content for those are only from streaming partners thus far, as broadcasters have not yet built out 8K content. From an audience/UX perspective, the vast amounts of content we continue to consume/play with will only become better from a sight/sound/motion POV.

Consumer choice around paid vs. ad-supported models will continue to exist, but the quality of the content is what ultimately drives time spent with platform partners and/or individual shows and brands.

For brands, the opportunities for content integration (brand integrations) will become much more prolific given the explosion of originals content (beyond standard advertising). Standard advertising is going to need to be as appealing as the content that it will run next to in order to stand out positively. Given the visual/audio quality of the content will only be increasing via the improvements to screens, any discrepancy between main content and ad content will be noticed.

From a broader perspective, we need to think about how to balance our marketing excitement about all the ways we can reach our consumers across various screens with the fact that people are spending so much time across all these screens (vs. with friends, family or doing other things).

Brands that speak to alternatives to content consumption (activities/exercise/sports, travel, community, food/dining/connection, etc.) may find benefits to reinforcing the need for people to (re)connect with family/friends as well as to activities and interests that don’t involve screen time. A tricky balance, but one that has important implications for our future society.
There’s no shortage of ‘wow’ moments this year in automotive innovation at CES. Mercedes & James Cameron teamed up to develop an ‘Avatar’ based vehicle, Uber & Hyundai debuted their flying taxi, and Honda unveiled a concept car known simply as the Augmented Driving Concept.

Automotive innovation points toward a fully electric, autonomous future, but how close to it are we? The US market for EV’s in 2018 was up 81% in 2018 to 361,307 vehicles. Tesla’s Model 3 drove much of the growth and now has a 40% market share with 140K vehicles sold in 2018. Impressive growth, but 361K EV’s is only 2% of the 17.2MM vehicles sold in the US in 2018 and an even smaller fraction of the 263.6MM registered vehicles in the US.

While we’re moving toward a fully electric future, the concept vehicles out this year point to very different conceptual realities. Many of the cars appear similar because of the laws of aerodynamics, but their purpose couldn’t be more different, and it’s all centered around a fundamental question: “What will a car be in the future?”
It might be more of a rented utilitarian good than an individualistic purchase. We may not own, and instead just borrow to get from point a to point b. The Hyundai S-Link, for example, is a futuristic open concept vehicle that can be configured as an open lounge, a medical clinic, a hotel room or a gym depending on community needs. With a fully connected world of vehicles, the sharing economy could evolve further into an anticipatory economy, based on signals from our devices or wearables.

Utility doesn’t end at getting from point a to point b. It’s the entire experience of transportation. In the future, if you need to commute an hour, a shared vehicle might pick you up, after having stopped to collect a hot breakfast for you, that you can then enjoy throughout your journey whilst watching a choice of screens and content either in vehicle or your own.

More utility, more free time, more screens, more content, more opportunities for advertisers.
SMART EVERYDAY
Energous announced WattUp®, a wireless charging technology that enables faster and more efficient integration for manufacturing. They showcased this through a variety of WattUp® enabled products from customers and partners. Rampant on the show floor were wireless headphones. Two stood out, Audio Technica's wireless in ear headphones and PadMate PadMu Slide earbud with a case doubling as a phone power bank. Neither could touch the wireless earbuds that allowed one to converse with person speaking a different language in real time. Priced at $230, TIMEKETTLE’s shared wireless earbuds will be a hit in the global business market, making it easier to conversate more effectively with clients and colleagues across the globe.

SMART PARENTING
Many companies introduced high utility smart products. XPLORA created a children’s smart watch that provides a way for parents to stay in touch with kids without giving them access to a smartphone.

P&G’s brand, Pampers has adopted the “smart” world by creating a device that alerts you to your kids’ dirty diapers – hopefully reducing accidents and diaper rashes.
SMARTER PERSONAL HEALTH
Nutricos’s smart dispenser, providing a combination of personalized recommendation for a healthy diet as well as dispensing a bespoke mix of supplements. The ClearUP™ Sinus Pain Relief treats common sinus pain from allergic rhinitis. This device uses microcurrent technology help reduce allergy-related sinus pain.

SMART HOME
From smart locks (Igloo home smart mortise 2+ key less entry lock), smart water saving and leak detection (Phyn Smart water assistant) to a smart makeup mirror (Venus Smart Make up mirror with speaker LED ring light, WiFi, microphone, AR makeup and skin diagnostics).

Furniture is going to become power charging platforms (D3 Intelashelf), rooms are going to adjust to each different person’s preference (Intellithings RoomeMe personal location sensor) and robots are going to take over mopping and vacuum cleaning (Narwal robotics).

All in all, the age of technology assisted living already entrenching our daily life is set to see a dramatic explosion . . . the choice is ours.
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