CES 2020 Review: A DarkDystopian Future, Silo Walls Crumble Plus Robots and AI

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INTRODUCTION TO CES 2020

So what's all this about then?
CES 2020 in numbers: attendance was hit by US-China conflict
The number of exhibitors from China was down at CES 2020
Event organisers criticising trade war policies is logical self-interest
2020 is a year of minor changes for consumer electronics at CES
Silo walls between industries continue to fall due to "smart" trends
Major implications: a disruption is starting to follow predictable rules
Futurology for additive and device interaction in smart homes
Cars and consumer electronics are blending across industries
Sony's concept car feels ready to drive away… nothing is futurism
Why has this not been done before…and how is this from SONY??
Empathic Technology is going in-home; this is not futurism anymore
Artificial authenticity tests if we can emotionally bond with robots
Robotics and smart home try to solve "the last 30 feet" problem
Dystopia rises: CES tech gets us ready for a much darker future

KEYNOTE NARRATIVE FOR CES 2020

2020 is the first "smart" milestone; brands are now articulating 2025
We are currently perfecting anticipation of the user's specific needs
Looking beyond 2025 we seek comprehension over just perception
The big step is self-learning; this is a trigger for both awe and fear
Experts suggest Artificial General Intelligence could arrive pre-2030
Another aspect of LG's thinking is that "Smart Home" is limitless
Samsung also talked about the next decade; with a shorter horizon

SMART CITY

One of the most interesting "Smart City" projects so far starts 2021
Renderings reveal some aspects of the "Woven City" infrastructure
There will be residents in this smart city trying to live "normal" lives
Personalisation is a digital power leading to physical customisation

SMART HOME

Empathic Technology is on show again; the incidences accumulate
The applications for Empathic Technology are expanding rapidly
On a counter-point: natural and more humanist themes are not lost
AI "ethics first" narratives emerge in Appliances and Home Care
We are not done yet with new Smart Home protocols being created
It will be instructive to see how the brand tensions play out on this
With much (quiet) support, Sonos challenges Google over patents
Wielding power feels nice; tech executives may not perceive issues
There are two different narratives playing out in the story coverage
Each smart home EcoSystem has moved on in some way at CES
The smart home ecosystems: relevant updates for Home Care
Sleep support may in future break out of Health as its own system
A wide range of reactive systems are growing around sleep quality
Laboratory sleep tests and observations can now scale for in-home
In-ear headphone buds can now passively sense blood pressure
Sensors tracking health are expanding Empathic Technology usage
Resonant and relevant; P&G nails a smart home baby care product
Pet health analysis from chemically and visually scanning "waste"
Tangent topic… laser tech is relevant for fmcg Home Insecticides
The smart home ecosystems – relevant updates for Home Care

Does a US security trend lead to armed home-defence drones?
Take off, perimeter scanning and landing are all fully automated
Your home uses your prints, your face and now your voice to verify
The smart home ecosystems: relevant updates for Home Care
GE's successful Kitchen Hub gets a second generation with microwave
The data range linked to GE's appliance cloud is interesting
Whirlpool's only presence at CES was the cooking partner Yummly
Ingredient recognition expands in fridge cameras via third parties
Accuracy of ingredient recognition via third parties looks superior
Mixing-in-the-moment for drinks keeps coming up (also IFA 2019)
Digital scent detection in Consumer Appliances is visibly growing trend
Consider: scent detection combined with Empathic Technology
The smart home ecosystems: relevant updates for Home Care
Moodo expands; also adding scent replenishment by subscription
Moodo gets more competition: including trend joiners from Asia
Knowledge of water use by item grows as part of leak prevention
The smart home ecosystems: relevant updates for Home Care
Brain-computer interfaces are here; now entering application phase
" FilmMaker Mode" settings download becomes standard in TVs
Breaking out of Health and Wellbeing, a new ecosystem emerges
Ultimate "smart" executions create and fulfil demand in one action
L'Oréal is also thinking the same; create skin anxiety, and solve it
Three cartridges can go into each unit, which mixes-in-the-moment
The key aspect is tracking skin improvement over time (or not)
Personalisation is one sales point, while time efficiency is the second
If claiming perfection, and choosing images… why choose this one?

SMART SPEAKERS AND VOICE ASSISTANTS

Smart home voice services hit 30% of US homes; going in-car next
We're getting even more voice for the bathroom; and it's still creepy
Smart speakers with screens do add value… but for USD900?
200 million Alexa-powered smart devices are now in use
Amazon has directly invested in one of the EV Alexa partners
500 million people use Google Assistant each month
Bixby hasn't yet lost its voice, but it is certainly not singing of victory
Samsung added a Bixby Ready logo to the latest washing machine
Voice in the kitchen continues to link to hands-free hygiene benefits
A future glimpse of where voice and chatbot assistance is headed
Demo polarised; both a quality gap and some appeal were clear
This is another case of CES mimicking sci-fi movies and games
A future glimpse of where voice and chatbot assistance is headed

ROBOTICS AND HUMAN ENHANCEMENT

Robots looking to solve the logistics "last 30 feet" problem
Digit rides along with the delivery vehicle, completing the last step
Smart lock boxes facilitate both logistics and new business models
Degree of robotics varies between the various smart lock boxes
There are multiple brands and organisations thinking about this
In food delivery, "drone-as-a-service" business model envisaged
Robot emotive appeal: Poster "puppy" for the pet route to emotion
Robot emotive appeal: pet route taken to absurd feline extremes
Robot emotive appeal: small and non-threatening (link to sci-fi 1)
Robot emotive appeal: small and non-threatening (link to sci-fi 2)

Some of P&G's efforts this year were more fun (and less practical)
Robot cleaners are a resource for multiple smart home ecosystems
A robot concierge with Empathic Technology, sensitive to emotion
LG's robot evolution visible at CES; this experience felt more "real"
Samsung showed off BotChef (demo also seen at IFA 2019)
Robotic disruption of out-of-home food preparation jobs is scaling
Human enhancement: giving amputees back the use of their hands
Human enhancement: over 20x more strength than a normal man
Great exoskeleton story that is morally uplifting, and not just aspirational
Samsung combined exoskeleton with AR; the result was weak
Panasonic showed the Atoun power assist suit in a press video

NEW HOME APPLIANCE TECHNOLOGIES

GE's front load washer has one-fluid reservoir auto-dosing
This seems to be a badly missed trick or an indication of limitations
Samsung's front loading washer has two-fluid reservoir auto-dosing
LG's latest US front loader is using two-fluid reservoir auto-dosing
Samsung's Flex Wash and Flex Dry allow for two loads at once
Samsung is joining the rising trend of "shoe care" popular in Asia
Micro single-mission fridges try fitting into tight urban living spaces
LG upgraded InstaView fridge with "balls of ice" instead of ice cubes
LG gets better at nagging users until they use appliances correctly
A micro countertop drinks chiller makes drinks ice cold in minutes
Modular kitchens continue as an Assisted Living theme for GE Shift
GE showed a pantry concept, bringing more food storage options
LG's smart mirror nearly ready (as fashion advisor and sales portal)
The measuring system can be too good; the retail aspect is TBC

LIFESTYLE AND OTHER TRENDS

Dystopia rises: CES tech gets us ready for a much darker future
Dystopia: seeking healthy breathing with urban poisons all around
Dystopia: water water everywhere, and not a drop to drink
Dystopia: in a pinch, homes can pull drinking water from the air
Water as a service: the subscription version of hydropanels
Dystopia: grey water is conceivable as mainstream "future normal"
Dystopia: meat has got to go. What do you prefer, soy or locusts?
Dystopia: grow-at-home rises as trust drops in food supply chains
Samsung's Bespoke Plant Fridge prototype is near fully functional
Dystopia: the need for waste reuse and recycling is part of the plan
There are start-ups built on facilitating composting in the home
Awareness of mobile phones as a hygiene hazard is spreading
There are various types of solution - for phones, devices and fmcg
A smart lunchbox that is self-heating is less crazy than it sounds

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