Impact Of Technology On The Remainder Of 2020

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There has been a lot of talk about "tech-lash," or pushback against the latest technology. However facts prove otherwise as people are using technology more than ever. 52 per cent of consumers say, according to the Technology Vision Consumer Survey, that technology plays a prominent role or is embedded in almost all aspects of their daily lives. In reality, 19 percent say that their lives are so intertwined with technology that they see it as an extension of themselves. Globally, people spend 6.4 hours online every day on average. They are post-digital.

What we see instead of a tech-lash, is a tech-clash. People are not opposed to technology; they are still excited and intrigued by that. But businesses are developing and deploying that technology from the days before tech had such a major, meaningful impact in our lives, using the playbooks of decades past. Closed ecosystems can bring disjointed experiences. Artificial intelligence solutions are applied without transparency to decision making, leaving people out of the loop on decisions that directly impact their lives. Concerns about security , privacy and ethical issues are keeping people wary of the evolving innovations of digital technology companies.

2020 is when the world will see transformational changes in how technology impacts our lives. There will be a breakout moment of artificial intelligence (AI) in manufacturing. AI is now part of daily life, driven by the emergence of an ecosystem of devices including Alexa , Siri and Google Assistant. Emotion recognition and computer vision will scale up in 2020, with AI having a breakout moment in manufacturing. U.S. companies Vicarious, Kindred, and Osaro stand out for their use of AI manufacturing technologies. The technology used by Kindred is used to automate part of the distribution for apparel brands like GAP. Mark Zuckerberg, Jeff Bezos and Elon Musk are attracting investment from Vicarious.

There will be the practical deployment of Internet of Things (IoT). IoT is hot but today there aren't as many mainstream applications as some have predicted. We foresee the number of connected devices and mainstream IoT applications hitting scale with 5G. Amazon recently launched Amazon Go, a system that uses IoT technology and machine vision to enable consumers to shop without manual check-out. More sensors and vision technologies will be used in environments, allowing for more scalable IoT solutions. Startups Basic Cognition (U.S.), Accel Robotics (U.S.), Trigo (Israel), Grabango (U.S.), and AiFi (U.S.) offer services close to the Amazon Go services.

There will beIncreased demand for edge computing processing power. 2020 will see the need for higher edge computing hardware performance, because better sensors and larger AI models now allow a host of new applications. There is a growing need for more data to be inferred and then decisions made without sending data into the cloud. In order to meet increased demand, chip startups SambaNova (U.S.), Graphcore (U.K.), Cerebras (U.S.), Wave Computing (U.S.), and Syntiant (U.S.) have established architectures. High performance AI chips, known as neuromorphic or brain chips, mimic brain structure

and process AI algorithms at the top.

2020 will see the evolution of aerospace technologies. Mankind will start its return to space by 2020, driven largely by the private sector. Technological advances have slowed ever since the Cold War. Notable aerospace companies now making progress include SpaceX and Blue Origin. CSpaceX is developing the Starship rocket which will reuse the whole body of the vehicle. Starship can space-time shorten intercontinental trips to 20-30 minutes. In China, the government and private enterprises are making progress in space for example LinkSpace.

Amongst other things 2020 will lead to the new era of the internet which will be visible through the deployment of 5G and Starlink broadband internet technology. The U.S.-China 5 G market is entering its main stage by 2020. There will be a new competition on who can more easily drive 5 G into mainstream market adoption. A further hot topic is SpaceX 's planned Starlink Broadband business. It will launch as many as 2,500 satellites until 2020. That marks a new age for some North American users of broadband internet. Starlink's broadband Internet system will grow through 2023 with 12,000 satellites followed by the addition of 30,000 satellites. SpaceX will offer higher Internet speeds beginning in 2020.

Research predicts the evolution of the health care system. The digital health care has seen a lot of creativity under the concept of prevention. Startups 23andMe and Color lead in genome research in the U.S., while Genesis Healthcare stands out in Japan and Korea's Genoplan. These companies use genomic analysis to learn about diseases and offer methods of prevention. The evolution of AI will improve care efficiency. Many medical images taken using MRI, CT scans, and X-rays are to be diagnosed using AI by 2020. Startups Enlitic and Zebra Medical Vision are the leaders in this area.

Some evolution will be witnessed in Agriculture as technology will be used to grow crops efficiently. Companies offering products using computer vision, AI and Big Data stand out in agriculture. Computer vision Ceres Imaging (U.S.), Taranis (Israel), Farmwise (U.S.), will become normal in 2020 for monitoring crop production. Robots that harvest plants and fruits may become more popular, such as those by Abundant Robotics. Indoor farming companies, such as Bowery Farming (U.S.), funded by GV, will also enhance the technology to improve crop growth efficiency.

Evolution of autonomous driving technology will be witnessed in the remaining half of 2020. Although level 5 (fully autonomous) was not realized, autonomous driving is already a hot topic. Some Tesla cars on the highway may be switched to autopilot mode but this is only possible up to level 2 (driving support) or level 3 (driver operated in an emergency). AI technology is evolving for understanding detailed road conditions. As leaders, the startups Prophesee (France), Perceptive Automata (U.S.), and Humanizing Autonomy (U.K.) stand out. They will be helping to achieve level 5 by 2020.

From the look of things the U.S. and China will put blockchain to practical use. As blockchain grows, security-based payment-type venture companies and venture firms — like Chainalysis, which develops countermeasure technology for money laundering — are drawing attention. Major institutions are set to introduce blockchain in 2020 to prevent large-scale leakage of information and Internet fraud. IBM provides a blockchain-specific accelerator system. China has approved the implementation of blockchain

in such companies as ICBC (China Industrial and Commercial Bank), Alibaba Group, China Southern Airlines, etc. Blockchain is to be put to practical use by 2020.

These technologies are set to change the world by 2020. While there are concerns about the impact on workforce, there is little doubt that 2020 will be a time of innovation as people leverage technology more effectively.

References

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