Following a year which has shown significant growth in the IoT sphere, 2019 is shaping up to be an explosive year for both technology and connectivity.

In order to explore this, DATAx has teamed up with global technology consultancy firm, DataArt, to bring you our top predictions for IoT in 2019.

Giants will come out to play

Following years of startups and smaller companies dominating the IoT sphere, DataArt predicts that next year the big tech players will regain their previous dominance of the industry.

"These big players will acquire a large portion of the market and will continue to increase their footprint as organizations flock to them for the promise of simplification at scale," claims DataArt. With the big players leveraging their size to push aside the smaller firms that have helped the industry grow to where it is, "we'll see smaller players focus on niche areas to survive such as data movement and other industry-specific challenges".

Rise of the edge

Edge computing has grown in popularity this year and is only due to carry on as our connectivity and computing power requirements grow.

"It will reduce data transfer volumes and cloud dependencies and provide more flexibility and agility for business," asserts DataArt. This means that industries that have seen increased reliance on "complex real-time data analysis" such as manufacturing and public security, will see increased adoption, along with industries where "cloud connectivity may be restricted (such as shipping and logistics)".

Smarter devices

We have also seen a marked rise in the adoption of smart devices, with firms like Amazon announcing plans to introduce its AI assistant Alexa, into at least eight new devices before the end of the year. DataArt predicted that the industries which will see the greatest rise in smart device adoption will be in "automotive, transportation, healthcare, hospitality and manufacturing solutions".

Smarter security

With this year not only continuing the trend of worsening and more frequent data breaches, but it has also marked one of the largest data breach fines being levied on a tech company, with Yahoo agreeing to pay a record $50m in damages to the victims of its data breaches between 2013–14.

In response to this, DataArt predicts the "race will be on to develop the smartest and most secure IoT solutions". This will intensify next year as one of the biggest restraining forces to the widespread adoption of IoT has been cybersecurity.

Automation, automation, automation

As DataArt puts it, "data is becoming the lifeblood of the automotive industry". The automotive industry has made significant steps toward automation and this year has been marked by a flurry of announcements by the biggest automotive and tech companies revealing their desire to be the first to enter the autonomous vehicle arena.

Apple is currently working on the development of fleets of self-driving convoy systems and has already hinted the launch its Apple Car in 202 3. Meanwhile, Ford predicts its self-driving cars will be deployed by 2021 and on November 1, Baidu and Volvo announced their plans to develop "robotaxis" together.

"The automotive industry will continue to progressively adopt IoT technologies to enable vehicles to seamlessly gather and monitor data and communicate with smart city services and other vehicles," claims DataArt. This, it predicts, will lead to "significant amounts of money [invested] in innovative startups to analyze and process data".

The 5G genesis

5G is one of the technologies that is set to have the greatest impact on IoT adoption as the network's speed is predicted to unleash the IoT capabilities.

"5G networks will usher in a new era for IoT, supporting an increasingly interconnected world that will drive IoT innovation further," claims DataArt. In October, Intel predicted that 90% of 5G data usage in the US would be in video content alone, despite many predicting that 5G would primarily be for industrial use.
This points to the 5G's ability to broaden our ideas of what IoT will allow all industries to achieve in "areas where time and bandwidth speed are crucial", thereby "unlocking unrealized revenue and potential".

Original: https://channels.theinnovationenterprise.com/articles/datax-presents-iot-trends-and-predictions-for-2019