2021 Predictions for the Drone Industry

LOS ANGELES - December 21, 2020 - 2020 has been an unprecedented year for many reasons, but a particular one to dive into is the effect it has had on some of our country's most traditional yet essential functions. Even as things shut down, essential industries like utilities, telecom, and oil & gas faced pressure to continue the same critical infrastructure operations without interruption.

Suddenly, drone technology that was previously met with hesitation and even dismissiveness was re-examined and quickly embraced as the ultimate tool to provide efficiency and worker safety.

By building an open source community, Auterion enables talented people worldwide to collaborate and create full-scale scaled solutions that are reusable and standardized to address global challenges. Together, this ecosystem has more development power and skill than any well-resourced company in the industry.

In 2020, the PX4 open source community grew to over 9,600 users and more than 600 contributors including partners, universities and research institutions, who together added over 1.5 million lines of code. The software stack has evolved into the most widely used open-source flight control and autopilot system for autonomous aircraft.

As the year ends, we spoke to our Auterion team and our partners in the ecosystem to gain valuable insights as to their lessons learned in 2020 and where they see the drone industry heading in 2021. Here are some key findings:

Continued industry maturity

"The acceleration of the drone industry in 2020 is absolutely a trend that we can expect to see continue in 2021 and beyond."

- Cynthia Huang, VP of Enterprise Business Development, Auterion

"This year more than ever we see drones viewed by the public as more of a "tool in the toolbox" than a novel piece of tech. This is a good thing! Next year we'll see more companies that ever decide to take this new tool and scale. What's going away is the notion that drones are too 'cutting edge' to be used by everyone."

- Jeremiah Johnson, Imagery Solutions Architect, Esri

"The drone industry will further mature, meaning that everything will get closer to the current manned aviation industry. We'll see transformation from tests and pilot projects to actual logistical operations. I foresee that the barrier for new companies will be higher, but fundraising activities will occur more often for scale-ups that have proven to have a viable business case."

- Patrique Zaman, Founder & CEO, Avy

Industry regulations and policy changes

“2021 will bring a rethinking or loosening of the boundaries and regulations for BVLOS flights/scenarios.”

- Florian Siebel, CEO, Quantum Systems

“The new EU regulations coming into force in 2021 will help make it easier to innovate. It will provide a structure that everyone will be able to follow, whether it’s from a customer or operator perspective. It will allow operators and manufacturers to perform more tests and new types of missions and will give customers a clearer understanding of what is possible and feasible when it comes to operations.”

- Patrique Zaman, Founder & CEO, Avy

“A huge cork in the bottle of automation is regulatory agencies not yet providing the regulations to allow full and complete automation of drone flights and data acquisition. Perhaps we will see some use-cases move from testing to legal regulations next year. Most notably in the “flying beyond line of sight” category. Regardless, it will be up to the drone end-users to continue to push these use cases to prove to the regulators that there is demand for enabling already proven safe workflows for widespread use.”

- Jeremiah Johnson, Imagery Solutions Architect, Esri

The impact of COVID-19 on the drone industry

“COVID may have an end in sight thanks to vaccines, but the lessons and values realized by critical infrastructure companies operating drones during the pandemic only paves the way for more adoption of drones in the future.”

- Cynthia Huang, VP of Enterprise Business Development, Auterion

“COVID-19 forced a lot of technology and workflow changes into the forefront. These changes were inevitable in the long-run, but the speed at which the world switched gears and implemented such technology is incredibly impressive. Drone use was a part of this change.

This year we saw organizations ranging from construction to mining to local governments rapidly figuring out how to continue work with limited employees on-site and the majority of employees consuming data and performing their work in their living rooms, kitchens, and guest bedrooms. Drones were at the center of these workflows. I don’t think this is going away. Few technologies allow such easy and instantaneous access to imagery from any perspective.”

- Jeremiah Johnson, Imagery Solutions Architect, Esri

“For 2021, the negative effect will be on the supply chain as a whole for drone manufacturers and for the drone ecosystem. The timeframe for hardware parts may get hindered and in-person meetings will be replaced by streamed demos to show drone capabilities and put a human touch behind the company.

On the other hand, there will be an opportunity for delivery drones. Since logistics have grown during the pandemic, the supply and demand will only increase with drones becoming very effective to meet this need. With regards to healthcare, the delivery of the Covid-19 vaccines is set to be the biggest logistical operation yet and drones will become a viable part in serving rural communities and getting those vaccines to the last mile."

- Patrique Zaman, Founder & CEO, Avy.

How will 2021 drones leverage AI?

"Simple classifiers for real time detection in video feed, including damage detection, search and rescue."

- Arnaud Thiercellin, Head of Enterprise Products, Auterion

"The possibilities of drones capturing and delivering real time aerial data and images will leverage AI, enabling smart decision making. Drones will be capable of fulfilling complete tasks, and missions with detailed reporting. It is likely the commercial applications and use cases will transfer into the governmental sector."

- Florian Siebel, CEO, Quantum Systems

"There will be a lot of space and opportunity to leverage AI for everything that is not flight critical. Will be a great way to deal with a lot of data. Drones used for situational awareness produce a lot of data and more data will be available as missions become more frequent. AI could help with securing this data and maintaining data privacy."

- Patrique Zaman, Founder & CEO, Avy

In summary, as the rapid increase in demand for drones continues in 2021, we will see an ecosystem rally and surge ahead to innovate and meet the rush of various enterprise needs and address industry regulations.

Building upon the success of 2020, we should experience a new wave of collaboration that will result in diverse drone offerings, improved workflows, and more integrated payloads than ever before.

-ENDS-

About Auterion

Auterion provides enterprise and government with an ecosystem of software-defined drones, payloads, and third party applications within a single easy to use platform based on open-source standards.

With 60+ employees across offices in California and Switzerland, Auterion's global customer base includes GE Aviation, Quantum Systems, Freefly Systems, Avy, and the U.S. Government. Auterion is also backed by investors such as Lakestar, Mosaic Ventures, Costanoa Ventures, and Tectonic Ventures. Learn more at www.auterion.com.

Twitter
LinkedIn
Facebook

Auterion PR contacts
Janel Steinberg and James Meredith
Liberty Communications
auterion@libertycomms.com
+1 415 429 5652 / +44 207 751 4444