

Help from Above: Drone Support on Construction Sites



FairFleet manages the system in an Uber like business model



Florian Waubke, CEO at FairFleet – which offers a one-stop shop for drone services – shares his vision on the digitalization of the construction sector.

Drones can provide high-precision data from all angles, covering high-rise assets as well as large areas in completely digital workflows. Autonomous flying, combined with AI-driven analysis and a deep information integration, is about to define

the future of construction. Maps for machines may be generated by drones and used by construction robots to move objects and execute tasks like drilling holes and precision mounting. FairFleet offers a one-stop shop for drone services and the online platform has been optimized for customer simplicity. Florian Waubke, CEO at FairFleet, shares his vision on the digitalization of the construction sector.

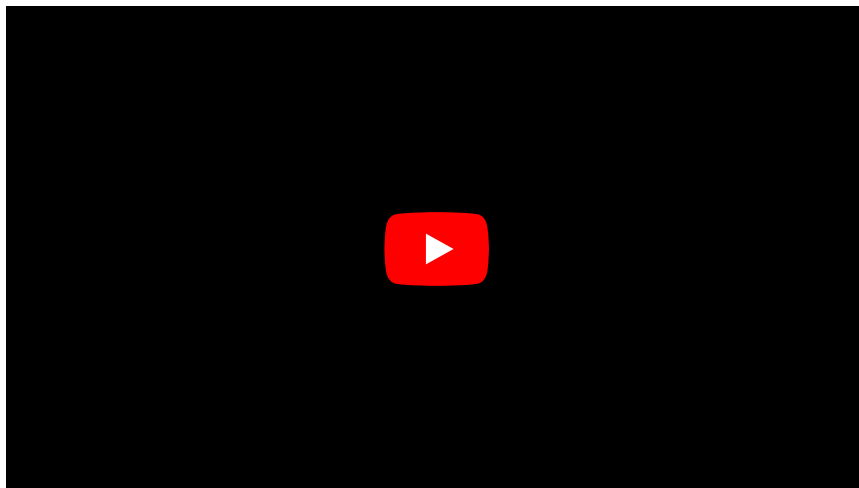
Regarding the near future – what will the construction industry look like?

Florian Waubke: The digital transformation will impact the construction industry. Data will be collected and fully analyzed digitally within a completely connected environment. Automation will accompany the digitalization procedure during the entire process of the development – from data collection and analysis to autonomous systems on a construction site. The transformation of the construction industry will help the delivery of data in a better, more structured and accurate way. This will especially help to increase productivity and reduce process costs.

When you look at your own company, what makes it special?

Waubke: For construction companies, FairFleet offers a variety of solutions. During the planning phase, we generate digital elevation models, demolition planning models and 3D visualizations. These can be perfectly incorporated into 360° spherical panoramas as well as high-resolution videos. The result is a high-quality visualization of residential or commercial assets to provide a realistic preview into the future of a construction project. While a construction is ongoing, we can deliver services such as progress monitoring and outdoor tracking for any kind of material and earth-moving activities. Furthermore, [FairFleet](#) uses thermal imagery technology to detect potential water intrusions, for example, for a construction warranty case, but also 3D modelling techniques to create a high-resolution digital twin of the asset. Last but not least, we can provide CAD-ready models of existing properties.

Drone missions reduce the costs of capturing and documenting projects by up to 90%, using high-resolution and geo-referenced drone aerial photographs to quickly, accurately and cost-effectively analyze construction sites. In order to monitor the progress, the flight is planned using flight planning software and can be repeated as often as necessary, regardless of the size of the construction site.



What is your company vision?

Waubke: All data will be translated into useful information with a high degree of automation, using the latest AI technologies. In addition to this, drone technology helps to capture more and better data in less time to make construction processes more efficient, but also safer.

How did you set up your revenue model?

Waubke: FairFleet operates a very flexible on-demand model – customers pay per flight/service package. Flights normally start at around

EUR 500 for a smaller construction site, including data analytics. For key account customers, we offer dedicated order pages, so each company can order their service packages easily and conveniently in less than 60 seconds.

How is your company funded?

Waubke: The company is funded by Venture Capital investors. Among them are HighTech Gründerfonds, one of the biggest and most active early stage VC funds in Germany as well as 3ECapital, a Düsseldorf-based fund. The investment cycle is completed by Dr Stefan Zoller, a former Airbus Manager.



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As a start-up, what could be the next development steps?

Waubke: We have already completed various projects in the construction industry. Our goal is to roll out our services on a big scale. To do so, we will search for a key partner with a deep construction integration, accelerating both our businesses. For a young company, it is important that partners are open to optimizing their products together consistently, so that they can provide a best in class service that really solves the problems of the industry. To create best in class products is a journey and we would love to have partners who see it in the same way. For example, data integration into legacy systems can be a challenge. The better we understand these challenges, together with our partner, the faster we can find solutions.

Who are your key clients?

Waubke: Companies in the field of construction, real estate, facility management, insurance companies, companies providing technical inspections and companies running large infrastructures. Most of our services centre around assets, mainly those which are larger in scale or difficult to reach. It all started with real estate but, as mentioned above, we are now serving a lot of different companies with a wide range of solutions.

What are the biggest challenges of your clients?

Waubke: With regards to the usage of drones, we see that our customers are facing different challenges. Here are some of the most relevant ones:

- **Dynamic legislation:** Flight regulations for commercial drone operations are non-standardized, vary from region to region and are subject to frequent change.
- **Pilot acquisition:** It is hard for our clients to find and deploy local pilots with the right capabilities, know-how and appropriate equipment.
- **Consistent data quality:** International clients seek consistent quality, even if flights take place in different countries and on a global scale.
- **Interpretation of data:** Solely capturing aerial imagery is not enough. Relevant results are delivered through data processing and comprehensive analytics.
- **Fragmented services:** To receive relevant results, various drone service and software providers covering singular parts of the value chain are necessary, causing multiple touch points and high complexity.

What kind of support do you offer in these cases?

Waubke: The customers can easily book flights with corresponding service packages via our website or call centre; we then take care of the rest and deliver a solution to the clients.

And we dramatically reduce the number of men at risk. Few industries are as dangerous and complex as the construction industry. Keeping workers safe should be the top priority, but it is one of the major industry challenges. Drone inspections and documentation of construction progress can help to overcome this challenge. Inspecting dangerous jobsites and monitoring hard-to-reach areas from a safe distance can potentially save lives.

What prerequisites do your clients need to bring?

Waubke: At the beginning, no more than the motivation to adopt new technologies in their business. At a later stage, data flows must be defined as seamlessly as possible to unlock the full automation potential.

Read the [original](#) article and [other stories](#) about start-ups in the construction industry.