PROJECT
I.O.X

Overview

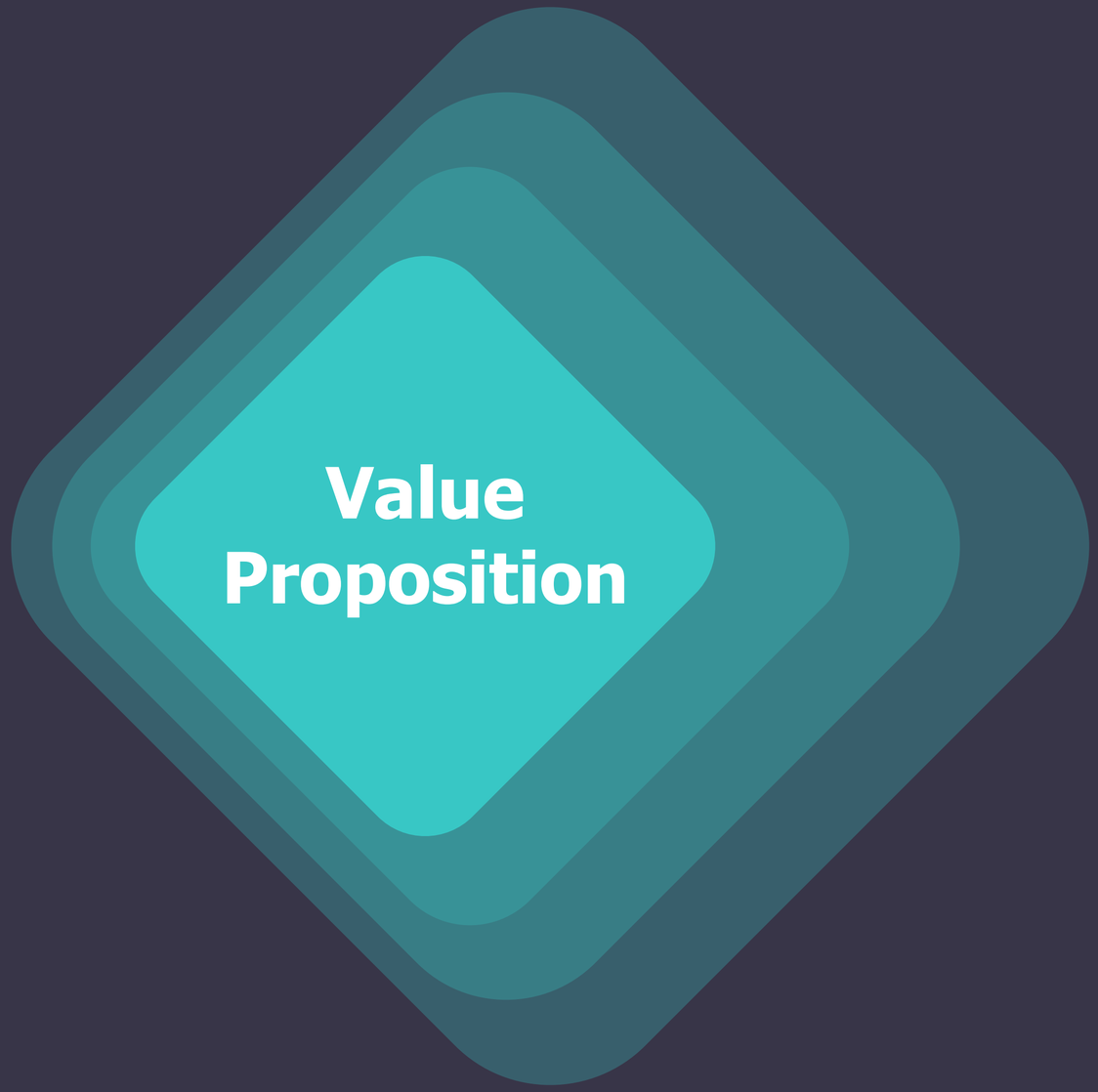
Aiotize is a manufacturer of unmanned aircraft systems for businesses and governments worldwide.

Based in India, Aiotize develops and builds multirotor platforms to aviation-grade quality standards, making them reliable, stable, and versatile.

These autonomous unmanned aerial systems UAS comprise full aerial data solutions to support a variety of commercial applications like security & surveillance, agricultural surveys and mapping, Asset survey etc.

IOX is an enterprise drone automation concept that provides drone agnostic software solutions to deploy with fully automated & cloud-connected commercial drones at scale.

- We Build Smart and Scalable Drones & Applications.
- Automating Drone Operations by leveraging the Internet of Drones.
- Simplifying remote drone missions, beyond visual line of sight [BVLOS].



Customer Value Proposition

01

Control Drone from Anywhere.

With Unlimited Range

live video feed and control drone over 4G/LTE.

02

Built for Safety, Security & Reliability

- Geofence and pre-flight checklist make sure the flights are safe.
- End-to-end encryption and authentication keeps drone and data access - secure.

03

Cloud-based application

Allows users to access the dashboard on any machine, anytime with no installation required.

Like the internet and GPS before them, drones are evolving beyond their military origin to become powerful business tools.

They've already made the leap to the consumer market, and now they're being put to work in commercial and civil government applications from firefighting to farming, Security to emergency response. That's creating a market opportunity that's too large to ignore.

Applications

Aiotize steps in with its Internet of Drones (IoD) – a derivative of Internet of Things (IoT) – which connects UAVs to Internet-linked systems to record and analyze data.

Our Drones could be used across a range of applications by

- Enterprises
- Defense & homeland security

Defence & Homeland Security

Drones or UAVs can identify security and terrorism-related challenges and pinpoint vulnerable areas that are prone to various risks. Drones are the modern-day force multiplier that can enhance the capabilities of security forces to contain terror and to counter the emerging challenges in defence and homeland security.

Anti Terror

Detect threats and identify risk-prone areas from a remote location

Border Security

Conduct reconnaissance missions and track illegal activities without risking lives

Counter Insurgency

Conduct surveillance and gather actionable intelligence

Crime Control

Enhance law enforcement with remote situation assessment and crime scene analysis

Crowd Monitoring

Detect irregular activity and gain in-depth situational awareness

Disaster Management

Gain real-time knowledge of the situation and plan search and rescue operations effectively

Enterprise

Drones have become an integral part of operations such as mapping, surveying, equipment inspection, analyze difficult-to-monitor areas, project monitoring and precision agriculture activities. The deployment of drones for such operations reduces crew costs by minimizing time-consuming ground observations.

Precision Agriculture

Analyze crop growth pattern and inspect crops for diseases quickly

Construction & Real Estate

Inspect buildings, bridges, rail lines and other infrastructure without scaffolding or booms

Industrial Asset Inspection

Examine solar farms and detect anomalies with fewer or no personnel

Mining

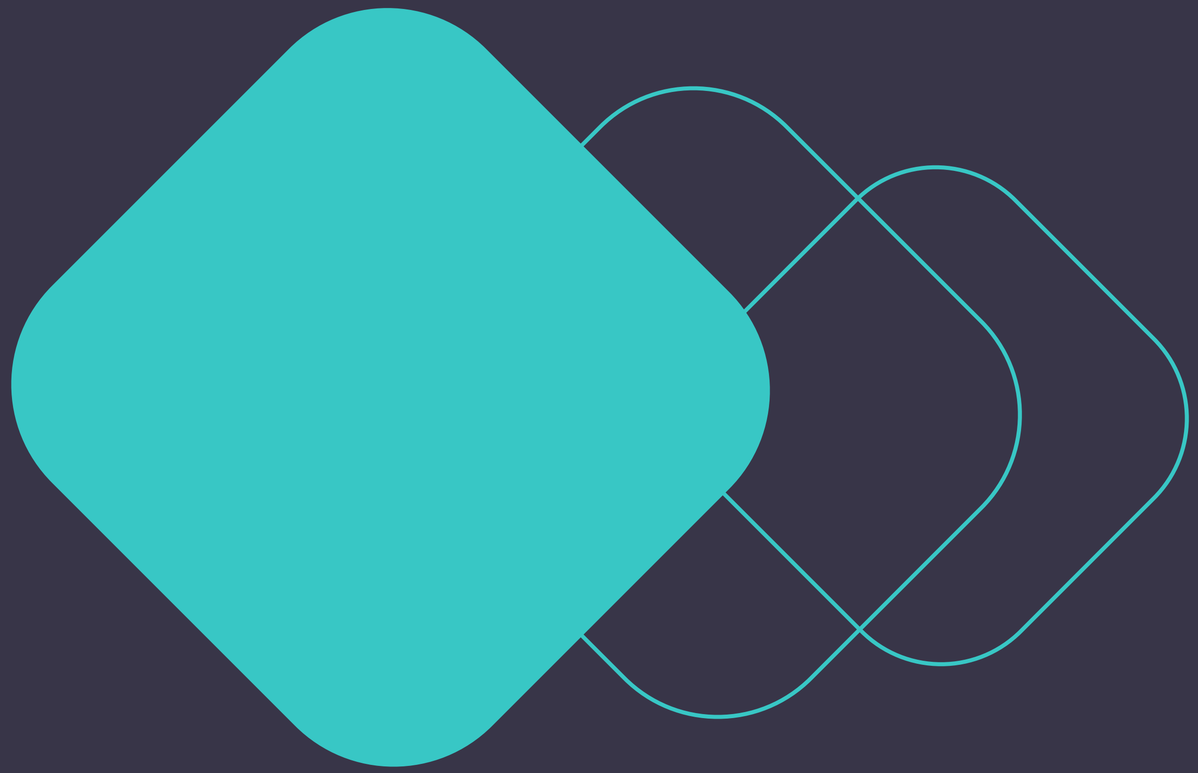
Use aerial surveys and photogrammetry to improve blast optimization

Oil & Gas

Eliminate human intervention for detecting leaks or emissions, spills and corrosion in hard-to-reach areas

Power Transmission

Inspect transmission towers and distribution infrastructure without risking human lives

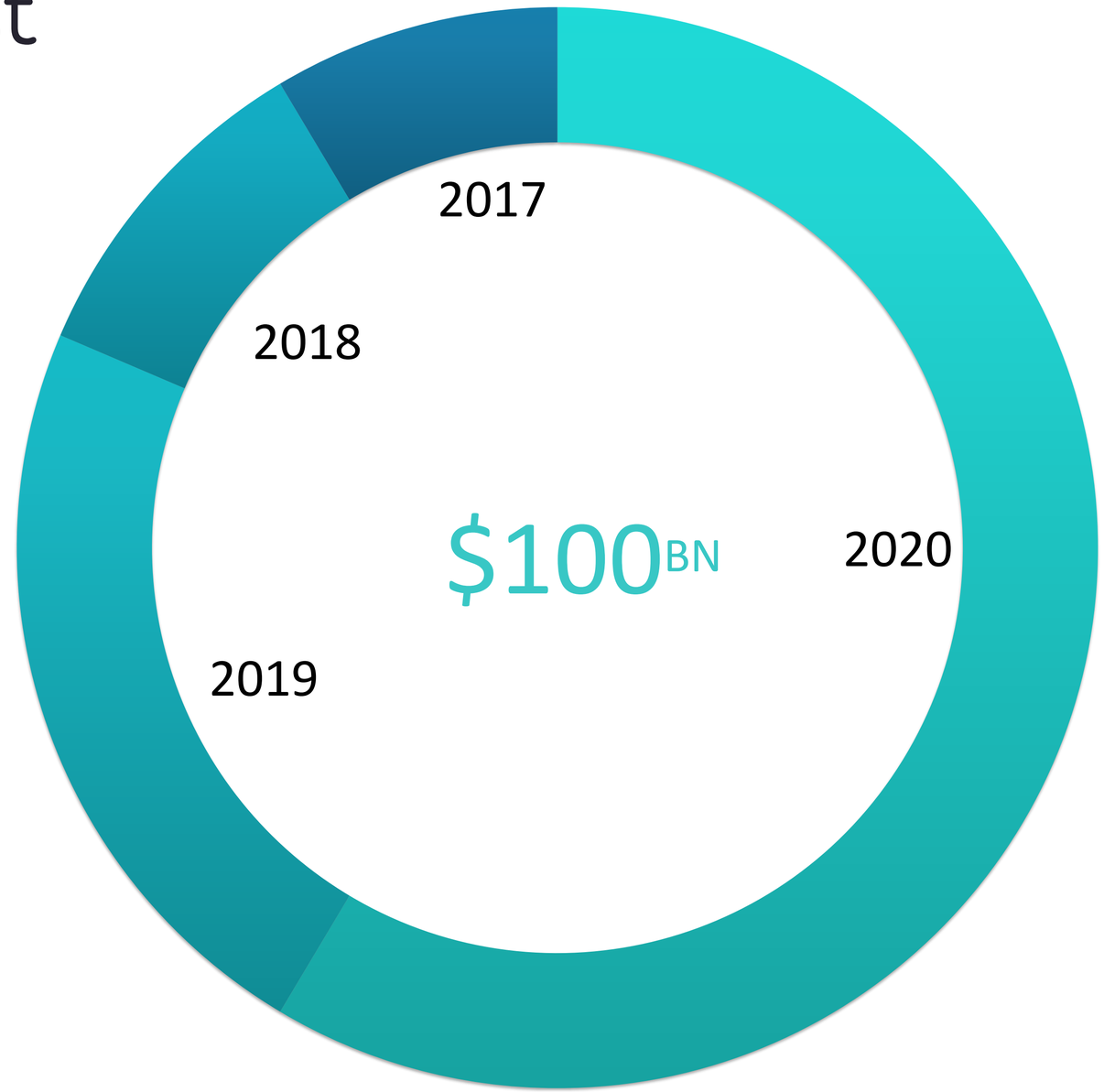


Market Research

Global Market Forecast

Between 2016 to 2020, a forecast of $100 billion market opportunity for drones–helped by growing demand from the commercial and civil government sectors.

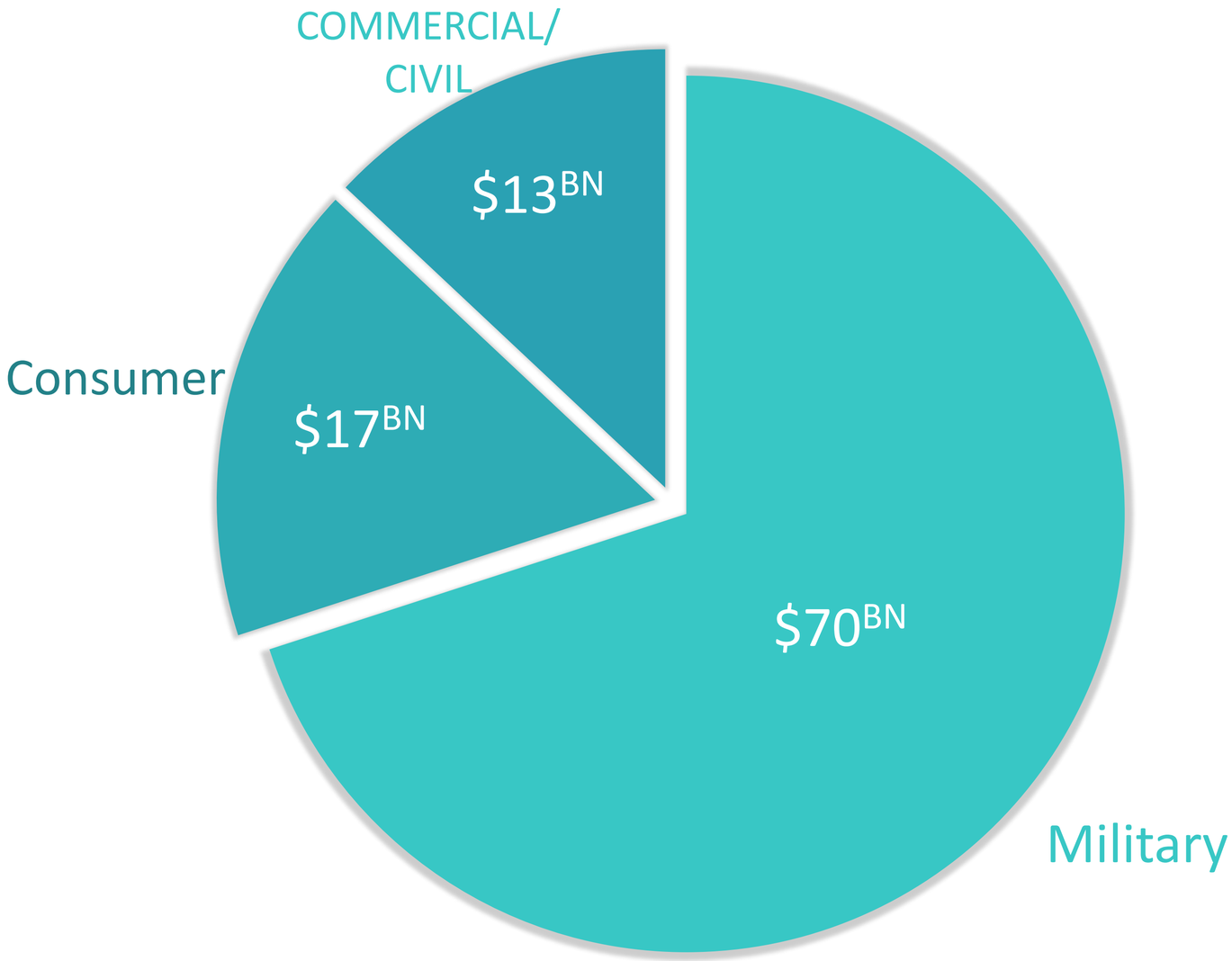
- Source: Goldman Sachs Research



MARKET SHARE

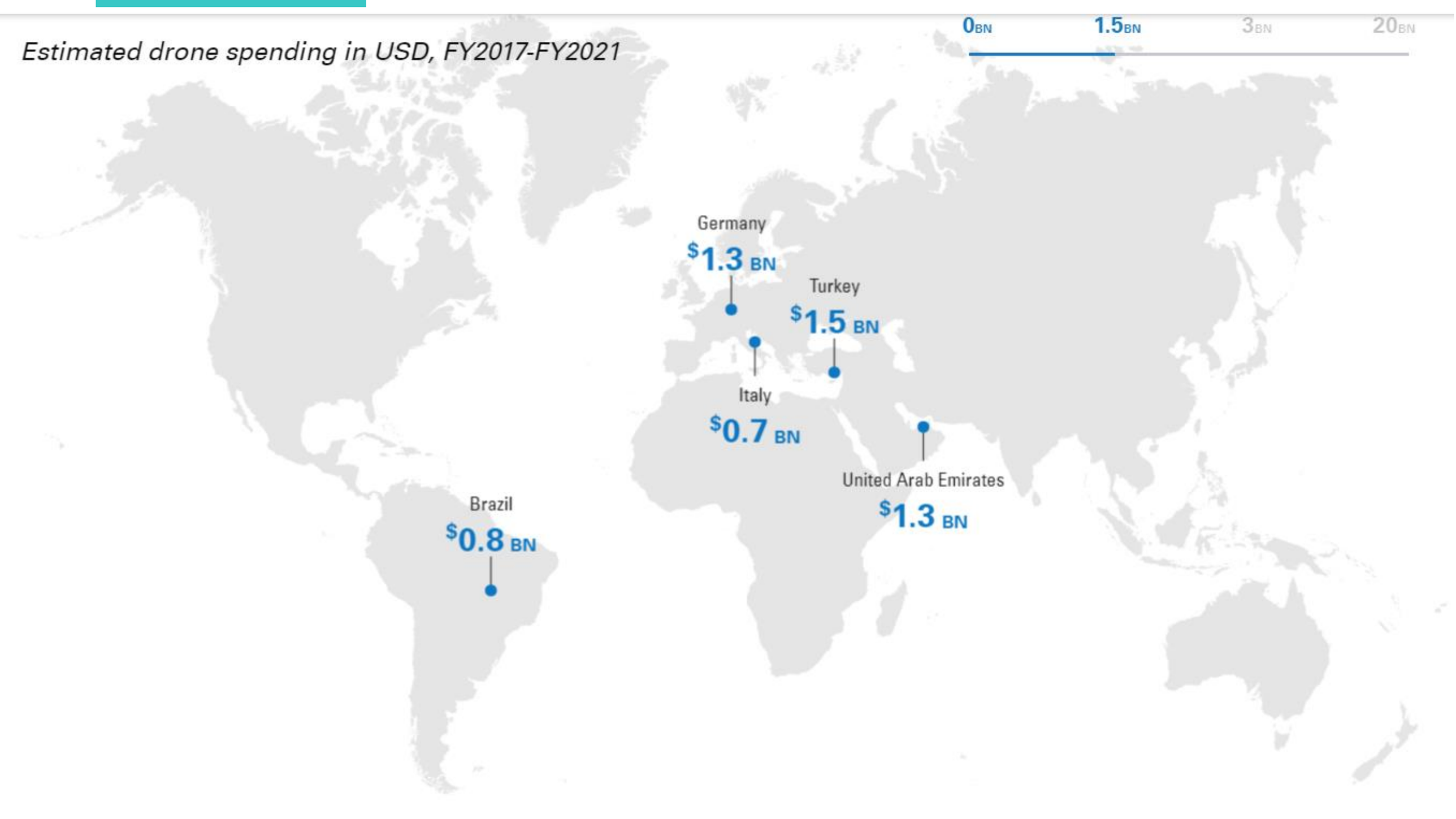
- Defense will remain the largest market for the foreseeable future as global competition heats up and technology continues to improve.
- The consumer drone market was the first to develop outside the military.
- The fastest growth opportunity comes from businesses and civil governments.

Source: Goldman Sachs Research



Between 2016 - 2020

Estimated drone spending in USD, FY2017-FY2021



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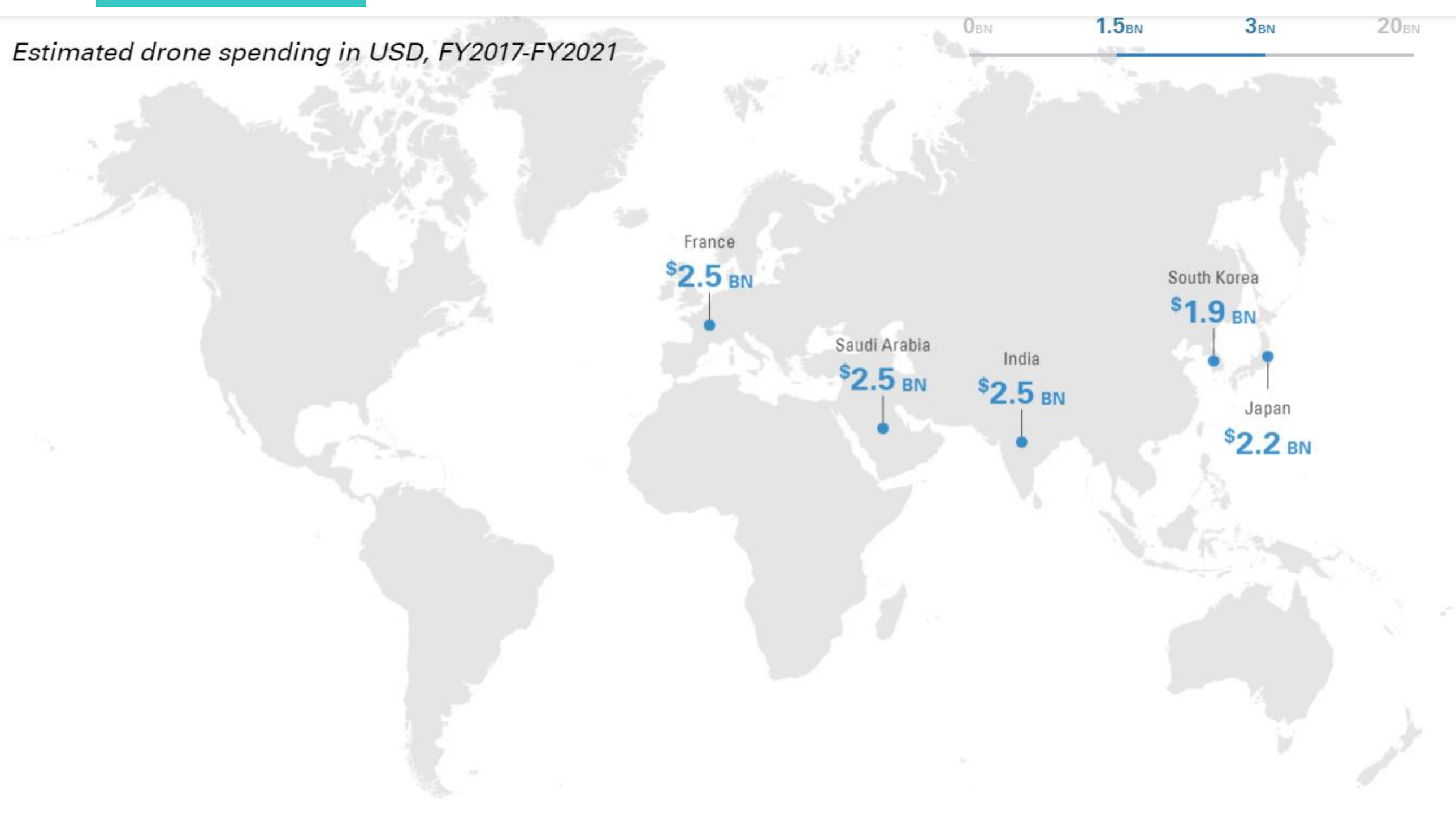

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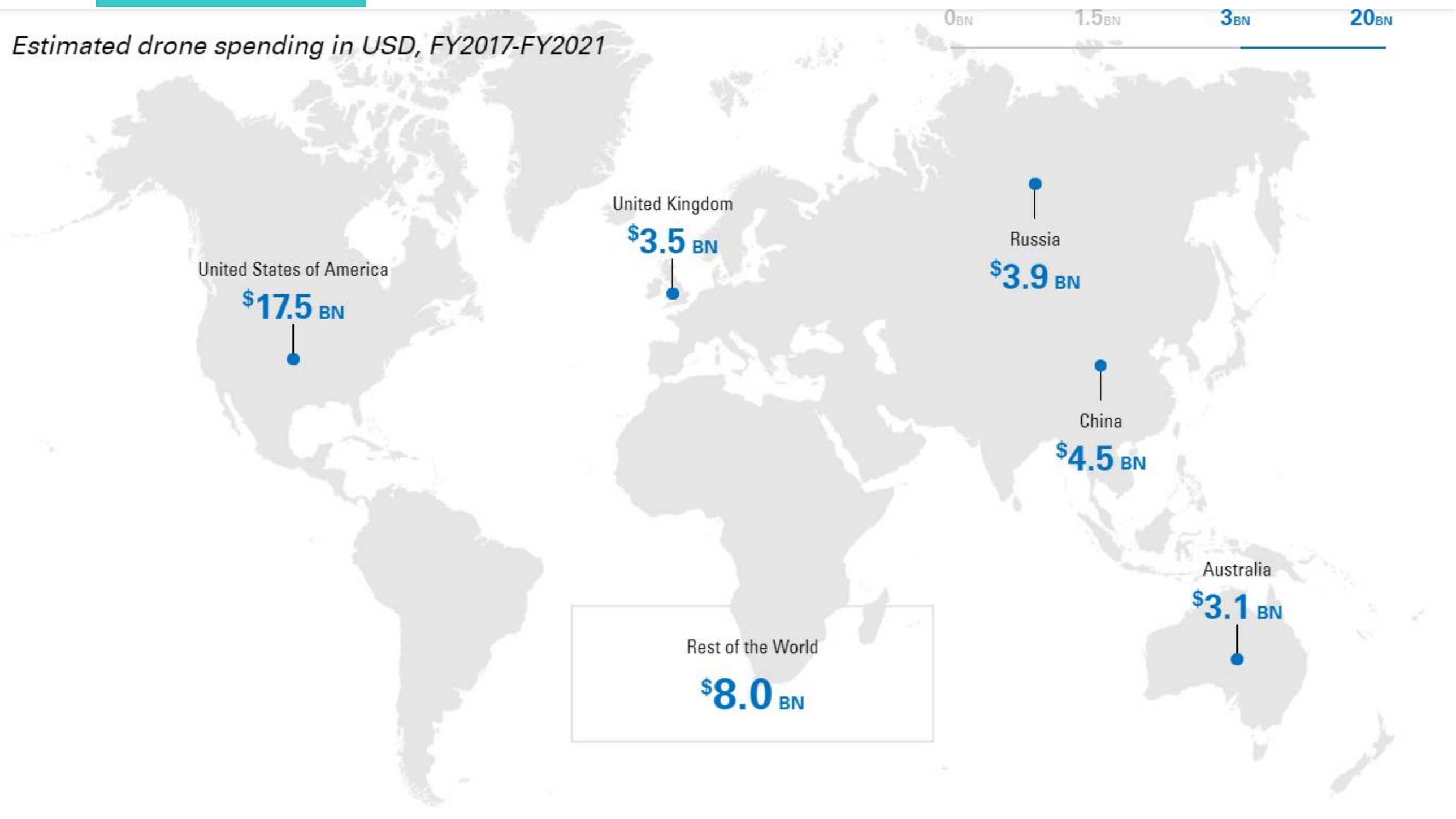


The Product

- Drone/UAV
- Ground Control Station
- Control Software
- Ai/ML Algorithms
- Encrypted communication system.

Product Overview

IOX is the modular Drone which is convenient to assemble, control & replace in case of need. It provides the user with an endurance of about 50 minute flight time under normal operations.

01

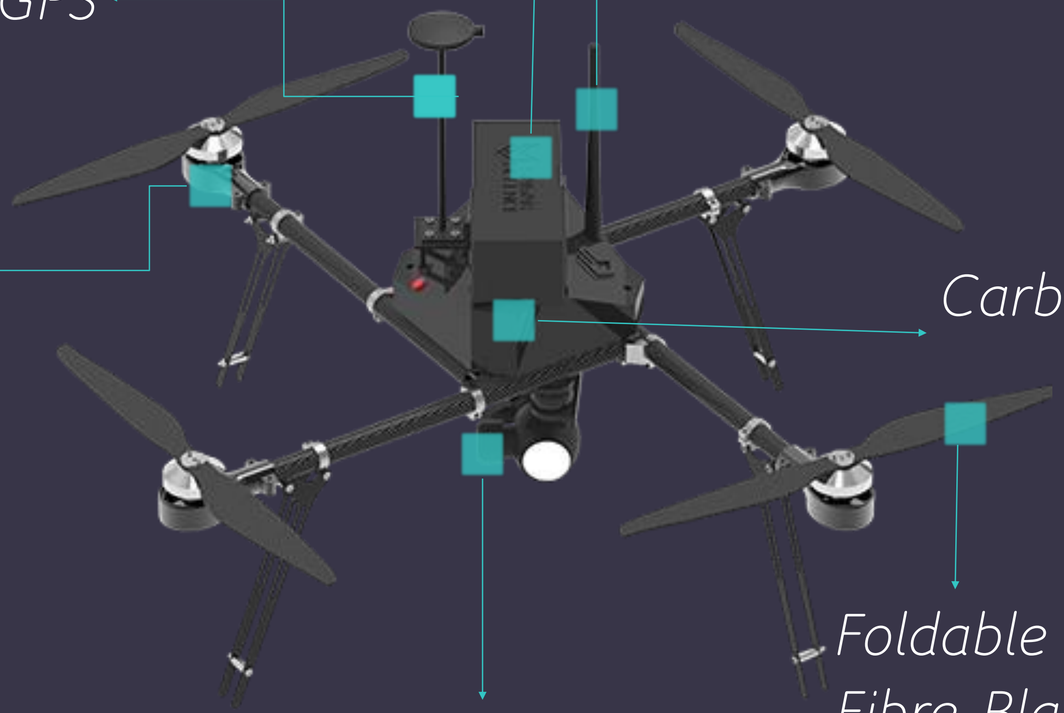
Endurance of 50 minutes flight time on a single charge

02

Available in Lightweight carbon fiber frame/ Aluminum/FRP with a modular design

03

Fully Autonomous Mission execution.



Swappable Battery Payload

Telemetry

GPS

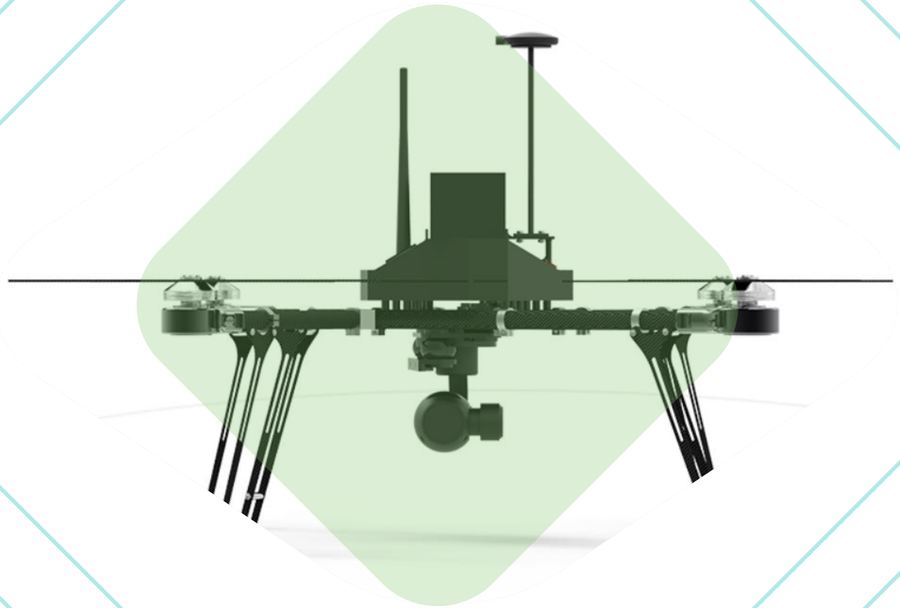
Custom Brushless DC Motor

Carbon Fibre Frame

Foldable Carbon Fibre Blades

Swappable Camera Payload

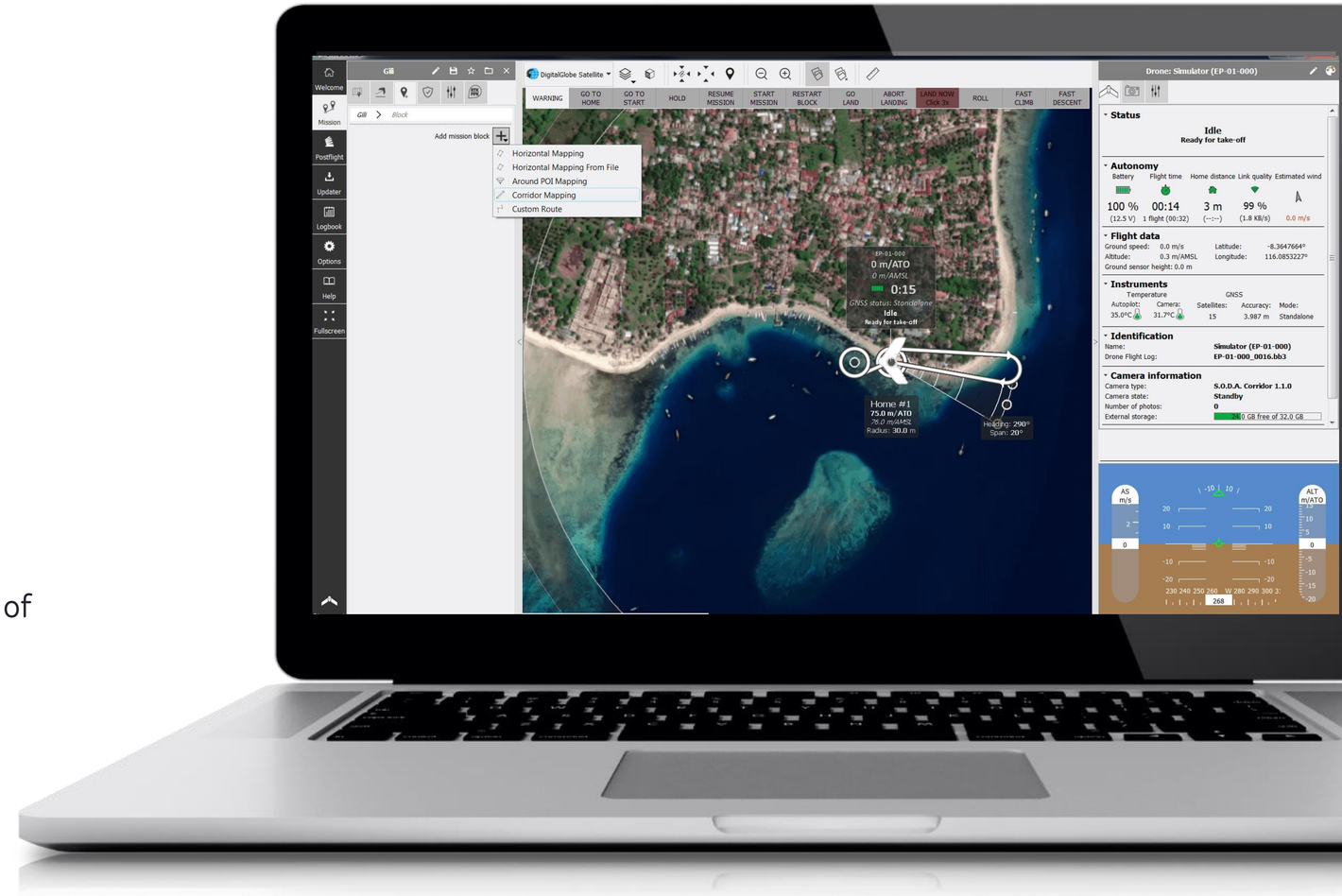
- Endurance of 50 minutes flight time on a single charge
- Robust and easy to repair.



- Fully Autonomous Mission execution.
- Operational range is ~ 30KM
- Modes including auto, manual, follow me and many more
- Modular design easily reducing the time for storage and travel

Ground Control Station Software

IOX has its own proprietary software for waypoint navigation, & planning a mission. The software communication with the drone is encrypted.



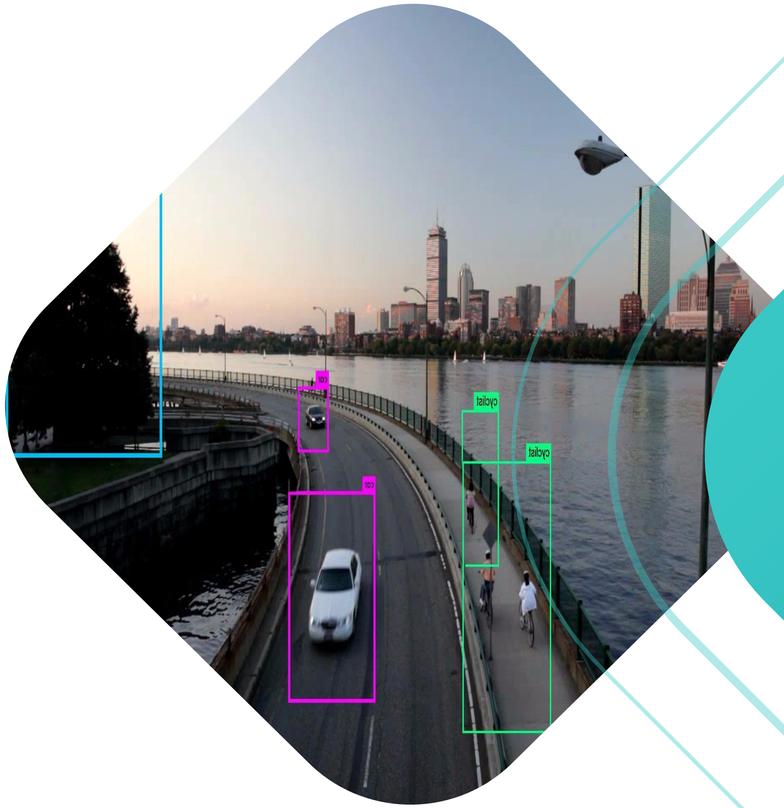
Navigation panel

Displays the Realtime location & GPS coordinates of the drone.

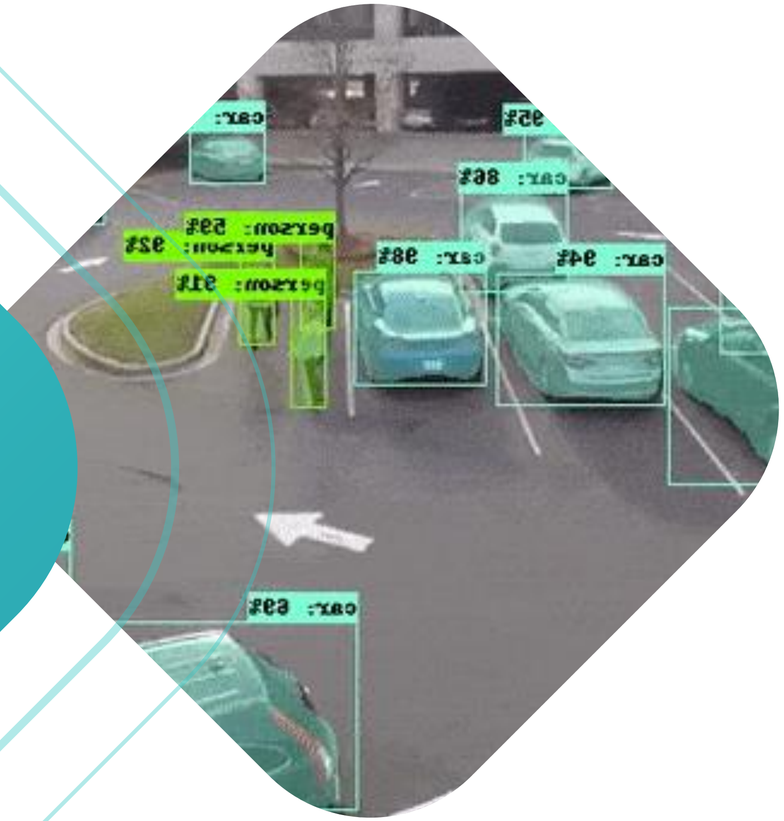
Video Panel

Displays the Realtime footage from the onboard camera

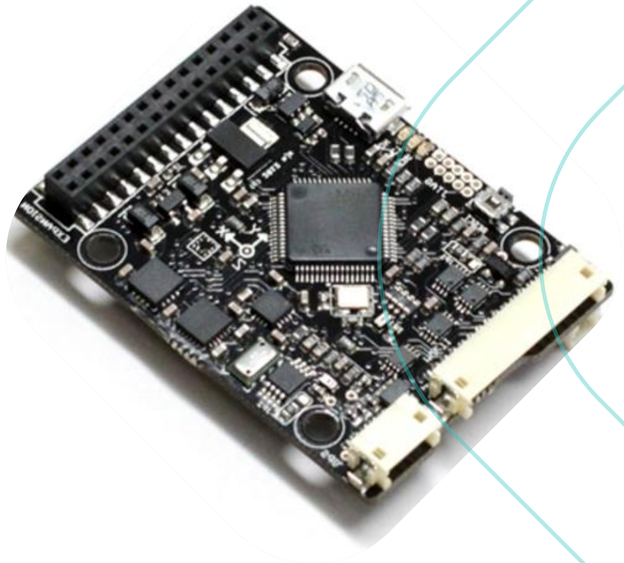
The Differentiators



1. Ai Driven
2. ROS Enabled
3. Video Analytics
4. Proprietary Ground Control Station & Analytics tool



The Differentiators



Autopilot

IOX is capable of doing BVLOS [Beyond visual line of sight] missions, once the waypoints are given by the ground control

Proprietary Ground Station Software

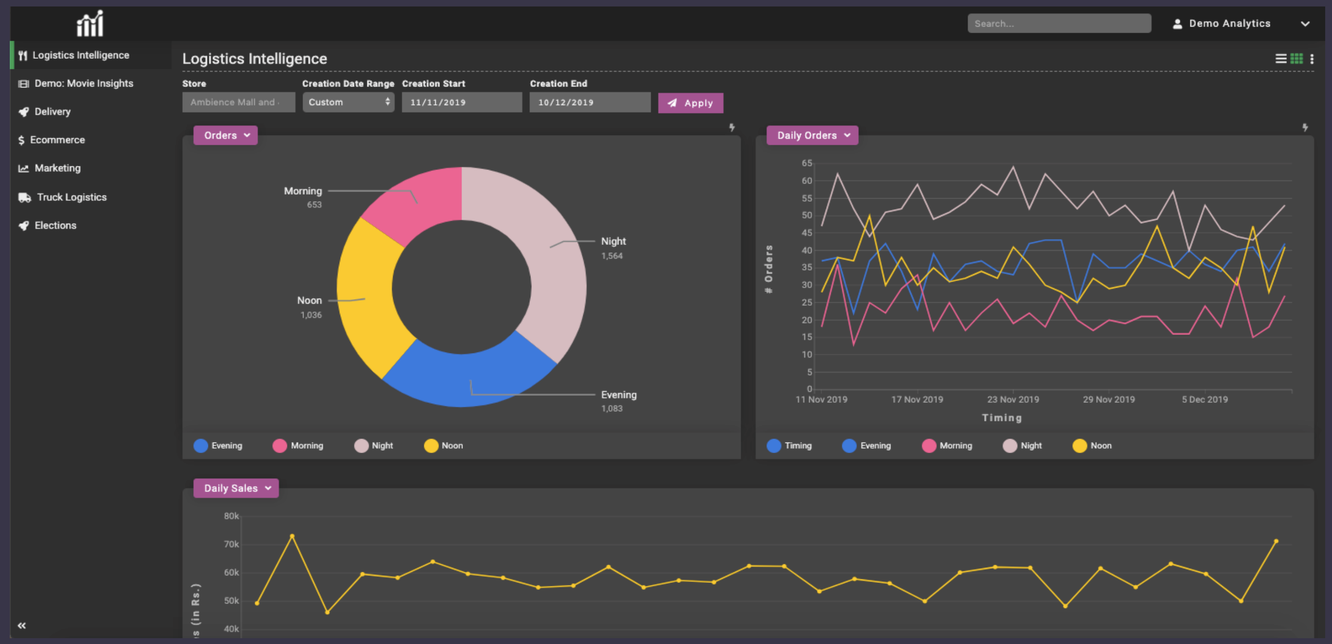
Load mission coordinates & it receives live footage of the mission.

Operational Range

IoX is capable of communicating & sending Videos from as far as 30 KM.

Asira

Proprietary Analytics Tool



Asira BI tool is a Value addition to IOX project, it generates reports & data visuals on basis of acquired data by the on drone while its operation.

Research & Development

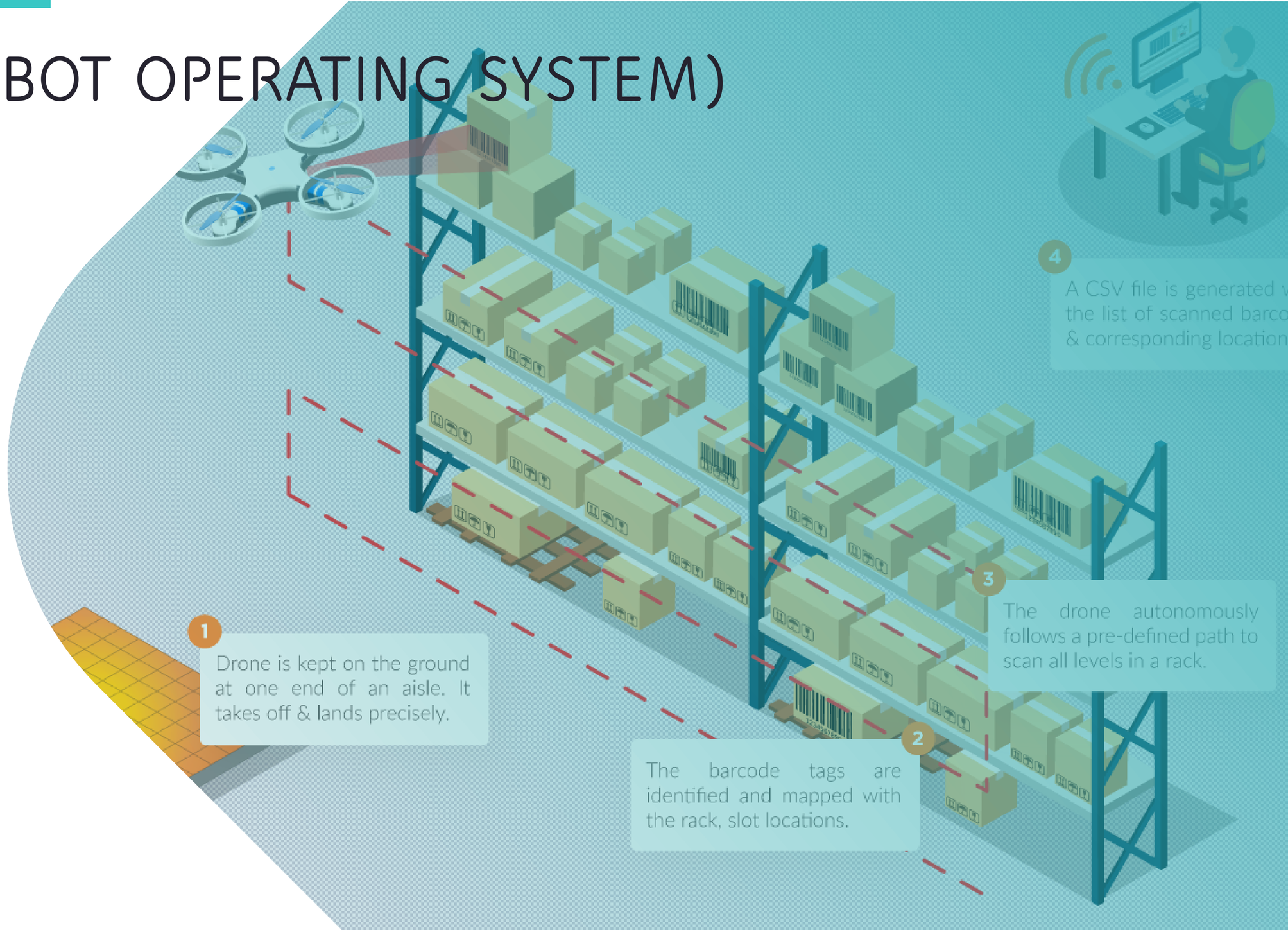
Project IOX is a constantly evolving concept as there's intensive research required to develop out of the box solutions. This gives iox a competitive edge as the current systems are very generic in nature.

1. IOX concept is built on ROS [Robot Operating System].
2. Ai Models such as facial recognition, object detection & avoidance are constantly trained by our Data scientist.
3. Video Analytics Models are trained to identify abnormalities in the operational ecosystem

ROS (ROBOT OPERATING SYSTEM)

The Robot Operating System (ROS) is a set of software libraries and tools that help to build robot applications.

IOX is ROS enabled, which is its Intellectual property, for indoor navigation without GPS coordinates.



PORTFOLIO

IOX is in pre production stage.

Some of the POC testing has been done with the said clients. This rigorous testing has helped us to conceive the production ready models according to the industry standards.

IOX - Drone as a Service Pricing Model

Monthly Subscription

Drone & the Platform could be licensed on monthly basis for services such as security, mapping, inspection

Service On Demand

Drone on Demand could be charged on task basis, hourly or daily basis. No Licensing would be required it would be according to the service.

Drone in a box Solution

Bespoke drone solution with the platform would be provided, with white labeled IOX platform for the businesses.

Core Team

Shivansh Sethi [CEO/Founder]

5 Years of experience in IOT - UC San Diego.

Sukhdeep Singh [CTO]

Data Scientist

MS Macquarie University, Australia

Anurag Jain [Chief Software]

Ex-Zomato | 5 years of exp. In Software Dev| Analytics.

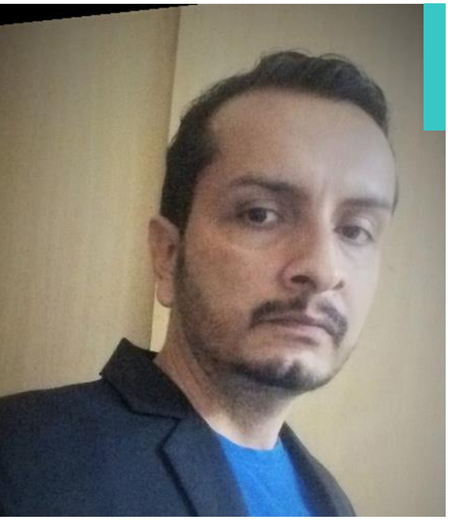
Prayag Sharma [R&D Lead]

Robot operating system expert | UAV/Drone specialist| Drone Pilot

Kapil Kumar [Technology Lead]

Drone Hardware expert | Drone Pilot

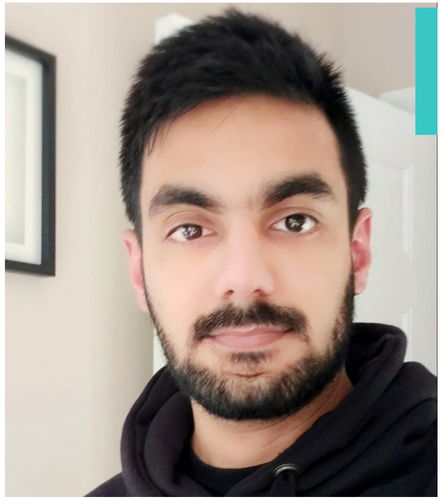
Core Team



Jeevan Mahala [Chief Adviser]

17 years of exp. In technical sales | ex-Quick Heal

Tarun [Chief Marketing and Sales]



Tushar Bhatnagar [Chief AI]

Research Scientist

University of Bristol, United Kingdom

Vinayak [Drone Pilot]

Computer Science Engineer

Chitkara University India

Mahima Gupta [DS Intern]

Masters in DS

Macquarie University Australia