

A large, white, stylized letter 'V' is centered on the page. The background is a close-up, low-angle shot of a wind turbine's nacelle and hub, showing metallic components and bolts. The sky is a clear, light blue. The word 'Industria' is written in a white, sans-serif font, positioned above the right side of the 'V'.

Industria

Indoor drones for confined spaces inspections

FLYABILITY

Company identity card

Insert your LOGO



FLYABILITY
Route du lac 3, 1094 Paudex, Switzerland
www.flyability.com

Creation date :2014
Legal structure : SA
Workforce: 105
Share capital:

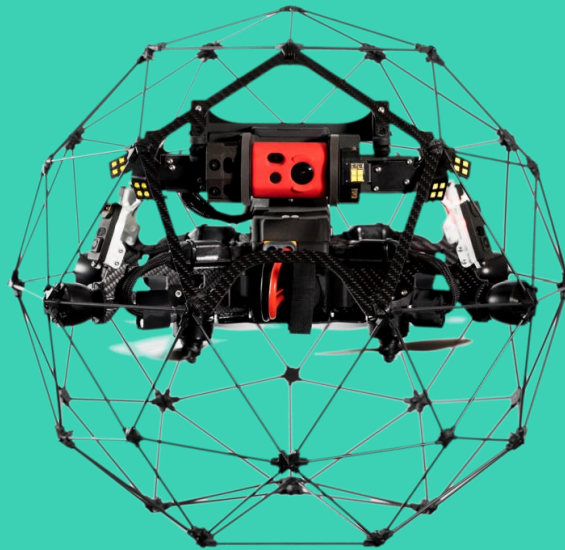
Company value proposition (20 to 30 words): Flyability is the reference manufacturer of indoor drones for inspections in confined spaces, aiming to replace humans to reach dangerous places in the industry.

Key figures:

	2017	2018	2019	2020
Turnover	0.3 mio EUR	0.7 mio EUR	1,2 mio EUR (new product launch)	0.9 mio EUR (Covid)
Net profit				
Equity				
Workforce	20	45	70	85

Market : All Industries worldwide, public safety, mining
Definition: Inspections in confined spaces, public safety, mining exploration and mapping.
Size : Niche market in the drone industry, but extreme potential in absolute terms
Trend : 40% annual growth.

Product / Company value proposition



Team

- ▶ Patrick Thevoz (<https://www.linkedin.com/in/pthevoz/>) and Dr. Adrien Brio – passionate cousins. (<https://www.linkedin.com/in/abriod/>), Swiss nationality.
- ▶ Ex-EPFL Students, Engineering backgrounds, own most of the shares.
- ▶ Presentation of Flyability investors: <https://pitchbook.com/profiles/company/98298-28>
- ▶ Dow Chemical and Swisscom important investors
- ▶ Started in the context of Fukushima, with a simple vision: use robotics instead of human to explore and inspect hazardous places.

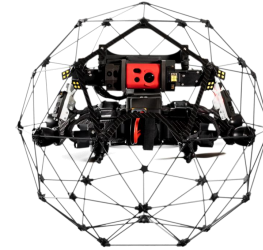
IDENTIFIED FINDING (S) / PROBLEM (S)

- ▶ **Confined spaces entries** in the industry are a huge hassle, in terms of safety (accidents/casualties related to lack of oxygen, toxic products, radioactive contamination)
- ▶ They also imply a massive immobilization time of the production, as very often rope access or scaffolding are necessary to inspect these places (ex: inside an oil storage tank, at least 10 days to build / dismantles the structure)
- ▶ They are extremely costly and complex to inspect (sometimes 100K USD for a scaffold inside a storage tank or in a cargo tank)
- ▶ Beside the industry, these issues are common in the mining exploration and infrastructure monitoring (sewers, internal bridge, etc.)
- ▶ Today, the standard drone technology cannot access indoor places as they need a GPS signal and they do not resist collisions.
- ▶ Inspectors need a reliable tool to easily access confined spaces and collect high-quality inspection data.

SOLUTION

- The Elios 2 is the reference of the indoor drone technology:

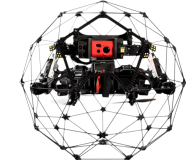
<https://www.youtube.com/watch?v=hW1Fn32JBls>



BENEFITS

- Removes the risk related to confined spaces entries,
- Significant downtime reduction (no safety permit needed, no scaffolding). Ex: 0.5 day instead of 1 weeks for an oil tank, 1km of sewers inspected per day instead of 400m, etc.
- Significant cost savings (inspection costs, facility management)
- In line with predictive maintenance (asset knowledge and prevention of the issues)

OFFER - INNOVATIVE PRODUCT (S) / SERVICE (S)



- Its **protective cage**, inspired by insects, can resist to all kinds of collisions, which enable the inspectors to access any complex spaces without a risk of crash
 - Its **navigation system** is very specific and relies on optical sensors, removing the need for GPS signal, making it very stable and easy to fly.
 - **4K Camera, IR Camera, and specific lighting system** (with oblique lighting) to collect high quality inspection data
 - **Software solution** for reporting, localizing the defects in the asset (x,y,z), inside a 3D model (Digital twin)
-
- The Elios 2 is the second widely commercialized product by Flyability. The Elios 1 was launched in 2016, the Elios 2 in 2019. Around 1'500 drones have been sold worldwide.

MARKET

- Market overview:
 - INDUSTRY (Nuclear, Oil & Gas, Cement, Metals, Chemicals, Pharma, Mining, Maritime)
 - INFRASTRUCTURE (large sewers, internal bridges)
 - PUBLIC SAFETY (fire brigades, police, special forces). Flyability refuses to sell to the military.
- In any country of the world. The North America represents 40% of our sales, Europe 30%, Asia and Middle-East are growing.
- Main customers: Asset owners (Total, BASF, Arcelormittal, etc.), inspection companies (Bureau Veritas, Vinçotte, etc) and OEM (GE, GEA, etc).
- Flyability does not provide inspection services: it is a hardware and software provider. We provide high quality training to make sure inspectors get the best out of the technology.
- Indoor drones are not subject to EU Drone regulations, as they are operated indoor, in private environments. There is no need to specific license or permit to fly our drones.

SEGMENTATION - POSITIONING

- Target Audience: Asset owners (Total, BASF, Arcelormittal, etc.), inspection companies (Bureau Veritas, Vinçotte, etc).
- We help them to achieve two types of inspections: regulatory and voluntary (preventive)
- BENEFITS
 - Removes the risk related to confined spaces entries,
 - Significant downtime reduction (no safety permit needed, no scaffolding). Ex: 0.5 day instead of 1 weeks for an oil tank, 1km of sewers inspected per day instead of 400m, etc.
 - Significant cost savings (inspection costs, facility management)
 - In line with predictive maintenance (asset knowledge and prevention of the issues)
 - For inspection companies: an innovative way to differentiate and bring value to their customers.
- Today, each of the segments represent 50% of our sales
- The TAM is very significant, we are only at the beginning of the adventure.

COMPETITION

	Flyability	Multinnov	Flybotix
Maturity	+++ (2014)	+(2018)	2020
Reliability	+++	very low	still assessing
Software solution	Inspection software	N/A	N/A
Employees	105	6	8
Country	Switzerland	France	Switzerland
After sales	team of 10	0	0
Commercial reach and legitimacy	Established	France	Starting
Price position	Premium	Low	Medium

COMPETITIVE ADVANTAGES

- Long-lasting and defensible advantages over the competition
 - Flyability was the pioneer in 2014,
 - Technological advance (4-5 years) and reliability
 - Strong barrier to entry (technological challenge)
 - Established structure (after-sale, quality, support)
 - Institutional and financial support (from Swiss institutions and investors)

ECONOMIC MODEL / INCOME MODEL



ELIOS 2 PRODUCT OFFERING

ELIOS 2 PACKAGES

Every Elios 2 comes with a package. We offer various packages to accommodate the different needs of our clients.

WHAT'S IN THE BOX	LIGHT PACKAGE	PREMIUM PACKAGE	ENTERPRISE PACKAGE
Elios 2 UAV	1	1	1
2.4 GHz digital RC and video receiver	1	1	1
Samsung android tablet	1	1	1
Transport case	1	1	1
Battery storage safe bag	1	1	1
Toolbox with all required tools for maintenance	1	1	1
Micro SD cards	1 x 32GB, 1 x 64GB	1 x 32GB, 1 x 64GB	1 x 32GB, 1 x 64GB
Spare cage pentagons	6	6	6
Pack of 4 propellers	3	5	7
Robot battery chargers	2	5	8
Robot batteries	3	9	15
SOFTWARE			
Inspector 3.0 Free	Included	-	-
Inspector 3.0 Premium	-	1-year License	3-year License
ADD-ONS			
Range Extender Add-On	-	-	Included
WARRANTY			
12-month warranty	Included	-	-
24-month warranty	-	Included	Included
TRAINING			
Self training / Online training material	Included	Included	Included
Introductory training	Included	Included	Included
SUPPORT			
Unlimited phone and email support	Included	Included	Included
PRICE	EUR 30,540.00	EUR 37,240.00	EUR 46,740.00

MARKETING / COMMUNICATION - ACQUISITION STRATEGY

- ▶ Marketing relying on important inbound lead generation (Web, SEOs, Social Media)
- ▶ Active content creation ([see our website](#)), webinars, articles
- ▶ Active promotion by our customers (real-life cases) on social networks
- ▶ Targeted outbound strategy to acquire new leads in asset owners and inspection companies

SALES CHANNELS

- Indirect channel= 60% of sales (and growing), direct channel 40%
- In Mature markets we work with 1 partner per country, supporting on importation, distribution, pilots training, maintenance and after sale, support, commercial development and event organization.
Today we have 50+ partners .
- Commercial model (margins) are confidential.

COMMERCIAL

- Client's functions: Head of inspection, Head of Maintenance, Head of Innovation (Plant 4.0), Site Manager, EHS Manager, CTO, CEO (for smaller companies), Technical director (for inspection companies)
- Estimated sales cycle: 5-6 months (between first contact, POC, sale)
- Examples of customers (Belgium-France focus): Total, BASF, ArcelorMittal, Aperam, Vinçotte, Bureau Veritas, SGS, Institut de Soudure, Engie, Horizon Data Services, Sites, Suez, Veolia, ExxonMobil, Dow Chemical, Chevron

FINANCIAL INFORMATION

- Summarize your projected income statement and your business assumptions:
 - CA 2021: 15 mio USD, CA 2022 (target): 20 mio USD
 - Number of employees / year and breakdown by function:
 - Commercial: 20
 - R&D: 60
 - Production: 15
 - Other: 10
 - Around 200 new customers per year
 - 10% of turnover from recurring contracts (software licenses, and subscription models), growing.

FUNDING

- Please see all info here: <https://pitchbook.com/profiles/company/98298-28>
- Only private funding right now
- Preparing a new round at the moment.

CONCLUSION

- We want to improve the lives of the inspectors, and improve the asset conditions in all kinds of industries
- The indoor drones is an excellent way to safely collect high quality visual data, in an easy and efficient way,
- We will go beyond visual inspections quite soon (integrating other NDT techniques)
- Our ultimate goal is to provide autonomous inspections in complex environment, with autonomous data comparisons over time (using AI).
- Although we have famous and convinced customers already, we know we are only scratching the surface of the potential market. Joining Industrya would help increase our visibility and reach in Europe, and expand this good practice, with an ultimate vision: limit confined spaces entries everywhere it is possible.