



COMPANY OVERVIEW

“We care. We perform. We deliver!”

Civitanavi Systems is one of the main players in the sector of high-tech inertial navigation and stabilisation systems.

Thanks to a vertically integrated business model and constant research in technological innovation, Civitanavi excels in the design, development and production of high precision inertial navigation and stabilisation systems. The application of proprietary methods and technologies, based on FOG (Fiber Optic Gyroscope) and MEMS (Micro Electromechanical Systems) technology, enables the company to best meet the specific needs of its customers, depending on the sector in question: aerospace, defense and industrial. These procedures, part of a clear and effective long-term growth and expansion strategy, make the group an excellence in its field of activity.

Founded as a start-up in 2012, Civitanavi was recognised as an innovative SME in 2017 and today is presented as a benchmark in the global competitive scenario. A team of some of the world's leading experts in inertial technologies enables the company to offer the highest standards of quality, thanks to the introduction of increasingly cutting-edge techniques and components. The company operates from its registered office in Pedaso (FM) and three further sites in Ardea (RM), Casoria (NA) and Turin (TO), with a staff of about 160 employees working throughout Italy.

In 2022, was established the subsidiary Civitanavi UK LTD in the United Kingdom, a company mainly specializing in design and commercial activities with the future aim of expanding production.

MANAGEMENT

The Company operates through a high-profile international team of some of the world's leading inertial navigation experts, with a proven and extensive knowledge of the sector.

- **ANDREA PIZZARULLI**

CEO and co-founder

Former Director of the Advanced Research Centre at GEM Elettronica, a company specialising in inertial navigation systems for Defence. He was founder and CEO of Xanto Technology, a startup developing integrated cryptography systems. From 2000 to 2005 he worked at Terawave Communication in Silicon Valley, as Chief Engineer for optronic subsystems for fibre optic telecommunications.

- **MIKE PERLMUTTER**

Executive VP and co-founder

Former President of Skylight Navigation and still a member of Converge Venture Partners. Co-founder of Fibersense Technology (1994), a world leader in advanced navigation and inertial stabilisation technology. Previously, he worked on the development of various gyroscopes at Raytheon and Northrop Grumman. 3 degrees from MIT and 17 patents granted.

- **MASSIMO VEROLA**

Director Engineering

- Program Manager at Northrop Grumman Italia
- Technical Leader in Quadrics
- 25 years of experience in Software Engineering, Control System Engineering, Parallel Computing, Avionics Systems and Inertial Navigation.

- **LETIZIA GALLETTI**

CFO and Investor Relation Director

- Audit Senior Manager at Ernst & Young S.p.A.
- Chartered Accountant and Auditor
- Extensive experience in business consulting and auditing of international groups, listed companies and middle market companies.

- **ROBERTO SENATORE**

Chief Technology Officer

Extensive experience in inertial systems, software/firmware development and VHDL architecture design.

- **ALESSANDRO SGUAZZOTTI**

Director of Operations

- 15 years of professional experience at CISCO Systems
- Production Manager in a Petro-Oil Company.

- **MARIO DAMIANI**

Strategies and Institutional Relationships and Board member

- 40 years of experience in the A&D sector
- Business Development, Sales and Management in the avionics sector at Elmer, GEC Marconi, Selex Comms, Selex ES, Finmeccanica
- Board member of Euromids, Eссор and Sirio Panel.

- **ALAN E. KAILE**

VP Business Development Aerospace and Defense and Managing Director of CNS UK

- Senior Consultant at Selex ES UK and Italy
- Inertial business development at Northrop Grumman Italy
- Sales, marketing and engineering at Aviointeriors, Litton Industries, GEC Marconi and Bae Systems.

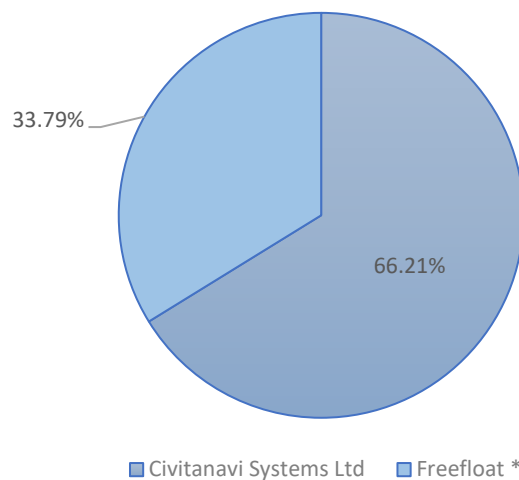
- **STEVE TOGHILL**

Director of Business Development Industrial Products

- R&D Engineer at Litef
- Development of Litef's first FOG AHRS system (LCR92), an industry benchmark product.

SHAREHOLDING

The main shareholder of Civitanavi Systems S.p.A. is Civitanavi Systems Ltd, which holds 66.21% of the company's share capital as of 1 June 2023. Civitanavi Systems Ltd's Shareholders and co-founders are Andrea Pizzarulli and Mike Perlmutter, and an investor, who is also a member of the Board of Directors of Civitanavi Systems S.p.A.. The free float is 33.79% of the share capital, 5.09% of which acquired by Athena S.p.A..



* of which 5.09% Athena S.p.A.

VALUES

- Teamwork: *"It's a joint effort."*
- Goal-oriented: *"We take things seriously."*
- Technology: *"Devoted to innovation."*
- Customer satisfaction: *"We want to solve our customers' problems."*
- Loyalty and Integrity: *"Whatever you do, do it right."*

BUSINESS AREAS

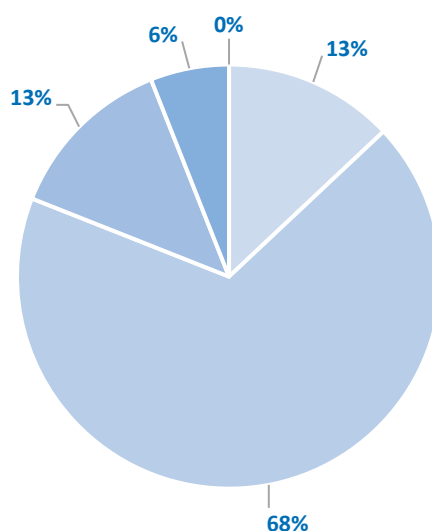
Civitanavi Systems operates in the technologically innovative sector of inertial navigation, with reference to the following business areas:

- aerospace and defense (in the space, land, aeronautical and naval sectors);
- industrial (mining and oil & gas) for the construction of tunnels (tunnelling) and horizontal tunnels (horizontal drilling).

Civitanavi is positioned in the high-end¹ segment within the inertial navigation sensors market thanks to the exceptional accuracy of its products, that have classified the company as a Tier 2² operator. Its objective is to become a Tier 1³ supplier through an articulated investment plan aimed towards the streamlining and innovation of production processes, to achieve vertical integration of the entire value chain in the medium to long-term period.

GEOGRAPHICAL AREAS TURNOVER AS OF DECEMBER 31ST 2022

■ Italia ■ EMEA (Excluding Italy) ■ APAC ■ USA ■ Rest of the world



¹ The term high-end (or high-performance) inertial sensors refers to all types of sensors with the exception of those used in consumer, telephone and automotive applications. The main discriminating characteristic is therefore the measurement accuracy of the sensors.

² The companies defined as Tier 2 are the main suppliers of Tier One companies, which are essential for the latter to supply the OEMs.

³ Tier 1 suppliers are the companies directly supplying the OEM (original equipment manufacturer).

PRODUCTS AND TECHNOLOGIES

Inertial systems for navigation and stabilization are motion measurement devices based on inertial sensors (i.e. Gyroscopes and Accelerometers inside an IMU - Inertial Measurement Unit), capable of providing precise indications on position, attitude (roll and pitch), orientation with respect to geographic north, angular velocity and linear accelerations of vehicles (such as ships, aircraft and space vehicles), without the need for external references such as satellite navigation devices or those based on the earth's magnetic field.

Full ownership of the know-how developed in-house guarantees Civitanavi a higher quality and reliability of its systems, making it highly competitive compared to much larger international market players. The solutions offered by the company stand out precisely because of the versatility of the technologies and methods used in their design and subsequent production, as well as a high degree of customisation aimed at meeting customers' needs in the best possible way. In fact, thanks to the application of FOG and MEMS technologies, Civitanavi sensors are particularly effective, as they allow autonomous and high-precision inertial navigation, stabilisation and precise orientation of the mobile device to which they are applied.

Below, the main product categories:

IMU

System used for "mission critical" applications for placing satellites in Earth orbit for various uses (Earth observation, communication, etc.) and on-board space transport systems (including unmanned).

PETRA

System applied to vehicles on the ground and in motion for stabilising them during adverse weather events.

ARGO

System used for "safety critical" applications in order to guarantee the stabilisation of flight or navigation in case of lack of a global navigation satellite system (GNSS).

NAUTILUS

System applied on oil platforms for the stabilization of the same or on boats suitable for monitoring the seabed.

CFA100IC

System used for long tunnel boring operations where it is necessary to drill through the mountain from two opposite directions.

CFA100M

System applied on drilling equipment that enables the alignment of the drill in underground quarry drilling operations.

KRIO

Stabilisation system applied on naval and underwater exploration or inspection devices, such as ROVs - (Remotely Operated Underwater Vehicle).

DOWNHOLE

A system with miniaturised dimensions, required for small diameters, which allows the geographical north to be determined in an underground hole with horizontal drilling.

FINANCIAL RESULTS

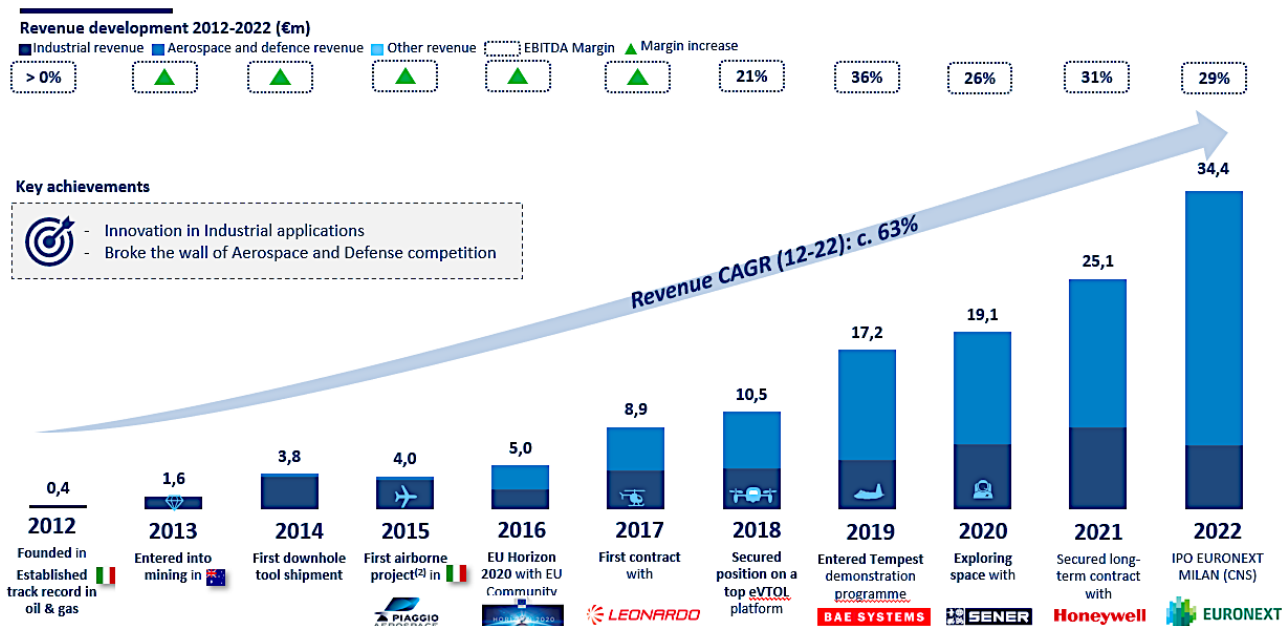
<i>in EUR thousands</i>	As of December 31st 2022	As of December 31st 2021	As of December 31st 2020
TOTAL REVENUE	34,412	25,142	19,135
EBITDA ADJ	9,948	7,990	6,815
EBITDA ADJ%	28.9%	31.8%	35.6%
NET INCOME	6,975	4,879	5,891

In accordance with IFRS accounting standards

The Net Financial Position as of December 31st 2022 was positive by EUR 24.5 million (reclassified according to IFRS accounting standards).

An important indicator of the growth of the Company's business is the evolution recorded by the orders acquired within a financial year, whether or not they are fulfilled within the same year (so-called "Bookings"). Bookings in 2022 (orders received from customers in the reporting year) continues in line with the trend of past years, reaching EUR 41 million with a performance above expectations, and a Book to bill of 1.2x.

From 2012 to 2022, the company grew profitably while maintaining a positive revenue trend, registering a CAGR of c.63%.



COMPETITOR POSITIONING

Thanks to the sectoral expertise of its team and the level of sophistication of its proprietary technologies, Civitanavi is positioned as an important market player at a global level, the latter being mostly dominated by a few large players. Its main competitors are the US companies Honeywell and Northrop Grumman, the French companies Safran and Thales, and the Israeli company IAI (Israel Aerospace Industries Ltd.).

Civitanavi competes with the major players in the sector, as the only operator able to develop and produce high-performance ITAR free⁴ inertial systems, with technology suitable for both navigation and aircraft stabilisation. Civitanavi is distinguished from its competitors above all by the exceptional variety of application areas and the cost-effectiveness, combined with extremely high quality, of its inertial systems, which bring significant benefits:



MINOR COSTS OF DEVELOPMENT



GREATER QUALITY AND TRUSTWORTHINESS OF SYSTEMS



REDUCTION OF WAREHOUSE STOCK



TAILOR-MADE SOLUTIONS



INTEGRATED AND FLEXIBLE ORGANISATIONAL MODEL



ORGANIC REVENUE GROWTH COMBINED WITH HIGH PROFITABILITY AND CASH GENERATION

⁴ Inertial systems not subject to US regulations controlling the manufacture, sale and distribution of defence and aerospace items.



MANAGEMENT WITH PROVEN EXPERIENCE AND PROFESSIONAL COMPETENCE IN THE TECHNICAL AND STRATEGIC FIELD OF REFERENCE



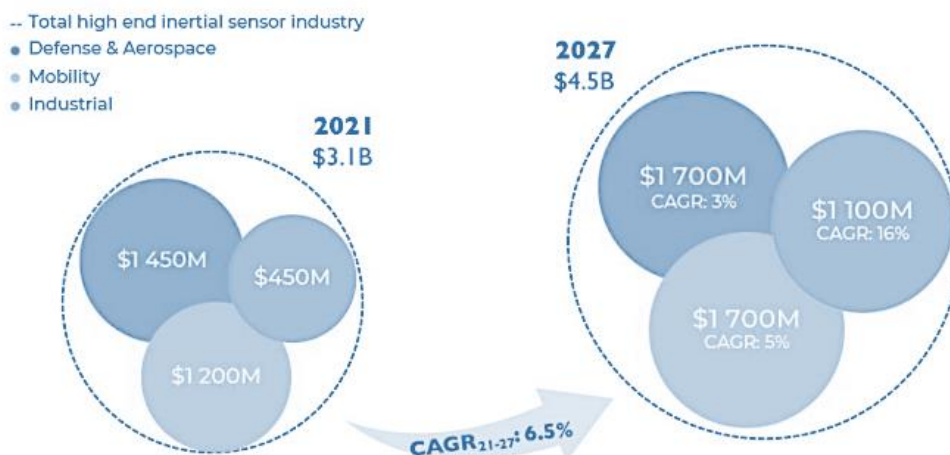
CLEAR AND EFFECTIVE GROWTH AND EXPANSION STRATEGY

GROWTH STRATEGY

The main factors that will drive the company's growth are the breadth and diversity of global market demand, which is growing at a rapid pace. In fact, the high-end inertial systems market is reported to be worth over \$3.1 billion in 2021 and is expected to grow at a compound annual growth rate of 6.5% from 2021-2027 (CAGR21-27), reaching \$4.5 billion by 2027. The market is driven by general trends in traditional markets such as Defence modernisation, A-PNT (Assured Position Navigation and Timing) in the absence of GPS in civil and defence applications and emerging trends in new markets such as new space applications, robotics, logistics, automation and mobility. Furthermore, significant trends are highlighted in the relevant sectors in the market context in which the Company operates, namely Aerospace and Defence (Avionics, Space, Land and Naval/Other) and Industrial (Mining, Oil & Gas and Horizontal Directional Drilling). Despite the significant growth expected in the market, CNS, thanks to its distinctive factors, has historically grown much more than its reference sector.

2021-2027 high-end inertial sensor market forecast

(Source: High-End Inertial Sensing 2022, Yole Intelligence, June 2022)



Over the course of a few years, Civitanavi has expanded and strengthened its presence in international markets such as Australia, Canada, South Africa, Taiwan, Turkey, the United Kingdom and the USA, going beyond the boundaries of its national reference market. The growth plan undertaken by the company is strongly oriented towards increasing the company's market share in high-potential markets and in geographical areas of high strategic interest, through the adoption of the following strategic lines:

- **Increased production capacity and global competitive positioning**, through the achievement of economies of scale and greater international presence;
- **Vertical integration along the value chain**, with particular reference to the emerging Urban Air Mobility market, and consequent increase in R&D investments to consolidate proprietary technologies;
- **Innovation and marketing of new products**, through a gradual but substantial improvement in terms of accuracy, size, weight and power;
- **Consolidation and development of a competitive corporate structure**, based on a significant increase in the workforce in the medium-long term and the simultaneous maintenance of a competitive and flexible work team;
- **Strengthening and developing new commercial partnerships with important OEMs** (original equipment manufacturers) and evaluating possible acquisitions of companies;
- **Implementation of a marketing strategy** aimed at consolidating brand awareness and improving its standing.

HISTORY

2012_Constitution of the company by Andrea Pizzarulli and Michael Perlmutter; entry into the Oil&Gas sector;

2013_Entrance into the mining sector and achievement of ISO9001;

2014 - 2015_Acquisition of the first two aerospace programmes;

2015_Entrance into the Oil & Gas sector;

2016_Signing a contract within the "SME Innovation H2020" programme with the European Union (called NICENAV) to co-finance the development of the first European ITAR-free system;

2017_Signing of the first contract with Leonardo S.p.A. and of a three-year partnership with a leading Turkish company in the Aerospace and Defence sector;

2018_Entry into the Horizontal Drilling sector and achievement of EN9100 certification; entry into the Urban Air Mobility sector;

2019 - 2020_Optimisation of ADOP (Alternative Procedures to Design Organisation) approval, required for civil avionics equipment design, and POA (Production Organisation Approval) approval required for civil avionics equipment design;

- 2020_** Design of the inertial system as part of a space launch programme in collaboration with the European Space Agency (ESA);
- 2021_** Signing of a contract for the development of an aerospace inertial system for distribution in the US and internationally; Civitanavi Systems becomes an S.p.A.;
- 2022_** Civitanavi goes public on the main market, Euronext Milan, in February. In July it signs an agreement with Honeywell to realise new inertial navigation systems;
- 2023_** Acquisition of 30% of PV-Labs share capital, a Canadian company that projects and produces gyro-stabilized gimbals and advanced ISR&T imaging systems.

