ASTI is a mobile robotics company headquartered in Burgos, Spain. The firm began operations in 1982 as a family company. In 2008, Verónica Pascual Boe acquired the entirety of the company from her family. Since then, ASTI has increased sales by 300% and now does more than 50% of its business internationally. ASTI creates solutions for internal logistics of industrial plants, with a bulk of their business focused on automated guided vehicles (AGVs).

### Project Scope

The G-Lab team focused on three areas as part of the overall engagement:

1. AGV competitors, related technologies to the industrial mobile robotics space, and growth benchmarking
2. ASTI company analysis and growth strategy, including specific criteria to use for valuing companies
3. Potential targets (startups and small companies) for growth

### AGVs and Industry 4.0

- The AGV industry is growing rapidly ($2.7 billion estimate by 2022), especially in markets with high manufacturing presence (e.g., China); automation investments are expected to continue and accelerate growth until 2025
- Growth will move towards the service and system hardware sectors
- Increasing adoption of robotics in sectors like electronics, retail, healthcare, logistics, agriculture, services, education, and government
- Emphasis placed on “day one” operation of AGVs; no need for infrastructure changes
- Focus on sensors has led to reduced size and software that can capture and analyze thousands of images
- Rise of e-commerce has led to increased investment; Amazon making Kiva proprietary has increased competition to fill the void. As industry matures, companies that provide end-to-end solutions are likely to be most successful
- ASTI's competitors are being acquired by bigger corporations, with Asian companies making strategic investments in AGV market
  - Chinese players Midea, strong in industrial appliances, acquired German Kuka (2016) and Weichai Power, strong in electric appliances acquired German Kion (2012)

### Growth Strategy and Proposed Build-up

- G-Lab team reviewed with ASTI potential growth categories and provided rationale and examples on when to pursue each one
  1) Acqui-hire
  2) Technology/IP buy
  3) New geographic market
  4) New product line
  5) Horizontal merger
  6) Vertical merger
- ASTI’s target selection criteria were reviewed, and additional proposed:
  - Geographic Footprint
  - Industries
  - Product/Services
  - Technology
  - Size
  - Ownership Structure
  - Cultural Fit
  - HR
  - Operations/Efficiency
  - Valuation
  - Debt/Financing to Date
  - Revenue/Profit/Growth
  - Innovative Business Model
  - Company Values
  - Team
  - Track Record
  - Commercialization of Technology
  - Market Share/Competition
  - Duplication of offerings/services

- Team provided detailed roadmap with growth opportunities, financing strategies, and timeline

### The Team

![G-Lab Team](image-url)