ASTI Strategy Outlook:
The Convergence Opportunity between AGV & AV Industry

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BACKGROUND & OBJECTIVE

AGVS EASYBOTS

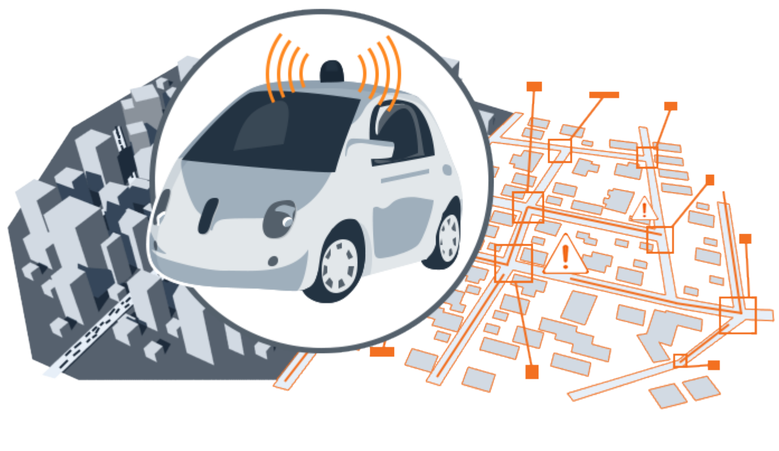
AGVS ROBOFASTS

AGVS HARDBOTS

Background

ASTI is an AGV (Autonomous Guided Vehicle) manufacturer. It sells products to several industries including Automotive, Food Beverage, Aerospace, etc. ASTI helps them automate the warehouse logistic process. Most of the time, ASTI makes customized products to cater clients' needs.

AVs (Autonomous Vehicles) are bringing the market a wide range of new technologies and business applications. One of the trends will be a convergence between Autonomous Vehicles & Robotics Solutions (such as AGV) that are active in the manufacturing industries.



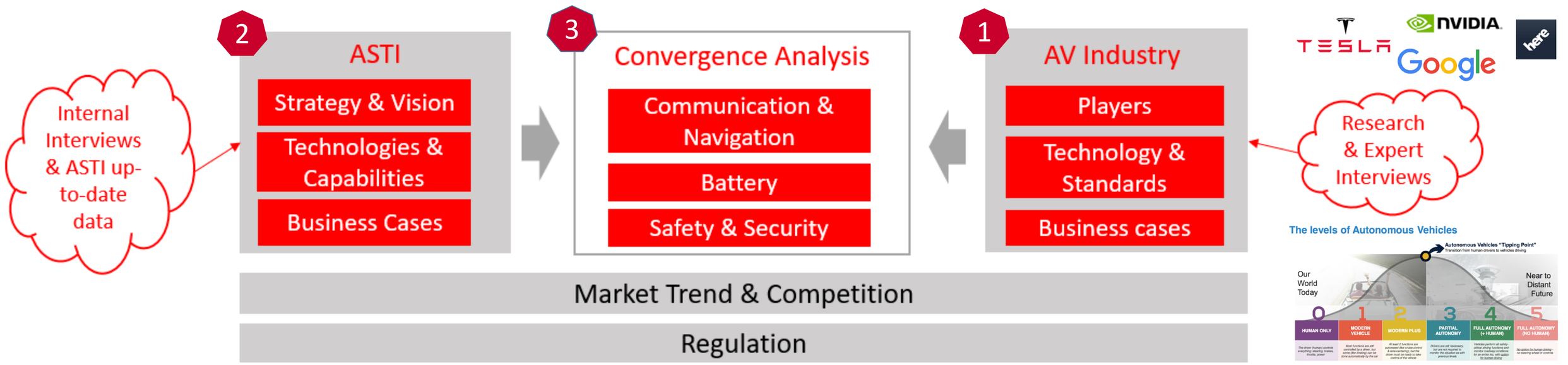
Objective

What are the challenges and opportunities facing ASTI with the raising of AV industry?

Challenge

- Lack of Deep Technical Expertise: No one in our team are familiar with either AV or AGV industry, we have to ramp up our knowledge base quickly to meet the required pace of the project and come up with insightful recommendations.
- Broad Scope: The project scope is very big and how to narrow it down to a reasonable yet meaningful scope is a key challenge.

OUR APPRAOCH

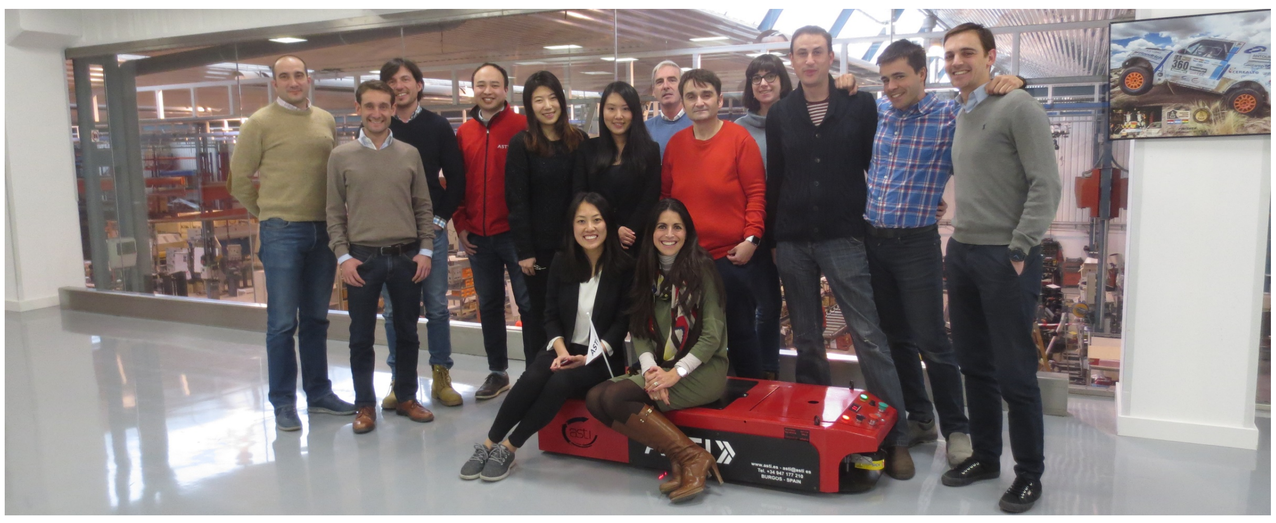


- Analyzing the key trends in AV and AGV industry to prepare us with deeper understanding of both industries
- Interviewing 5-6 managers across various departments to get a full understanding of ASTI's capabilities and their challenges
- Comparing the gap between AV industry and ASTI's capabilities to inform short to long term strategies

RESULTS & RECOMMENDATIONS

We presented our findings with the entire executive team in ASTI and received very positive feedback

"Lucas, Iris, April and Aveling have done a great job. They have not only identified where are the potential risks for ASTI but also where are the opportunities and how to address them. The converge between AVs and AGVs is speeding up and that means a much larger space for new partnerships, collaborations, tech developments and innovative business cases. Thanks to the MIT G-Lab and this great team we have been able to set up a clearer strategy & road-map for 2018" - ***Verónica Pascual, CEO***



RECOMMENDATIONS

- **Short-term (2~4 years) :** Focus on developing vehicles with increased level of automation and intelligence
- **Mid-term (5~8 years) :** Achieve more interconnectivity and productivity with advanced fleet management, V2X(Vehicle to Everything) communications, data analytics, etc.
- **Long-term (9~12 years) :** Provide integrated Industry 4.0 logistics solution that expands across manufacture plants, warehouses, distribution facilities and last mile deliveries

- **Opportunities:** 1) Expand industry exposures to healthcare, retail, etc. 2) Explore new business models such as SaaS provider for predictive maintenance
- **Challenges:** Regulations, Safety (including cybersecurity), Strong competition, etc.