# IAA.PROTOTYPE.CLUB

IAA TRANSPORTATION 2024 17. - 22. September 2024









## promoting new ideas, finds new service providers with media impact









Securing market position via new innovation with simultaneous focus on core business through tendering in compliance with public procurement law

Qualification and recruitment of new highly qualified talents and service providers with customized prototypes as performance testing

Improving the company's image and positioning it as innovation-friendly with an open "new way of working" attitude across its departments

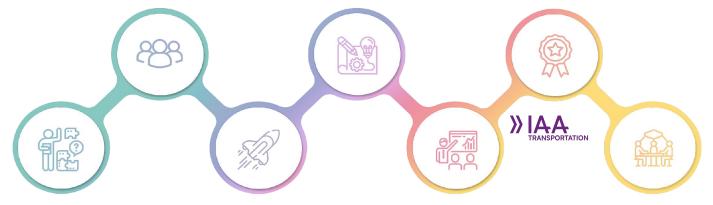




## Process of innovation competitions on trade fairs



- Until the demo, the teamsdevelop their prototypes in the virtual space
- Selection of the best solution& award ceremony for the best teams of the fair



- 1 Definition of internal obstacles in the form of a challenge
  Best case: Pre-definition of budget for follow-up order for the winning team
- Virtual Kick-Off:
  Pre-qualified teams will
  receive their challenge
  information & access to the
  virtual working platform
  approx. 2 weeks before the
  demo
- Demo: teams present their solution & business idea to the jury of challenge partners
- In the scoping workshop after the fair, a 100-day roadmap for an MVP is defined together with the winning team





### Example: IAA.prototype.club 2023

## **Sensor Integration**







#### Niklas, Bosch:

"The IAA.prototype.club was the perfect endeavor for us to see how other companies go about these challenges. It was more than impressive what startups can do within 12 days"

#### **Background**

Bosch produces a wide variety of high-quality and well-functioning sensor systems for the automotive sector. These sensors can also be used in other industries, e.g. robotics.

#### Challenge

Develop ROS-based software for delivery robots that integrates Bosch's radar and ultrasonic sensors to improve obstacle detection. Hardware must be operated with this within 2 weeks.

Main goal for IAA MOBILITY 2023: Functionality of the sensors in the robots

#### Setup

Participants receive radar and ultrasonic sensors including equipment for integration 2 weeks before the fair. The presentation of results will take place in person at the IAA Mobility 2023.

#### **Award**

The team with the most convincing solution will get a potential contract to jointly build a prototype of a micro-mobility robot incl. some of Bosch latest development technology.

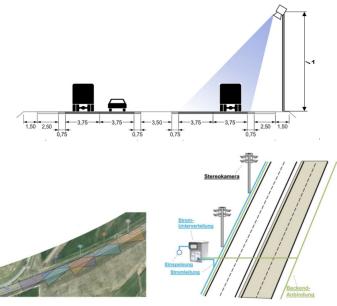




### Example: IAA.prototype.club 2022

# **Image Recognition Software**







#### **Background**

The reference image recognition system of Lower Saxony test field has a localization error of approx. 50cm and needs a lot of computing power.

#### Challenge

An image recognition software for the real-time detection of vehicles is to be developed, precisely recognizing and localizing the detected objects. The main goal: calculate the trajectory of a car running on the highway A39. Nice to have: e.g. identification of other objects within detection range, classification of the vehicles by EU standards, documentation of velocity and acceleration, etc.

#### Setup

Participants receive a set of camera data from two poles and create a prototype

within 2 weeks. The results are presented at the IAA Transportation 2022.

#### **Award**

The team with the lowest localization error receives a follow-up order to develop the image recognition system into an MVP in 100 days together with the DLR.





### Example: HM.prototype.club 2023

### **Offline Localization of Robots**













#### Eva, Siemens Energy:

"We just finished the HM.prototype.club and it went really good. We met really great startups today. They really understood our main pain point."

#### **Background**

Difficult offline location determination of robots in large power plants, among other things, due to lack of networking, which is necessary for safety reasons.

#### Challenge

Develop a concept with prototype for an **offline AR navigation app** for the user. Similar to Google Maps for an industrial site or plant, but offline. Reusable as a "brain" for robots.

#### Setup

Participants receive localization data and a map. On this basis they develop a prototype within 2 weeks, the presentation of results takes place at HANNOVER MESSE 2023.

#### **Award**

The team with the most convincing solution receives a follow-up order to develop the prototype into an MVP in 100 days together with Siemens Energy.





### Example: DLG.prototype.club 2023

### Tomorrows cabin as farm control center











#### **Background**

The work tasks of the machine operator are changing: the automated machine is taking over more and more classic operating tasks, and the operator is increasingly organizing the processes around it.

#### Challenge

How can processes outside the cab (e.g. a fleet of field robot) be monitored and controlled - without losing control of their own machines? What can a new of human-machine interaction look like in this environment?

#### Setup

Participants receive data. On this basis they develop a prototype within 2 weeks, the presentation of results takes place at AGRITECHNICA 2023.

#### **Award**

The team with the most convincing solution receives a follow-up order to develop the software into an MVP together with CLAAS in 100 days.







# **Your Options with prototype.club**

#### **CHALLENGE PACKAGE**

- Definition of a challenge & agenda setting in two workshops
- Identification and scouting of quality participants
- Access to **pitch documents**, prototypes and CVs of all applicants
- Participation of 2 R&D and 2 HR employees
- Sponsor booth and banner at event
- Advertising package pre & post as well as social media coverage
- Implementation start at scoping workshop with winning team

35.000€

#### INDIVIDUAL SPONSORING

- Sponsor booth and banner at trade show
- Various advertising packages & social media coverage
- Provision of a **special award** for certain teams
- Bar, pitch event or networking event, etc.

from 12.000€





# Some of our partners













































# **Impressions from 2023**













Find more







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### prototype.club events in 2024

