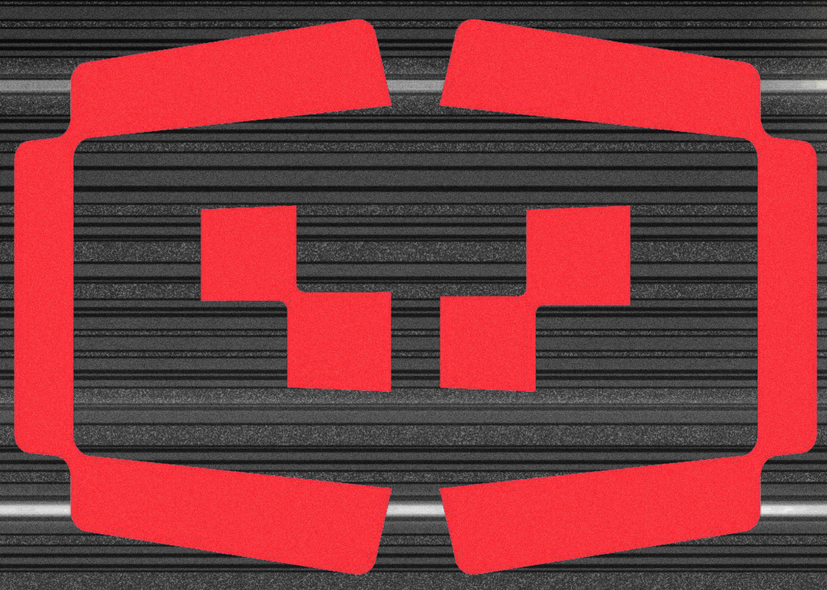

HORIZON

ROBOTICS TEAM

Sponsorship Proposal

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This proposal is structured to give prospective sponsors and partners a complete, transparent view of who we are, what we build, and how your investment creates lasting impact.

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Who We Are

Horizon Robotics is a competitive youth robotics team from Liceul Teoretic Orizont, Durlești branch, based in Chișinău. Competing in **FIRST Lego League** (FLL) and **FIRST Tech Challenge** (FTC), we bring together students across mechanical engineering, software development, project management, and community outreach to build with purpose and compete at a high level.

Awards & Achievements

- Star in the Making title at the FIRST Lego League (FLL) Semi-Finals
- Excellence in Engineering (Excelen în Inginerie) diploma at the National Finals

Our Mission

To engineer real-world solutions through competitive robotics, cultivating technical excellence, teamwork, and a lifelong commitment to innovation.

Our Vission

To become a flagship STEM program recognized regionally and internationally 4 inspiring students, families, and institutions to invest in the engineers of tomorrow.

Values, Work Ethic & Community Impact

Beyond competition, Horizon Robotics is a community anchor — running outreach programs, mentoring younger students, and demonstrating that engineering is accessible to everyone.

Precision & Excellence

We hold ourselves to the highest engineering standards — every build iteration, every line of code, and every competition run is treated as an opportunity to improve.

Gracious Professionalism

A core FIRST value — we compete fiercely while supporting fellow teams, sharing knowledge, and modeling integrity both on and off the field.

Community Outreach

Participating in local STEM fairs, we actively recruit the next generation - particularly from underrepresented communities — into the world of robotics.

Innovation Mindset

We don’t just build robots... we prototype, test, fail, iterate, and improve. The engineering process is our classroom, and curiosity is our foundation.

The Problems & Our Solutions

PROBLEM / 01

The Problem We Identified

Balancing a heavy academic schedule with intensive hardware and software iterations left a minimal window for system testing and performance optimization before deadlines.

Our Engineered Solution

We developed a rapid prototyping workflow. By running mechanical fabrication and software simulations in parallel, we compressed development timelines and maximized testing efficiency.

PROBLEM / 02

The Problem We Identified

Entering an advanced competitive arena meant facing complex technical challenges, requiring us to quickly master intricate system frameworks we had never encountered before.

Our Engineered Solution

We accelerated our learning curve through a strict internal documentation framework, systematically deconstructing and refactoring testing failures into concrete technical advantages.

PROBLEM / 03

The Problem We Identified

Limited access to custom components and strict prototyping budgets demanded absolute discipline in inventory management and strategic asset allocation.

Our Engineered Solution

We adopted a lean philosophy, pushing our existing hardware to its absolute physical limits through aggressive code optimization and smart mechanical redesigns.

Build Milestones & Engineering Journey

Our development followed a disciplined engineering cycle — from initial research to competition-ready hardware. Key phases are outlined below.

Phase 1 — Research

1

Problem identification, literature review, and stakeholder interviews with local waste management professionals to define the engineering requirements.

Phase 2 — Design

2

CAD modeling, sensor selection, control architecture planning, and early subsystem budgeting to establish a robust build strategy.

Phase 3 — Build

3

Structural fabrication, electronics integration, motor calibration, and multiple rounds of lift mechanism refinement to improve reliability and range of motion.

Phase 4 — Test & Iterate

4

Rigorous iterative testing, sensor calibration, field testing, and three full design revisions to improve accuracy, stability, and autonomous performance under real conditions.

Phase 5 — Competition Ready

5

Final assembly, autonomous routine perfection, driver training, and performance optimization for tournament conditions to ensure a polished, tournament-ready robot.

Roadmap & Long-Term Vision

Horizon Robotics is not a one-season project 4 we are building a sustainable, growing program with multi-year competitive and educational ambitions.

2026 Competition Season

Qualify and advance through Moldova's regional FTC events, with the goal of reaching the national championship stage and earning a top-3 finish in the Innovation Award category.

Offseason Engineering

Expand our robot's sensor suite, refine our software and autonomous routines, and develop a second-generation prototype to be ready for the next season's challenge.

Community & Outreach Scaling

Build a structured mentorship pipeline in our School, hosting a junior workshops, collaborating with other local schools, and growing an annual robotics showcase for students across Moldova.

...and more?

With your partnership, we can expand this roadmap even further!

Financial Breakdown & Funding Requirements

We operate with full financial transparency. Below is a breakdown of our current season expenditures and projected 2026 funding needs. Your investment goes directly toward building the next generation of engineers.

Budget Category	Amount	Currency	Notes
Robotics Equipment & Parts	15,000	MDL	LEGO Education Spike Prime / Expansion sets
Team Branding & Uniforms	14,000	MDL	Custom team hoodies and apparel
Official Tournament Entry	3,000	MDL	Participation fees
Public Relations & Marketing	8,000	MDL	Banners, stickers, pit display, and outreach PR materials
TOTAL	**40,000**	**MDL**	**approximately €4,000**

Partner With Us

Build Brighter Futures

Every donation funds critical student learning and development

Drive Innovation

Your support helps our team tackle more complex engineering challenges

Community Impact

Partner with us to inspire the next generation through outreach.

Contact Us!

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