

HARDWARE KICKSTARTER

PRE-LAUNCH CHECKLIST

Based on analysis of 41 failed crowdfunding hardware projects totaling \$122.5M in losses

85% of crowdfunded hardware failures are engineering problems, not fraud. This checklist addresses the specific product development gaps that killed projects like the Lily Drone (\$34M), OSSIC X Headphones (\$2.7M), and Amabrush (\$3.7M). Complete every item before launching your campaign.

SECTION 1: Kickstarter Compliance

Kickstarter will suspend campaigns that violate these requirements. Non-negotiable.

- Working Prototype Demonstrated** how your prototype performing its core functions on camera. No CGI, no special effects, no simulations of future capabilities. Kickstarter requires proof your product works TODAY.
- No Photorealistic Renders** Only photos of actual prototypes allowed. Technical drawings, CAD wireframes, and sketches are permitted. Polished renders that look like finished products will get your campaign suspended.
- Software/Hardware Integration Shown or Disclosed** If your product requires an app or software component, demonstrate that integration working. If it's not built yet, you must explicitly disclose this to backers.

Kickster Best Practices. Help build trust between you and the backers

- Risks and Challenges Section Complete** Required by Kickstarter. Detail the specific obstacles you face, your timeline, and why you're qualified to overcome them. Generic answers like 'manufacturing is hard' won't cut it.
- Production Plan Documented** Explain HOW you will manufacture your product. Name your manufacturing partners if possible. Disclose whether you've produced anything like this before.

SECTION 2: Engineering Readiness

54% of failures in our database were manufacturability issues. 49% were system integration failures. These checks prevent both.

- Design for Manufacturing (DFM) Review Complete** Your design has been reviewed by someone who has manufactured at scale before. Tolerances that work at $n=1$ often fail at $n=10,000$. The Skully AR-1 helmet raised \$2.4M and failed because they skipped this step.
- Bill of Materials (BOM) Priced at Volume** You have real quotes at your MOQ, and you've resisted the temptation to order early. Tiko 3D Printer committed to their full BOM before their prototype was even finalized: a decision that contributed to their collapse after shipping just 4,000 units.
- System Integration Testing Complete** All subsystems tested TOGETHER, not just individually. The Lily Drone had components that worked in isolation but failed when combined. Their promotional video was faked using competitor drones.
- Thermal and Power Validation Done** Power consumption and heat dissipation tested under real-world conditions, not lab conditions. Document the results.
- Prototype Matches Production Intent** Your prototype uses production-representative materials and processes, not just 3D printed parts that won't scale.

SECTION 3: Feasibility Validation

22% of failed projects promised technology that violated basic physics. These items ensure your product is actually possible.

- Core Technology Validated by Third Party** An independent engineer or physicist has confirmed your core claims are achievable. The Fontus water bottle claimed to generate drinking water from air; basic thermodynamics calculations proved it impossible. It raised \$345K anyway.
- Performance Claims Backed by Testing Data** Every specification you advertise has been measured and documented. No theoretical maximums presented as typical performance.
- No Physics-Defying Claims** Review your marketing claims with a skeptical engineer. The Triton 'artificial gills' claimed to extract oxygen from water for 45-minute dives. UC Berkeley professors debunked it as physically impossible. They raised \$900K before being forced to refund.

SECTION 4: Production Readiness

17% of projects failed during production scaling. Getting from prototype to 10,000 units is where most hardware startups die.

- Manufacturing Partner Identified and Vetted** You have a signed agreement or LOI with a manufacturer who has produced similar products. Check references. Visit their facility if possible.
- Supply Chain Redundancy Established** Backup suppliers identified for all critical components. Single-source dependencies have killed more hardware startups than bad designs.
- Quality Control Process Defined** You know exactly how units will be tested before shipping, and you've defined acceptable yield rates. Kanoa wireless earbuds had a manufacturer ready to scale, but when a negative YouTube review caused a key investor to pull out, they couldn't pay the factory to continue production. QC testing should be elevated for first builds, make sure the product going out performs to expectations and no DOA product shipped.
- Tooling Costs Budgeted** Injection molds, dies, and fixtures are accounted for in your funding goal. These often cost more than the campaign raises.
- Lead Times Mapped** You know how long each production step takes, including component procurement, assembly, QC, and shipping. Add 50% buffer minimum.

SECTION 5: Regulatory and Compliance

12% of failures were regulatory issues discovered too late. ZNAPS raised \$2.3M for a phone charger but never got Apple MFi certification, making their product effectively useless.

- Certification Roadmap Complete** List every certification required for your product category and target markets: FCC, CE, UL, Apple MFi, USB-IF, etc. Know the timeline and cost for each.
- Safety Testing Requirements Identified** Products with batteries, heating elements, or child interaction have additional requirements. The FORT Magnetic Pillow Fort raised \$3.1M, then faced a CPSC recall over magnet choking hazards.
- IP Clearance Done** Patent search completed. No obvious infringement risks that could result in injunctions or lawsuits post-launch.

SECTION 6: Financial Reality

Kickstarter is demand validation, not a product development budget. If you're using backer money to figure out how to build your product, you're already in trouble.

- Unit Economics Validated** Your per-unit cost (BOM + labor + packaging + shipping + platform fees + payment processing) leaves margin at your pledge price. Account for Kickstarter's 5% + payment processing 3-5%.
- Funding Goal Covers ACTUAL Costs** Your goal includes tooling, certifications, first production run, shipping, customer service buffer, and a contingency for things going wrong. They will go wrong.
- Stretch Goals Are Achievable** Every stretch goal has been costed and validated. The ZANO Drone's over-ambitious stretch goals contributed to their collapse despite raising \$3.5M.
- Post-Campaign Runway Planned** You have funding or a plan for the 6-18 months between campaign end and revenue from retail sales. Many projects die in this gap.

FINAL CHECK: Are You Ready?

If you cannot check every box above, you are not ready to launch. Going live with gaps in your product development is how campaigns end up in the Kickstarter Graveyard. The campaigns that succeed use crowdfunding to validate demand for a product they already know how to build.

Need help getting launch-ready? Design 1st has 30 years of experience taking hardware products from prototype to mass production. We've helped launch over 1,200 physical products including successful crowdfunding campaigns like Groove Thing and Toddler Monitor.

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This checklist is based on research from the Crowdfunding Graveyard, an interactive database of 41 failed crowdfunding hardware projects. Explore the full database at graveyard.design1st.com/