

12 Funding Sources for Hardware, IoT and Robotics Startups



Ways to fund your physical product startup:

Funding is critical to the success of any new physical product development project. It's one of the key ingredients on top of a great idea, a talented team, and a tight product-market fit that every company needs to push forward to market.

Physical product development is a cash flow business, necessary to get to market, manufacture, ship to customers, and scale your sales. Over 25 years, Design 1st has seen 1000+ physical product development projects move from concept to manufacturing. Each of these projects navigated funding challenges.

To help you secure funding for your product development project, we have put together a list of the top 7 funding sources our customers have used to transition from a great idea, through to product concept, then prototyping, and onto volume manufacturing.

1) Friends and Family:

The first source of funding many entrepreneurs turn to is friends and family. Getting \$25,000 to \$50,000 from close relationships can help entrepreneurs transform a new physical product idea into a finalized manufacturable concept and working prototype. This type of funding can come in three forms:

1. Gift: No formal agreement to pay back money
1. Loan: Planned repayment, agreement on funds
1. Equity: Investment in percentage of business shares

The best way to approach this type of funding is to be upfront about the high risks and challenges of bringing a new product to market. It helps to create a solid business plan that outlines capital costs and development timelines. If your funding is a loan vs. a gift you will want to define repayment terms.

We have had many successful entrepreneurs rely on this funding source along with a healthy dose of bootstrapping to move to market. Some examples include:

- [Humidifier: Zero-Energy Humidifier](#)
 - [Toddler Montor: Bluetooth Enabled Child Safety Device](#)
 - [We-Vibe: Personal Massager](#)
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2) Local Angel Groups:

Local angel investing groups help regional entrepreneurs and startups scale their business with funding, resources and expertise. Angel investors close the gap between friends and family and formal Venture Capital investments.

Typical angel investments range from \$50,000 up to \$1-million for startups with high-growth potential, a solid business plan, and some revenue. Since investing in early-stage startups is high risk, Angel investors look for big rewards and often seek a rate of return of 5-10 times their original investment within 5 to 7 years.

For physical product startups, having an MVP (minimum viable product) prototype, a business plan, potential customers and a path to market may not be enough. Launching a new hardware product to market is expensive. Outside of product development costs you will have tooling, manufacturing, regulatory fees, packaging, shipping, etc. To be successful in securing an Angel investment, be sure to you can show a concrete path to revenue and strong pre-sales momentum.

If you are looking for Angel Investors to pitch to, here are some resources to get started:

- [Angel Capital Association \(ACA\)](#)
 - [Angel Resource Institute \(ARI\)](#)
 - [Gust](#)
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3) Startup Accelerators & Hardware Incubators

Startup accelerators and incubators offer a combination of mentoring, capital and product development resources to help startups grow. There are hundreds of global accelerators that work with Startups, but for physical products the list is much shorter.

When searching for a Startup accelerator for physical products you should look for “hardware accelerators or incubators”. These are specialized groups that focus on IoT, robotics, hardware and embedded electronics.

Here is a list of the top global hardware accelerator programs:

- [Hax](#)
- [HARDWARE.co](#)
- [Highway1](#)
- [AlphaLab Gear](#)
- [Brinc IoT](#)
- [The R/GA Accelerator](#)
- [Bolt.io](#)
- [mHub](#)
- [Industrio](#)

4) Crowdfunding:

One of the most common answers we get from entrepreneurs when asked about potential funding sources is crowdfunding. While crowdfunding offers a massive opportunity to generate

awareness, pre-sales and capital windfalls, running a successful crowdfunding campaign has its challenges.

You will need a fully functional MVP prototype and a significant investment — approximately -\$50,000 — in pre-campaign marketing and public relations to achieve chart-topping success that generates awareness and surpasses goals.

When successful, crowdfunding campaigns can help new physical products leap the chasm between pre-market prototype and mass-market sales. There are several companies that can help you prepare, launch and deliver a winning crowdfunding campaign for a physical product including:

- [LaunchBoom](#)
- [Funded.Today](#)
- [Jellop](#)

Two recent Design 1st clients have conducted successful crowdfunding campaigns include:

- [Bird Buddy](#)
- [Toddler Monitor](#)

5) Government Grants:

Government grants, tax rebates and purchase programs are the fuel that helps many physical product startups get to market. There are thousands of government-funded programs covering every step of the product development cycle, from early-stage R&D to purchase programs like Canada's BCIP (Build in Canada

Innovation Program), where the government agrees to be your first customer.

The challenge is navigating the maze of government grants to find the right program for your business and funding needs.

For Canadian startups the three major national funding programs are [SRED](#), [IRAP](#) and BCIP. These programs offer early-stage physical product startups a variety of funding support in the form of tax rebates on R&D, product development funding, pre-market prototype testing and purchase contracts for your first production run.

Over 250+ Design 1st customers have taken advantage of Canadian government programs, including us! Over the past five years we have been publishing an annual guide to Canadian Product Development Funding you can download below. It includes the process, links, resources and tips to help you take advantage of government funding opportunities.

For the U.S. and global startups, government funding is as challenging. The best place to start is using Google. Search: 'Country name,' 'government startup funding programs.' Then filter your results for the past year. It is important to get up to date information as government programs and funding change often.

6) Venture Capital:

Venture Capital investors often look for established startups who already have strong sales momentum and existing funding. VC investments for early-stage hardware startups are rare as most

VC's favor the quick return and fast growth opportunities of selling software vs. manufacturing, packaging and shipping physical products.

There are a handful of Venture Capital groups that specialize in hardware, robotics and IoT. For physical product startups that have exhausted other funding options and have excellent growth opportunities, reaching out to these specialized hardware VC groups below may be helpful.

Here is an excellent list of the [Top 100 Hardware Seed VC Investors by Signal](#).

Additional Funding Sources:

For bootstrapped startups and entrepreneurs, there are dozens of other funding sources to help support product development and go to market. Depending on your appetite for risk and willingness to give up equity in your business, these additional funding options may be useful to explore:

7) Joint Venture with Distributor/Supplier: Work with an existing industry distributor or supplier where you provide the idea and product development and they help support upfront manufacturing costs, packaging, shipping, etc.

8) Consulting Firm Equity: Many invention design agencies and some product development firms offer equity-for-service models, where you will pay a reduced rate on product development costs in exchange for equity in your business.

9) Commercial Bank Loans: If your business has existing assets and strong working relationships with financial institutions, securing a commercial loan is possible. But for most first early-stage startups, funding new product development is too risky for traditional banks unless you secure your first 'purchase-order' from a customer.

10) Company Co-Founders: Adding co-founders to your company can bring more experience to the table and additional funding. The challenge is getting lawyers involved to iron out the details, splitting the equity and agreeing on the hundreds of decisions that will need to happen.

11) Pre-Market Sales Campaign: If you have a working MVP prototype and a strong product-market fit, launching a 'pre-sales campaign' can give you a boost of revenue to support a first volume-manufacturing run. This activity would include building a pre-sales e-commerce landing page and running an ad campaign on Facebook, Instagram, TikTok, etc. to drive awareness and pre-sales.

12) Enter Awards and Pitch Contests: There are hundreds of awards, pitch contests and challenger events hardware startups can enter to win funding and gain access to valuable mentoring resources. While far from a guaranteed funding source, these contests allow startups to gain feedback on their business and tap into a vast network of contacts.