# CoScientific LLC

**Purpose:** You have an idea for a product that won't leave you alone, but you also don't have the infrastructure to convert it into income or a payday. This is a rough guide to commercialization for a physical product. It's by no means comprehensive or the best path for everyone. Hopefully, it will give you some ideas and tools to keep your costs low.

- 1. Determine if it is already for sale or patented (Skip if you're not looking for patent protection)
  - a. Write up a brief description with keywords
  - Search the internet for existing products, note items that are similar
  - c. Search the <u>US Patent and</u> <u>Trademark</u> office for existing patents – This can be difficult and probably won't get you a clear answer but can be helpful if you find out that it already patented.
  - d. Provisional patent application If you think it's possible that idea is patentable then write up all of the aspects and possible versions into a document along with sketches. This can then be easily turned into a provisional patent application by an attorney. You could also do this work on your own and get it done for about \$100, spending \$1-2K on a patent attorney is a decent idea. Once you file, you have **1 year** to turn your provisional into a full application. During this year you are free to discuss your idea publicly knowing you have a filing

Product Roadmap for Individual Inventors version A

> date secured. It's important to know that if your product develops away from what you put in your provisional that you aren't covered for those changes. Also, if your idea isn't patentable then others are free to take your idea. Most inventors are super worried about this, but depending on how easy it is to make and use you should realize that very few people have the drive and stamina to take an idea that they love to market, let alone one that you snagged from someone else. The competition to be concerned with is a company that can easily add it to their existing line of products.

Law School Clinics for Inventors and Small Businesses – You may qualify for free attorney services. You'll still have to pay normal filing fees and the process will likely take longer due to the law school schedule.

#### 2. Prototypes

- a. Have the supplier sign a nondisclosure agreement (NDA) – You should be able to find a free one online (search by state). Every time you send the supplier critical information add "Your Name or Company Proprietary and Confidential Information"
- b. Make or have a 3D CAD drawing made. If you don't know anyone, I've had good luck with <u>Upwork</u>. You can have the individual you hire sign an NDA. \$50-75 per hour

should be enough depending on the complexity of your product. You can also put in milestones or hour limits to make sure you are getting what you pay for. Track versions this will not be a one and done situation.

- c. Have one 3D printed by <u>Protolabs</u>, <u>Stratasys</u>, or fabricated by a local machine shop. Make spaces are also becoming popular and usually have a 3D printer. The prototype can either be a non-working proto for visualization or a fully functioning proto depending on your product and needs. Usually, the first step is to make a part you can hold to give you a chance to review it and iterate.
- 3. Customer Discovery I know I put the prototype before finding if there are customers, but it's because no one wants to look for customers before they make the product If you do, it will save you a lot of money and heartache.
  - Questionnaires Interview as many people as you can tolerate to find out if they have the problem you are solving. Don't show them

your product-this is not a sales call. You are validating if people really care and the upside is, they may lead you to a better solution. Be as non-biased as possible. Video series to watch: Customer Discovery by Ralph Guggenheim https://vimeo.com/groups/204136/ videos/75308828

 b. <u>Customer Discovery</u> — How I used LinkedIn to talk to 100+ people who I didn't know earlier. You can too.

Talking to Humans \$3.99 on Kindle, Free if you're in Tucson and sign up for a free Startup Tucson membership

- c. Pricing Rule of thumb is 2x for every handling. 2x your cost to your distributor 2x is the price to the store who sells it for 2x. It's simplistic, but you'll sell a part that costs you \$1 to make for \$2 and the store will sell it for \$8.
- d. Amazon If you can make 10-100 prototypes and they are appropriate for selling on Amazon it's a great way to test the marketing and price point. Depending on the price, they may take up to 50% of the sales price.

#### How to know when you're ready to start a business

First time entrepreneurs often think that they need investors to get started. The truth is that you need customers (and that most successful companies don't need to ever raise money).

If you can't sell a product, pre-sell a prototype. If you can't pre-sell a prototype, start an email list. If you can't start an email list, go wherever your customers might be. If you can't go to wherever your customers might be, it might be time to admit that you don't really want to start a business.

https://www.resultsjunkies.com/how-to-know-when-youre-ready-to-start-a-business/

But remember you have combined the distributor and the store so 2x isn't bad. It may allow you to keep your price low or margin high. You may lose money on this small first sale, but it's effectively your marketing research.

- e. Kickstarter You can crowdsource your startup costs if its consumer sexy and/or you have a great online sales pitch
- f. Local store Find a local store like Ace Hardware or a gift shop and ask if you can provide 10-50 units to see how they sell. Check back weekly for a month to see the sales rate. Ask the business roughly how many customers they had over the period. Provide a business card stating that you are local and appeal for their feedback.

<u>Lean Canvas</u> – Methodology to make sure you have a viable idea. It's generally used if you are working towards getting investors, but I think the concepts and format are a great way to evaluate your ideas.

**Pain -** People spend money for two reasons: Pain and to feel good. You're most likely working on an idea that has a pain point. The bigger the pain the easier it is to sell. Ideally, people should be knocking down your door to relieve their pain.

### 4. Find a Sales Channel

- Amazon with Facebook advertising that you can direct to exactly your customer's interests, age-range, and location
- b. Walmart They have a very welldefined <u>submission process</u>
- Licenses to good partner that is already in the industry – this can be tricky, especially if you don't have patent protection. Remember don't expect a ton of money if

someone else is going to do the execution. Take less money for a quicker resolution to the contract. Lawyers are for contracts, it's more important to find someone that can negotiate for you.

**5.** Investors – If you need investors read the resources page of <u>Y-Combinator</u>

## <u>Tips</u>

- Don't use an inventor or marketing service targeted at inventors – I can't say that they are all bad, but it's likely to frustrate you and cost a lot.
- <u>Small Business Administration Free</u> Learning Courses
- SCORE Free business consulting

Darren Verebelyi, PhD has 15 years of experience as an engineering manager responsible for the full range of activities from R&D to process, product and equipment engineering. His company CoScientific LLC helps small to medium-size manufacturers with a range of services including problemsolving, NPI, and new equipment projects.

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