



Predictable Designs Podcast - Episode #16

Questions on Outsourcing, Distribution Channels, and the Cost to Market



Podcast Transcript

John Teel: In today's podcast, I wanted to mix things up a bit. Instead of having a guest interview like I have in previous episodes, today I'm going to be selecting various questions that either members of my Hardware Academy program have asked, or just general followers of my blog have asked.

Question #1: Can I outsource the parts of my startup I don't want to do?

The first question I want to look at is actually a question that I get asked a lot. It's a question that there are really two sides of the same question.

Recently, a member in the Hardware Academy, who happens to be an electrical engineer, asked if it was possible or feasible to outsource marketing and sales functions for his startup since he doesn't seem to really have any interest in those areas, and wants to be able to focus entirely on the development and manufacturing side.

The other side of that same question is, or I commonly get asked are from non-technical people who want to outsource the development of their product.

The simple answer for both of those is I definitely encourage you to use outsourcing as a way to fill in any gaps in your own experience and knowledge, but it's not something that you should use to make those functions of your startup just completely disappear or remove them from anything that you're involved in.

For example, I had someone recently contact me, who was interested in joining the Hardware Academy. He was concerned that it was going to be mostly focused on the development side.

His experience was with marketing and sales, and he just had no interest, to be quite frankly, he said, in having anything to do with the development or manufacturing. He just wants to outsource it to someone that can do all of that, and then he just focuses on the marketing and selling aspects.

The two sides to the equation are basically, technical people who are comfortable in development and manufacturing, but sales and marketing scares them, so they want that side of the equation to go away. The other side are non-technical people, who may feel more comfortable with the marketing and sales side of running a startup, but they want the development and the manufacturing to basically go away. They don't want to be involved in that.

First of all, I think that, like I said, outsourcing should be looked at as a way to fill in any gaps in your knowledge or in your experience, but you need to ultimately maintain control of those activities.

If you think you're using outsourcing because you only want to focus on marketing and sales, and you don't want anything to do with development, yes, outsourcing development is something I encourage you to do.

If you're non-technical, in most cases, it's not going to be feasible or make sense for you to try to learn everything, to become an engineer, basically, and design your own product.

That's just not something that's really feasible to do, but what I do encourage you is that you should learn enough so that you can at least have some insight into what's going on in development.

The hardware startup development is a really big part of your company, and if you're just outsourcing that, and having no involvement, then one of the key functions of your startup, you're giving that to another company. You're losing control of what happens.

What I find is that if you don't have a good understanding of any of the functions that you're outsourcing, then, first of all, it opens you up for being scammed or ripped off.

There are so many companies out there that prey on entrepreneurs with a dream, who don't really have realistic expectations. They use that, and will take advantage of you if you don't understand the process. That can go in various ways.

For instance, I had someone contact me a couple of years ago, that was wanting me to take over design because they had hired a designer in Asia, they paid him thousands of dollars, they thought they were getting a custom product developed, he sent them prototypes, but a few months afterwards, they ended up finding their exact prototype on Alibaba.com, which is a supplier website for Chinese suppliers. They found their board on Alibaba.

What this designer had done, all he had done was basically buy an existing board and put a new sticker on it, claiming that it was a custom design board. If this entrepreneur had a good understanding of product development, then this is

something he probably would have caught much earlier, and not let someone just go off and keep scamming him for so long. This would have been caught much earlier.

That's why it's really good for you to have a basic understanding of all the functions you're outsourcing. I always recommend that you have an independent oversight. Some level of independent oversight on those functions.

For instance, if you're outsourcing product development, then your best bet, of course, is I think to join the Hardware Academy, so you can get other input from myself and other engineers, and we'll help keep you on track and making sure that what you're paying for from your developer is-- that you're getting good quality, and that you're not being ripped off.

Always focus on learning enough about the task so that you can outsource it and manage it, but also feel free to bring in two sets of eyes. You hire one place to do the work, and then you can hire another engineer to provide some level of oversight.

If you have a design done, then you're welcome to post that design in the academy, and you can get some basic high-level feedback at no additional cost. Then I would also probably recommend that you hire a designer, a third-party engineer to actually do a full and thorough design review before you go off and spend money on the prototyping of that.

When it comes to outsourcing product development and/or outsourcing marketing and sales, I typically find it's actually a little more feasible to outsource development.

The reason being is that marketing and sales, those are how you connect with your customer. Really, in this whole equation of a startup business, the customer is really the most important thing.

You do not want to do anything that removes you from the customer and interacting with the customer because that's how you're going to get feedback, and you're going to know what your customers really want.

The worst mistake you can do is to hide yourself away from customers, you think you know what they need or what they want, you don't need any input from

them, and you just forge ahead and make something and then say, "Here, buy what I made for you."

That is a recipe for failure. You need to, from day one, try to connect with as many potential customers as possible. Interact with them, form close relationships with them so you can get their feedback. I find that marketing is one area that I do not recommend that you outsource.

You may eventually be able to do that, in some aspects of marketing, but if there's one area where I feel like the founders or a founder needs to be heavily involved, and in the trenches, it's marketing and sales, because that's how you're going to get the feedback that you need to develop products that are actually going to sell.

If you just outsource that away, to some marketing firm, then there's going to be a level that you're removed away from the customer, and that's just never a good situation to put yourself in. Instead, embrace the customer.

In fact, I understand that a lot of engineers, I understand that engineers typically, we're introverts, we're most comfortable hiding behind a computer or in a lab and not doing marketing and sales activities. I encourage you to learn to love marketing. I was able to do it. It's like I'm extremely introverted, I'm very much very classic engineer, but eventually, I learned to really love marketing. To this day, I still really enjoy the marketing side of things.

Sales, I don't find as enjoyable, but I find it critical. I always want to be heavily involved in sales aspects because that's how you generate, obviously, your revenue, but it's also how you can interact most directly with the customer. Definitely, don't try to push away marketing and sales.

Instead, you'll have such a better chance of success if you can learn to embrace it. If you're going into this with the mindset that you only want to do the aspects that you're comfortable with, that you enjoy, that's really not the right way to approach a startup.

That may work if you have a solid founder team, and you all have very discrete skill sets, then that can work wonderfully. If you happen to have co-founders who are dealing with all the sales and marketing, and you're an engineer, then yes, you can just focus entirely on the engineering side.

If you're a solo startup, or maybe just a couple of founders who don't have a full complement of skills, then you're going to have to force yourself to be adaptable. It's probably one of, I think, the key criteria for succeeding as an entrepreneur, is you have to be adaptable. You have to wear many hats.

You have to do everything, from development to sales, to marketing, to operations, to patents, to legal stuff, taxes. It's pretty much, you have to do everything. If you go with the mindset that you're only going to do the things you enjoy, then the chances are that you won't succeed.

If that's the mindset you have, then fine, that's great if you're a hobbyist or a maker and you're just doing this for fun. When you're doing it for fun, you get to pick and choose what you want to do. If you're doing this to build a startup, then you need to force yourself to do the aspects that you may not find enjoyable.

Instead of forcing yourself to do those and not enjoying it, I recommend that you try to change your mindset and find a way to make yourself enjoy those activities, which is exactly what I was able to do with marketing. If I'm able to do it, then I know definitely, that you're able to do that as well. The overall moral of the story for this question is to embrace all aspects of bringing your product to market. I think you'll have a much higher chance of ultimate success.

Question #2: How do I price my product for the various distribution channels?

The next question is also from another member in the Hardware Academy. Their question was basically, they didn't understand how to price their product for the different distribution channels.

For instance, they were looking at selling their product on their own website, selling it through Amazon, selling it at two other businesses, they wouldn't resell it to businesses that would actually use the product themselves, but then also, they were considering selling through distributors, through small retail chains, and hopefully, eventually, through big-box retailers.

Their question was, how do they price for all of these different distribution channels? Do they have a different and suggested retail price? For instance, when starting to sell a product on your website, if you sell it direct to the consumer from your website, then there's no middle people. There's no distributors or retailers taking a percentage of the profit, versus if you sell through a distributor who then sells to retail chains, then you've got multiple people taking a

percentage of the profit or the markup on the product. You'll have the distributor, and then you also have the retailer.

As you sell in different channels, you're going to have different profit margins. Assuming that you keep your retail price the same for all of these channels, which is what you should do.

For instance, it may seem like a good idea when selling your product on your own website because you don't have any middle people taking any money, that you should maybe sell your product at a lower cost, and try to boost your initial sales. Let's say, for instance, if your product has a suggested retail of \$100, then very roughly, it's going to cost you about \$25 to manufacture that product.

If you're selling through your website, you're paying 25 per unit, and you're selling them for 100. You get to keep \$75. Versus when you're selling it through, say, a retail chain, then they're going to want to buy it at half of the retail cost, typically.

If it's \$100 retail cost, they're going to want to buy it for 50. In this case, you're buying it for 25 and selling it for 50. You're only making \$25 per unit versus when you sell it through your website, you're making \$75. It can be enticing to think, "Oh, well, I can sell it through my website for only \$50 to try to boost sales." That's not a good idea for several reasons.

The first one being that if you're trying to also pursue selling it through retail or through distributors, then you're going to turn them away really quickly because no retailer wants to be selling a product, when they know that people can go online and buy it from you cheaper.

Let's say you sell it through, let's just go with Walmart, and they're selling it for \$100, but you're able to sell it on your website for \$50. Walmart's not going to like that, and they're not going to carry your product. If they see that after they've carried your product, then that's just going to open up a whole bunch of problems, and you're going to be dropped really quickly.

That's a good way to irritate any buyers, is to think that they're being made to sell it for a higher cost because they don't want to have to compete against you. What this means is, even though your profit margins will be higher, you need to keep your product price, the suggested retail price, the same.

This has one big positive, in addition to what we've already described, and that's the fact that on your first units, when you're first making, let's just say hundreds or even a couple of thousand units, your manufacturing cost is going to be much, much higher than it is at higher volumes.

Starting by selling directly on your website, where you have a much higher profit margin, that just allows you to sell the product and still make a decent profit off of it. Let's say that when you're making really small volumes, it only-- say instead of \$25, it cost you \$75 to manufacture.

Well, that's not something you can really sell through retail, if the retail price is \$100, but you could still sell that through your website, just because of the higher margin. You could sell it for \$100, and then you get to keep \$25 for each unit that you sell.

On your first units, especially when you're really low manufacturing volume, maybe hundreds of units, if you even have to sell your product at break-even, or even at a loss, on your very, very first units, that's okay. It's like you don't typically are going to make a huge profit, initially on your first units, but starting by selling directly on your website, it just gives you an opportunity to sell at a much higher margin. That's why I always recommend that you start by selling on your website. It has other advantages too.

It allows you to build up some sales reputation and sales history, and if you're selling the product like hotcakes from your website, then trust me, that's going to make a Walmart a lot more interested in something that's completely unproven.

That's why it's good to start with your website, since it has the highest profit margins. The lowest profit margins are most likely selling through big-box or selling through a distributor who then sells to big-box because then you're going to have a lot of people wanting to take a percentage of each unit.

How much do retailers and distributors typically want for your product? What percentage of the profit margin do they want to take? It varies from industry to industry, from retailer to retailer, but the standard is, they double the price that they pay for it. There's even a term for this, a retail term called keystoneing.

Keystoneing means you double the price that you pay for. In this case, you buy it for \$25 from the manufacturer, you sell it to \$50 to Walmart. You've just

keystoned your price. You went from \$25 to \$50. That's 100% markup or a 50% profit margin.

A 50% profit margin is the middle standard for a physical product company. It's going to be a 50% profit margin. Then, in this case, you sell it to Walmart for \$50, now they're going to keystone it and double it, and then they sell it for \$100.

That's fairly common for like a retailer or for you, the manufacturer. It's not quite as common for distributors because the distributor, typically, will take a lot less percentage. Instead of a 50% profit margin, they may take maybe a 10% to 15% profit margin. Each type of industry just has different profit margins based on their business model, and what type of profit margins they expect.

Even though 50% is very typical, I would say profit margins for a brick-and-mortar retailer can vary between 40% to 60%. Just for your initial estimates, I would definitely use the 50% profit margin, so basically, keystone it and just double the price.

That's how you're going to price for the different distribution channels, so that the final retail price needs to be the same for all of these different channels, but what will change is their profit margin that you make on each of those different distribution channels. In general, you're going to make lower profit margins on higher volume distribution channels.

The highest profit margin is through your website, but that's probably going to be also the lowest volume versus Walmart is going to sell really high volume, but you're going to make a lot lower profit margin. That's just the nature of selling physical products, is your profit margins are going to be different based on the different distribution channels, and the types of production and sales volumes that you can expect from those different channels.

As far as setting the retail price for your product, there are different ways that you can set the retail price based on the value that someone gets from the product.

That's a much better way, typically, to price it, but what you want to do is you want to also look at your manufacturing cost. You obviously don't want to-- the different ways of pricing it have to come together.

For instance, if the same product, let's say, you determine that people value it for only \$50, well, if your manufacturing cost is \$25, then that's not going to be enough profit margin for you. Typically, you want your retail price to be at least four times your manufacturing cost. That's assuming you keystone it or double the price. You buy it for 25, you sell it to Walmart for 50, Walmart buys it for 50, sells it for a 100. Each person doubles it.

Assuming that standard chain of you selling it to a retailer, and then them doubling it, that's you doubling it, them doubling it, so that means the suggested retail price needs to be at least four times the manufacturing cost.

Ideally, at least four times. I should clarify that. For some products, if you can hit three times your manufacturing cost when you're first starting off, that's still good, and you can work on optimizing your profit margins down the road.

Initially, I wouldn't focus too much on maximizing profit margins in the early stages, when you're running low volumes, but what you do need to know is you need to have forecast, and understand your price to know that once you get volume up, and you make some other modifications to your design to lower its cost, that you can then get your profit margins up at least to 40%, but ideally to 50% to 60%.

Question #3: How much money do I need to bring my product to market?

The final question I'm going to look at in today's episode was, once again, another question from a member in the academy. His question was basically, does he really need, or is it really going to take \$1 million or more to get his product to market?

I believe it was maybe in a podcast interview that I had done with Scott Miller from Dragon Innovation, and I believe Scott maybe mentioned \$1 million or \$1 million to \$2 million. He heard that, and then I think other places he'd seen \$1 million mentioned for a hardware startup. He wants to know, is that really how much he needs? He also asked, did I need that much or how much did I spend to get my own hardware product to market?

The simple answer is no, you don't need \$1 million initially. I'll explain that here, in a moment. Eventually, a hardware startup is an expensive business to run, but you do not require \$1 million to start with.

The reason being is that for most self-funded entrepreneurs, it's not going to be feasible for you-- it depends on the product, of course, but for a lot of products, especially if there's any complexity to the product. It's not going to be feasible for you to develop the product, manufacture it, get inventory, and then really start selling it in a big massive way to retailers. Inventory is one of the big obstacles.

The cost of inventory, and then also just injection molds are expensive, especially for high-volume production. Those are two of the big costs that you're going to run into.

What I recommend for most people, that becomes much more feasible, is that you take the product as far as you can on your own, to prove that it has some merit, prove that you're capable of executing, and then once you get it to that point, then you've got enough traction that you can start to entice other people to get interested in your product, and either invest in it or to help you in other financial ways.

For my own case, no, I definitely did not have \$1 million that I invested into my product. In fact, I believe the total that I invested over five years, for my product, including some inventory and such, was about \$75,000.

That's not how much money it took me to get it to market, but that's all that I had to put forward. I was able to partner with a manufacturer, and I was able to convince this manufacturer that they should invest in the product. Essentially, they invested around a \$100,000 for my injection molds. They paid for that, and it wasn't free. It was borrowed money. Basically, it was amortized.

That essentially means they pay, say, a \$100,000 for your molds, and then the agreement was that I pay them \$1 extra per part for the first 100,000 parts, and that's how I would pay back the molds. That's one strategy you can look at to eliminate the mold causes, if you can get the manufacturer to amortize the cost of those molds.

The other thing that I was able to get my manufacturer to do that drastically lowered how much capital I needed was favorable payment terms. By far, is after you get past molds, the biggest cost obstacle to a hardware, any physical product startup is cash flow and the cost of inventory.

This is because for most manufacturers, you're going to have to pay entirely up front, initially, perhaps eventually you'll only pay half up front, but initially, you're

going to pay the full amount upfront, then that takes, say, 30 days to manufacture the product, another 30 days to ship it across the ocean on a cargo ship.

That's two months that you had to pay for, and you still haven't gotten any money back yet. Two months later, you finally have the product. Now you have to ship that to your customer. Let's just say it's still only two months that they've gotten the product.

Most retailers, they don't pay immediately. The soonest they pay is 30 days after they've received their order. That's net 30, is what that's called. 45 days is also really common, 60 days is quite common, and even 90 days or even longer is common in some industries.

That means that you, during that entire time, have had to finance all that inventory. That can really tie up a lot of money. That can be a huge obstacle for you trying to get any type of volume production to get your prices down, or to meet any types of order. You get a huge order from Walmart, let's say they want to buy 100,000 units. Well, how are you going to pay for that?

They're not going to pay for it right up front. They're going to want to pay for it probably 90 days after. You have to pay for the production. That's going to be a huge obstacle. There are ways around that.

I think the best way is the way that I did with my product, and that was I convinced my manufacturer to give me fantastic payment terms that allowed me to pay them after I got paid. My manufacturer gave me payment terms of net 90 days. That meant 90 days after they shipped the product, after they manufactured and they shipped it, then 90 days later, I had to pay them.

Fortunately, this gave me enough time to get paid by my customers before I had to pay back the manufacturer. What this did was completely eliminated the cash flow issues of having to purchase inventory. If I hadn't partnered with the manufacturer, then that would have been really financially challenging. That being said, there are other ways to get around the cost of purchasing inventory, if you don't find a manufacturer that gives you good payment terms. Two of these methods, one is called PO financing, and one is called invoice factoring.

Let's say you get a big order from Walmart, but you don't have the money to produce it. You can get what's called a purchase order finance loan. The beauty of

a PO financing is, they don't look at your credit score, they look at the credit score of your customer.

In this case, Walmart, or assuming you're selling to any big decent sized company that has a good credit history, then the a PO financing loan, you could have the worst credit in the world, and they don't care about your credit because they only care about the credit of the customer that's paying because you have a purchase order which is a legally binding agreement, that they're going to buy this product from you.

That's a really good way to get the money to be able to afford to manufacture the product. The other way is called invoice factoring. It's similar to PO financing, but instead of-- it's going to have a lower interest rate than PO financing because it's lower risk for the lender.

With PO financing, you're asking for the money before you've manufactured the product, because you need the money to manufacture it. There's risk for the lender that, what if you can't even manufacture the product like you say? That adds extra risk versus with invoice factoring, you've already basically, you've manufactured the product, you've shipped it to the customer, and now you're just waiting on the customer to pay you.

You've sent them an invoice and now you're just waiting for them to pay you, so that maybe another 30 to 60 to 90 days. What you can do is you can factor or essentially sell that invoice, and then you get the money immediately. That won't eliminate your cash flow, but invoice factoring will reduce the cash flow problems, and allow you get paid more quickly.

Those are two of the best methods, I think, for getting around the really, really high cost of once you really start scaling your product. Then, of course, there's crowd sourcing and investors.

Once you get that initial-- you get some initial traction, then all these things become much easier than when you're first starting out. It's really difficult to get any type of investment or a manufacturer to win a partner with you when you don't have any traction yet. You can't do most of this at the very beginning. Push your product as far as you can on your own. That's what I did with my own product. I pushed it to the point that I had a fairly crude prototype.

It was close to being ready for manufacturing, but it was still 3D printed, and I was able to use that, then I got a big retailer interested in my product, which was, you've maybe heard me mention, was Blockbuster video. I got written interest from Blockbuster Video.

That was my leverage that I could use to go forward. Then I took that interest from Blockbuster, and I reached out to manufacturers, and I'm like, "Hey, I've got - Blockbuster Videos says they're interested in my product."

That was really huge, and then that gave the manufacturer the confidence to invest in my product. There are ways around some of the financial obstacles of getting your product to market, and it's just all about being creative and just making it, getting enough traction to prove that there is interest in your product, and that you're capable of executing.

You'll find out that there's more opportunities that open if you can get it to that point where you can either partner with a manufacturer, or get some outside investment.

Okay, those are the three questions that I wanted to review with you on today's podcast, and I look forward to seeing you next week on another episode of the *Predictable Designs Podcast*.

