



From Idea to Product: Research



Research

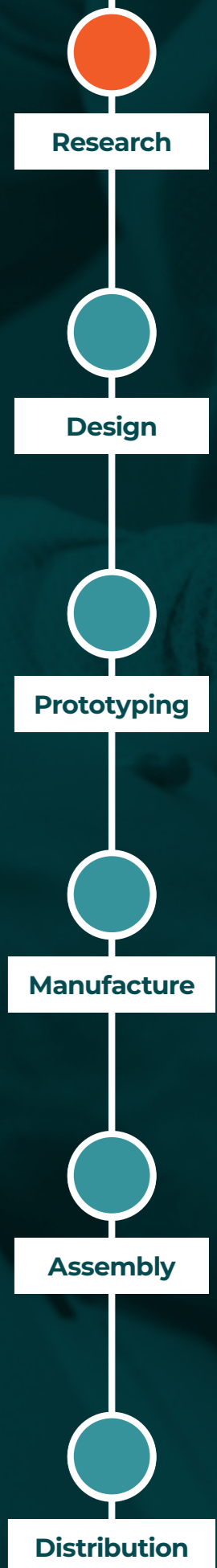
Research is one of the most important aspects of product development. It can be so easy to rush, or ignore and it may spell disaster for your product if not done properly. It's tempting to get ahead of yourself and jump straight into the product development and prototyping phase, but stay on track.

There are 3 key areas of research to focus on before you begin with your journey.

- 1 Idea Validation**
- 2 Market Research**
- 3 Cost Research**

Put simply, you need to work out if your idea works, whether there's a similar product on the market and whether it's profitable to create and sell.

At this stage, you need to be doing both secondary and primary research. Secondary research (second hand information) is researching online and in books etc. Primary research is speaking to people, doing polls and surveys etc. Both are equally valuable during the research phase, so do not neglect one or the other.



1 Idea Validation

The first and most important thing to do is to validate your idea. There is no use in continuing down this path if your invention or product doesn't do what you hope it will. It doesn't have to be a fully-fledged perfect prototype (and it shouldn't be at this stage), it simply needs to demonstrate that your concept works.



EXAMPLE

You've come up with an idea for a new kind of coffee press. Instead of pressing the coffee like in a traditional Cafetière, you pour everything into a cocktail-shaker-style device, and shake it to brew the coffee.

Here, idea validation is needed to tell you whether brewing by "shaking" is possible (and is it better than traditional pressing?). You'll also need to go through idea validation to determine any downsides to your invention. What happens to hot water in a sealed container when it's agitated? (...not good things).

This idea can easily be validated by attempting to brew hot coffee in a sealed container by shaking it and testing the results. (Providing you go through the necessary safety precautions)

Naturally, sometimes an idea doesn't need a huge amount of validation. If the product you plan on bringing to market is relatively simple, then use your judgement here to determine whether it's worth putting time into Idea validation. A newly designed wall-mounted coat hanger, for example probably doesn't need huge amounts of idea validation, unless it's radically changing the way we hang our coats.



Before Moving On

Before moving onto the next stage, you need to be able to answer yes to these questions:

- Is it possible to create a fully functioning product with your idea?



Research



Design



Prototyping



Manufacture



Assembly



Distribution

2 Market Research

Understanding the market is the next important step in the research phase for your product. This is the part where you determine whether there's anyone out there that is interested in buying your product.

Your first step is to find out if there are any products on the market that are the same (or similar) to the product that you are creating.

It does not matter whether there are similar products or if you're the first in the market, so do not get too excited if you're the first, or too defeated if you're not.

Just because you're the only one selling what you're selling, doesn't mean it's a brilliant business opportunity and you'll be successful. You could go to the North Pole and be the first person selling ice cream; it doesn't mean you'll be rich from it.

Conversely, turning up late to the party doesn't mean there's no chance to be successful. Volkswagen was founded over 30 years later than Ford and they're doing just fine.

What you're looking to understand here is what sells and what does not sell. If you're not the first in the market then you need to understand the companies you're potentially up against. Here are some questions you're going to need to ask:

What are they selling?

Here you need to work out if what is on sale is the same as what you're producing. It's not the end of the world if it is, but even the slightest of differences will give you a unique selling opportunity.

Is it patented?

This is a detail that can make or break your idea. Are the products currently on the market patented to an extent that would inhibit your ability to manufacture a similar product? You can search the Gov.uk website for patents, as well as using google's built in patent search. At this stage, you simply need to ensure that you're not stepping on any patented toes, but down the line you may need to contact a patent lawyer to ensure your idea is safe.

How are they selling it?

Do your competitors have any unique selling points? How is the brand positioning itself? Does the brand establish itself as a luxury product or on the lower end? This is important because understanding how to position your product from the beginning helps you make manufacturing and design decisions later on. This is where you're looking for a gap in the market to fill.

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Can you improve on it?

This is where understanding the current market and how to fit into it comes in. Improving on what's available with a better product at a similar or better price point is a tried and tested business strategy, providing you can back up the product's claims.

How many are being sold?

This is not an easy metric to get, but it's important to find out in one way or another. A rough guess is fine at this stage in the game. What you need to work out here is whether there will be enough sales of your product to support itself.

Hopefully you'll find that the reason your product is the only one on the market is because you're an innovator that's come up with something truly unique. Not because your idea is a lemon that has failed in the market already. How do you find this out? Research.

You may have run into old, defunct products of future's past in your research for any products similar to your idea. Take these products and begin your search for reviews, forum posts and questions about that product. This will give you information and insight into potentially how it failed and mistakes to avoid in future.



Before Moving On

Before moving onto the next stage, you need to be able to answer yes to these questions:

- Can you create your product without violating any patents?
- Have you established that there is a market for your product? Is there significant sales volume to support the business?
- Have you established where your product sits in the market?

Research

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3 Cost

This next stage of research takes your previous stages into account. Can you create the product that you want to create, to a necessary standard and sell it for a price that the market will support?

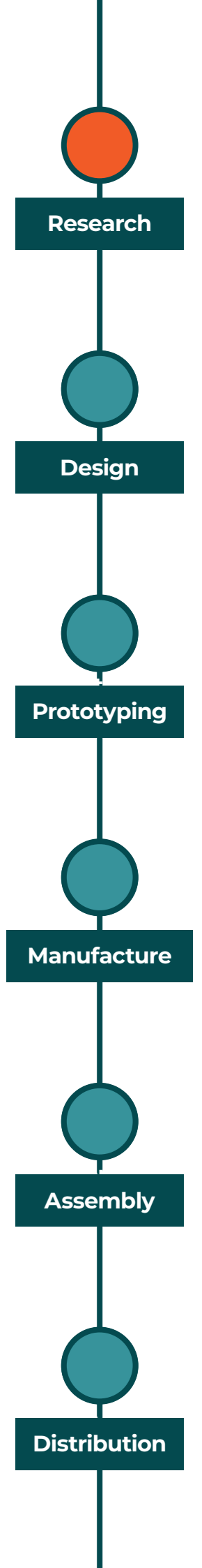


The first thing you need to work out is what selling price will the market support? A lot of research, questioning and polls can be done here to get the answer you need. Do people feel like they're paying too much for similar products and would prefer something cheaper? Are people happy to pay more for a product that has more features? This is where market research is important in telling you what customers are looking for from your product.

Why should you research the end retail cost of the product before you even begin looking at manufacture and distribution? Surely, retail cost is one of the last things to look at? Not at all. Knowing at what price the market will purchase your product means that you can plan profit margins and production costs accordingly and work out how profitable the product may be from the start. If you decide on retail price last, you're can very easily lose your entire profit margin to manufacturing costs or price yourself out of the market.

You will also want to work out a rough cost of manufacture at this point. Once again, it doesn't need to be perfectly accurate, but it needs to give you an idea. At MRT, we get enquiries like this on a daily basis and we're always happy to offer a helping hand. We're often asked for a rough cost per unit based on quantity, size and rough material requirements. We for obvious reasons can't offer exact numbers, but we can give you a number that's close enough for these early calculations. We might even be able to give you a little more information on start-up costs and logistics.

Plug your numbers into the above formula and multiply it by your estimated yearly sales volume to give you a (very rough) estimate as to whether you've got something worth pursuing on your hands.





EXAMPLE

The Coffee Shaker is a great coffee maker and we're happy to proceed to the next steps. We've established that people are happy with the cost of coffee makers, and we think that the added extra taste that our coffee making gives warrants an extra cost. We've researched that the market pays up to £25 for the higher end coffee presses, so that's where we're going to price it.

After speaking to MRT Castings, we know that each unit will cost roughly £6 to produce and we'll need to produce 1500 units to stay just ahead of what we think demand will be.

£6 + Profit Margin = £25

If we re-order the equation to calculate profit margin...

Profit Margin = £25 - £6

We can see roughly, that each unit will have a profit margin of £19 or 76%.

If we multiply this by our estimated annual sales volume of 1500 units, we get annual profit of £28500. Using this, we can estimate whether the business can handle additional costs of manufacture, running the business or price drops. It also allows us to work out how long it might take to be profitable, based on established tooling and other business costs.

Whilst at this stage, these estimates won't give you definite answers; they will give you enough information to act on. If in your research you find that the retail value is £25 but it costs you £30 to manufacture each unit, you know that it's not looking to be profitable and you should re-evaluate the product to try and make it cheaper.



Before Moving On

Before moving onto the next stage, you need to be able to answer yes to these questions:

- Do you know what price you can reasonably sell the product for?
- Have you researched what it can roughly be manufactured for?
- Is the retail value of the product more than your projected estimated manufacture costs?

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