



YOUR COMPREHENSIVE GUIDE TO THE PRODUCT DEVELOPMENT PROCESS



CHAPTER TOPICS

- How to Determine the Feasibility of Your New Product Idea
- 3 Steps to Understanding Your New Product's System Requirements
- How to Tackle the Prototyping Process in Three Steps
- How to Turn Your Prototype into a Product
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How to Determine the Feasibility of Your New Product Idea

Coming up with an idea for a new product can be exciting, challenging, and overwhelming. However, even after your idea is fully formed, one of the biggest questions may still remain: Can it be done? Considering all of the time, [money](#), and effort required by the product development process, you'll want to be sure your product design and goals are realistic.

Conducting feasibility research will help you determine the practicability of these factors and give you the confidence to move forward with developing your product. As we discuss the importance of feasibility studies, how to conduct feasibility research, and common mistakes in the feasibility phase of product development, you will have all the information you need to understand the risks, details, and new opportunities of developing your product.

Even after your idea is **FULLY FORMED**, one of the **BIGGEST QUESTIONS** may still remain:



CAN IT BE DONE?



Recognize the Importance of Feasibility Studies

Good information and preparation are key components of any successful project. Without a thorough understanding of your product's goals, budget, time constraints, market, and resources, you could end up missing valuable opportunities to pivot or making costly mistakes. By investing in determining your product's feasibility, you will be prepared to proceed with developing your product.



Good information and preparation are **KEY COMPONENTS** of any successful project.

PRODUCT FEASIBILITY

is determining the reality or possibility of developing a product.



POSSIBLE



IMPOSSIBLE

What is product feasibility?

In practical terms, product feasibility means determining the reality or possibility of developing a product that can be made from off-the-shelf components. Even though your product may feature new or advanced technology, it's important to remember that you will have a much easier time developing your product if the components that will be used to create it already exist in a commercial setting.

Keeping system integrators in mind as you develop your product will help you to develop a more feasible and even innovative product as you strive to create something novel or new for the market space. By balancing the trade-off of your product's features and cost, you will begin to understand the feasibility of your product and create practical solutions to achieve your goals in the marketplace.



Is feasibility testing really worth it?

Although preparation is key to success, it always comes with some kind of price. With feasibility testing, that price could include time, money, and potentially your expectations and goals for your product. However, given that 100 percent of future [project costs](#) can be saved with a feasibility study, it's one piece of preparation you won't want to skip. Typically, a feasibility study can range from two weeks to two months—a small price to pay for potentially saving you months to years of development costs.

For example, let's say a customer wants to build a low-cost monitoring system with a very high-resolution camera, but the feasibility research determines that there isn't a camera on the market that could meet the customer's needs at the necessary price point. The customer decides to halt product development and—although disappointed—is very grateful to have avoided spending an unnecessary \$500K and taking on a year-long project that couldn't have worked in their market.

100%

of future project costs can
be saved with
A FEASIBILITY STUDY.



Do Your Research

As you may be realizing, determining feasibility is all about performing quality research. The information that you need to be able to understand whether your product is feasible can come from a variety of sources, including the following:

- Industry publications
- Manufacturers
- Competitors
- Customers
- Other sources of technological, scientific, or market information

As you consult these sources, you will be able to determine realistic buying and materials prices and understand any potential roadblocks to developing your product. In some cases, you may already have this information and may not need to perform much additional research. If you are simply developing an incremental change to an existing product or you can already find your product on the market, you may be able to proceed without an extensive feasibility study. But if your product is [disrupting the marketplace](#) with cutting-edge technology, is high-risk, or will cost a lot of money, you need to conduct a feasibility study.

For example, one entrepreneur wanted to develop a seatbelt-use-enforcement technology for handheld gaming that would require the user's seatbelt to be enabled while gaming in an automobile. Since the technology needed to develop the product was especially ambitious and innovative—including battery pack customizations and integrations into a seatbelt fixture—a feasibility study was conducted. The study determined that the product development costs would end up likely exceeding the device's profitability, saving the developer a great deal of time and money.



Avoid These Common Mistakes

Now that you know how to begin conducting feasibility research, you'll want to make sure you do it well. As you begin the process of determining your product's feasibility, remember and plan to overcome these common errors:



Filing for a Patent Too Early

The number one mistake that many product developers make is filing for a patent before determining feasibility. Although it may seem like a good idea, filing for a patent takes a lot of time and money that may end up going to waste if you find out that your product idea cannot be produced.

Not Understanding the Target Market

Market research is a critical piece of information in determining feasibility. If no one wants to buy your product because it adds time or complexity to their current processes or it isn't the right price, you'll want to stop before getting too far.

Communicating Ineffectively with Stakeholders

In communicating with customers, partners, and especially manufacturers, you should communicate very clearly what you aim to do. If you are calling a manufacturer to ask about the components they produce, be prepared to use their industry terms and do your homework beforehand to understand if there is a path for your product. If you are concerned about sharing your idea, you can secure an NDA, but don't let that prevent you from communicating your idea effectively. Ideally, most of the people you work with will be interested in your success!

Failing to Work Out the Details

Before launching into a feasibility study, know all of the details about what you want to accomplish. You should consider all of your product requirements and know exactly what you want your product to achieve before making any big decisions.

Conducting feasibility research is an essential first step to achieving success in the product development process. Without it, you and your product could suffer from a lack of important information and the loss of valuable time and money. By remembering everything you've learned about the importance of feasibility studies, conducting feasibility research, and common mistakes in determining feasibility, you will be prepared to move forward with the opportunities that present themselves in developing your product.



3 Steps to Understanding Your New Product's System Requirements

Major projects require major planning and preparation. Without the effort of over 400,000 engineers, technicians, and scientists and a carefully laid out [363-page final flight plan](#), the Apollo 11 mission would never have been possible. Although the development and launch of your new product likely won't require quite as dramatic a plan, the principle of working through a thorough process to plan every aspect of your product's development should be the same.

Identifying your product's system requirements is a key step in the product development process. As you are careful in outlining your company goals and product specifications, creating a trade matrix and bill of materials, and analyzing and adapting this information to meet the needs of your situation, you will feel confident and prepared to move forward with developing your new product.



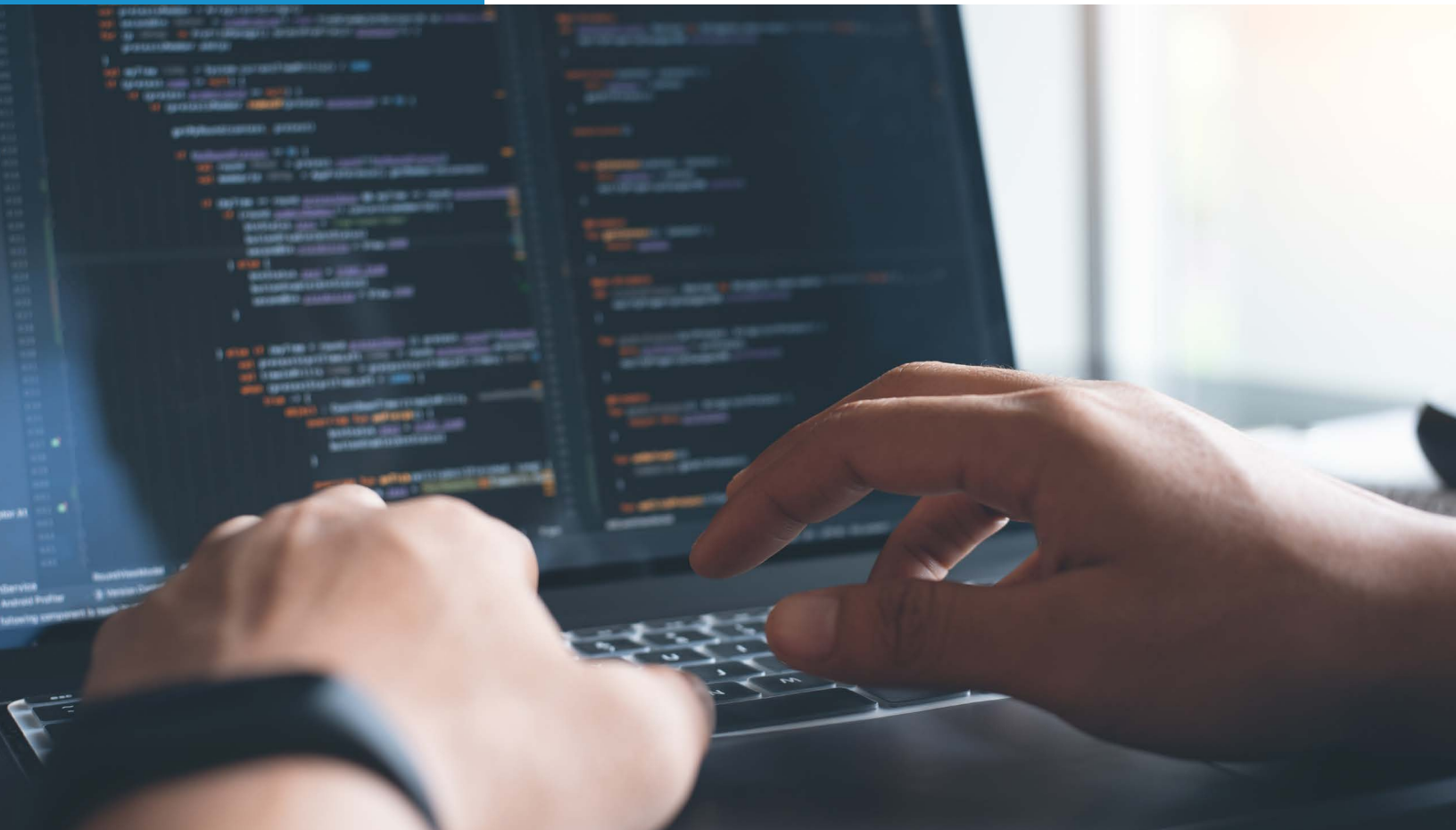
**CLEARLY DEFINING
YOUR GOALS
for the new product
IS ESSENTIAL.**

Outline Goals and Specs

Once you know that you have a viable product idea, you can begin building your approach to developing your product. The process of identifying your product's system requirements begins with understanding the cost of creating the product and understanding all of the elements required to manufacture and get set up. As you begin figuring out the architecture and goals of your product, consider the following elements to determine your product's system requirements:

Company Goals

Clearly defining your goals for the new product is essential. If you develop an incredible new product that doesn't help your business achieve its objectives, you have wasted valuable time and money. As you define your goals, ask yourself what you want the product to do, how much you want to sell it for, what your target development cost is, what the key features are, and how these elements align with your business objectives.



Product Specs

The next step is to figure out the system's high-level architecture to identify the needed components. As you continue to think about what you want the product to do, consider the following questions:

- What should the product look like?
- How does it assemble?
- How much power will it consume?
- What environments will the product operate in?
- What is the upgrade path?
- How much do the tools cost?
- How risky is it to develop?
- What kinds of industry or regulatory standards need to be met?

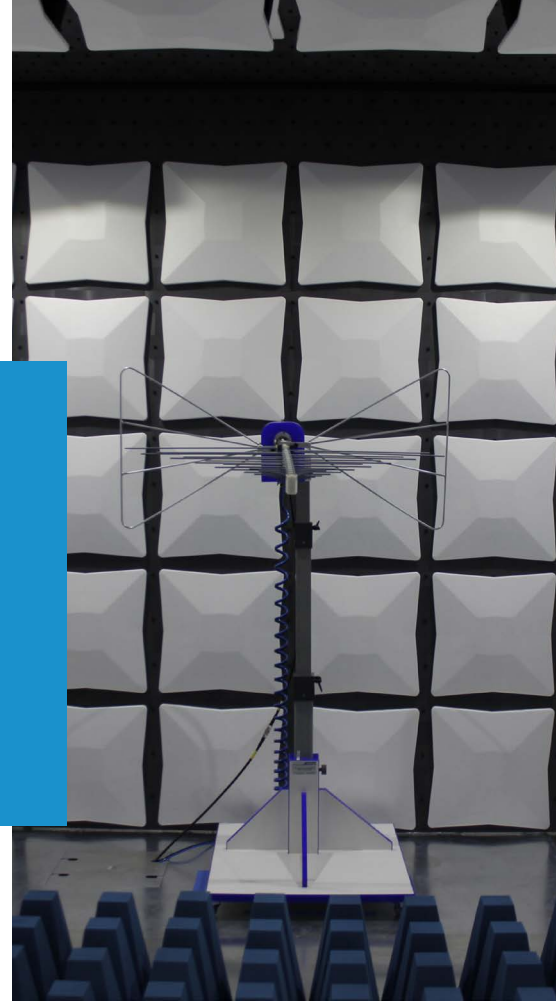
These questions will help drive you toward identifying the needed features and requirements for your product and determining the best components for the system.

Market Research

Although you should have already completed some initial market research, you'll want to make sure that you are clear on what your customers want from the new product by the time you're ready to develop the system requirements. Ensure you know what features are the most demanded by the product's customers, which features are optional, what your competitors are doing, and anything else your customers might be telling you.

We learned this lesson personally when we designed one of our own products with rechargeable batteries—typically a great way to optimize power consumption and cost. However, after the product went to market, we learned that customers were expecting the product to use AA standard batteries. Since they were using the product in locations away from a power source, a rechargeable battery was impractical for their needs. We learned to listen to our customers early on in the process!

As you begin identifying the requirements for your product, attention to detail is key. If you're concerned you may be forgetting an important element of planning your product, consulting a [product requirements document](#) can help you think of everything you will need to identify for your product. Don't cut corners on identifying all of your system requirements. You may regret it later!



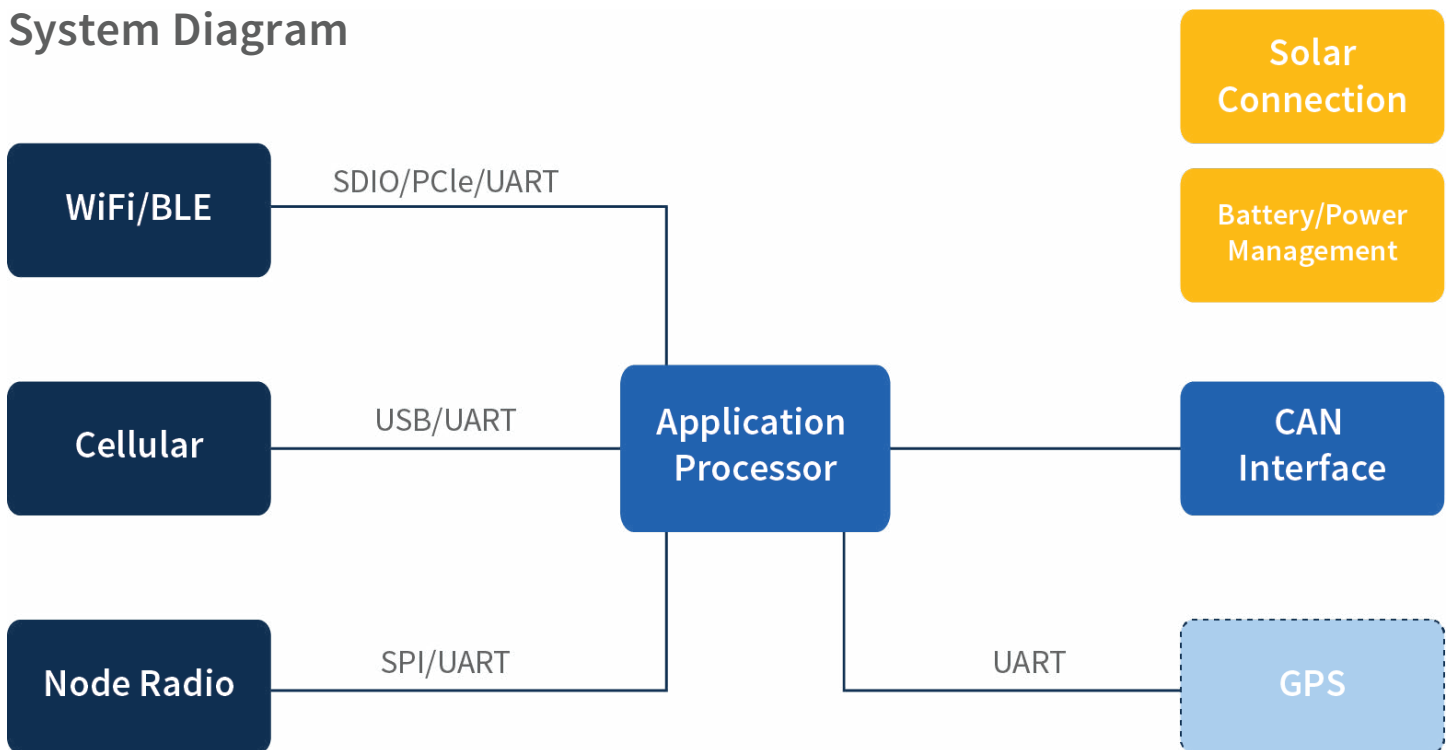
Create a Trade Matrix and Bill of Materials

With your product specs document in hand, you are ready to begin evaluating the actual costs and priorities of your product. Two tools that can help you with these evaluations are 1) a trade matrix and 2) a bill of materials. Considering each of these items will help you better determine the scope, budget, timeline, and features of your product so that you are prepared to move forward with its development.

Trade Matrix

A trade matrix is a method for determining the balance between the desired product costs and features. As you work through it while considering your [costs, priorities, and goals](#), you will be able to make informed decisions about what is realistic for your product and budget. As with the other steps in this process, you should be extensive with the elements you include in the matrix.

System Diagram



Bill of Materials

A [bill of materials](#) is a centralized document outlining all of the costs involved in developing the product. While you likely won't be able to anticipate every one of the product costs at this stage, creating a high-level bill of materials early on in the process can help you determine the product's initial system design and compatibility with your budget. During this process, be sure to consider the expertise of the developers who will design your product and the [components](#) they are familiar with.

Analyze and Adapt

With all of the information you need to identify your product's system requirements, you will be prepared to identify the true necessity and costs of your product's features.

Unfortunately, the data you gather may reveal that you can't have it all. However, these resources can help you know how to adapt your [price and features](#) in a way that will still be beneficial to you and get the job done for your customers. Some elements you may have to adapt include your product's power consumption, [heat dissipation](#), finding second sources, and more. If you're not sure where to begin adapting your product, consult with a solid product development team to create recommendations for you. These recommendations may even include offering two options with different costs and features. Either way, receiving

expert recommendations can help you find a compromise you're happy with.

Creating a solid plan for your product's system requirements can be extensive, but it doesn't have to be difficult. As you define your business goals and product specifications, create a trade matrix and bill of materials, and use this information along with expert advice to compromise and move forward, you will be fully prepared to advance successfully in the product development process.

Wondering if you missed anything in identifying your system requirements? Reach out to us at (801) 495-2310, and we'll send you a comprehensive document of all of the questions you should consider when developing your product requirements.



“ Intelligence is the ability to adapt to change.”

– Stephen Hawking
English Theoretical Physicist





How to Tackle the Prototyping Process in Three Steps

Arguably the most fun part of the product development process, prototyping is where you get to actually see your product come to life. After investing hours into the engineering and design work, connecting the dots to form a functional product can be extremely gratifying, not to mention [time- and money-saving](#).

By breaking down the prototyping process for electronic products into three simple steps, you will be able to understand exactly what you need to do to create your prototype and avoid any unwanted surprises. As you review the electrical, mechanical, and firmware/software prototyping processes and other tips for prototyping success, you will be prepared to tackle the prototyping process like a pro.

1. Electrical

The first step to developing a prototype is figuring out how the electrical components will work together. To begin, you will need to create an electrical schematic from all of the electrical components listed in the bill of materials. The [schematic](#) will act as the blueprint for your

product's electrical design. With the processor or controller in the center acting as the product's brain, you will need to configure the peripheral devices, screen, Bluetooth or Wi-Fi radio, buttons, inputs of electricity, outputs of data, and any other electrical elements of your device.

After the schematic is created, it's time to create a layout of the circuit board and make sure everything fits together as planned. Once you've finished the layout and generated Gerber files, you can make the first prototype of the product's circuit board to use with the other elements of the product prototype.

Disadvantages of Off-the-Shelf Processor Boards

Though ready-made processor boards can be an attractive option, you should consider several factors before you select one to use in your prototype. Your prototype should be built with the end goal of manufacturing in mind, so be sure to choose a processor board you can commit to.

If you choose to use an off-the-shelf board, be aware that the board's manufacturer could stop making it at any time, potentially leaving you without a second source and a need to redesign your product. You'll also want to avoid [breadboards](#) because they are typically incompatible with the components that will be used

in automated mass production. While using an existing processor board reduces development time, it also decreases the amount of control you have over your product.



2. Mechanical

As you move on to developing the mechanical aspect of the prototype, your next task will be to figure out how all of the prototype pieces fit together, what they'll look like, and how they will withstand their environment. Housing the electronic components properly is extremely important to protecting your product from

ESD (electrostatic discharge) and protecting the delicate electrical components from unwanted contact.

[Rapid prototyping](#) and 3D printing are other aspects of the prototyping process that typically refer to the development of the product's housing or mechanical pieces.

While these processes may not do it all, they do provide valuable and fast prototyping techniques that can make your prototype look even more professional and very similar to what the final product will eventually look like. With the mechanical design of your prototype in place, you will be ready to test the physical aspects of your prototype.

3. Software/Firmware

If required by your product, your next step in the prototyping process is to develop its firmware and software. [Firmware](#) is the lower-level code embedded in your device that resides on a processor or controller. It is the backbone of the entire system that makes each element cohesive and functional.

Developing firmware can be a lengthy process. However, the length of the firmware development process ultimately depends on your product's trade matrix, bill of materials, and end goals. If you choose a processor or controller that has significant

open-source code available or code developed by the manufacturer to kick-start your efforts, that development effort can be shortened.

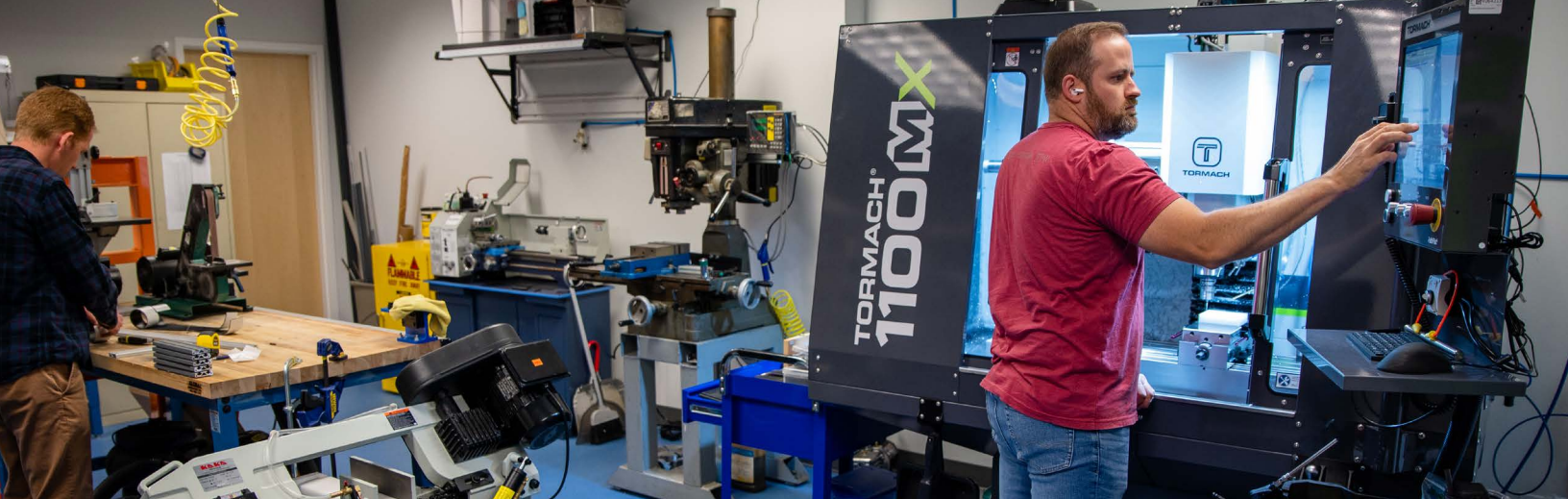
If your product includes any kind of user interface outside of the device, you will also need to develop software. The software will manage your product's web interface, applications, and other interactions the user may have with the device. With each element of the prototype held together and interacting properly, you should have your first working prototype in your hands. Congratulations!



FIRMWARE

is the backbone of the
ENTIRE SYSTEM.
it makes each element
**COHESIVE AND
FUNCTIONAL.**





Things to Remember

Though building your prototype may seem as simple as going through these listed steps, you should make sure that you are working through each process thoroughly and with the right expectations. As you use your prototype effectively to verify

the product meets its intended requirements, ensure your product meets the needs of your target audience, and work with the right team, your prototype will become a valuable asset in the product development process.

Using Your Prototype

One of the main points to remember as you create your prototype is that it is not meant to be as [polished as the final product](#). While it should be as close to ready for manufacturing as possible, you will likely go through multiple iterations of the prototype before it is production representative. This is important to keep in mind as you put the prototype through functional testing and begin to show it to investors and stakeholders.

Functional testing is an especially important use of your prototype because it will help you know how well your product stands up to its necessary requirements. For example, as you begin identifying issues with your product in different testing scenarios, you will know where to adjust its design to validate its functionality and verify that it meets industry standards. Making sure your prototype is functional before you invest in getting it on the market will save you lots of time and money.



FUNCTIONAL TESTING

will help you know how well your product stands up to its necessary requirements.

Hiring a Product Design & Development Firm

Because the prototyping process can be complex and requires expertise in a variety of different areas, you may choose to work with a professional product design and development team. If you do, you can expect to be involved in making important decisions about what to include and how to include it in the prototype without having to figure out the details of making it all work together.

Product development firms also have all of the resources you will need to build your prototype under one roof. Whether you need help with electronics,

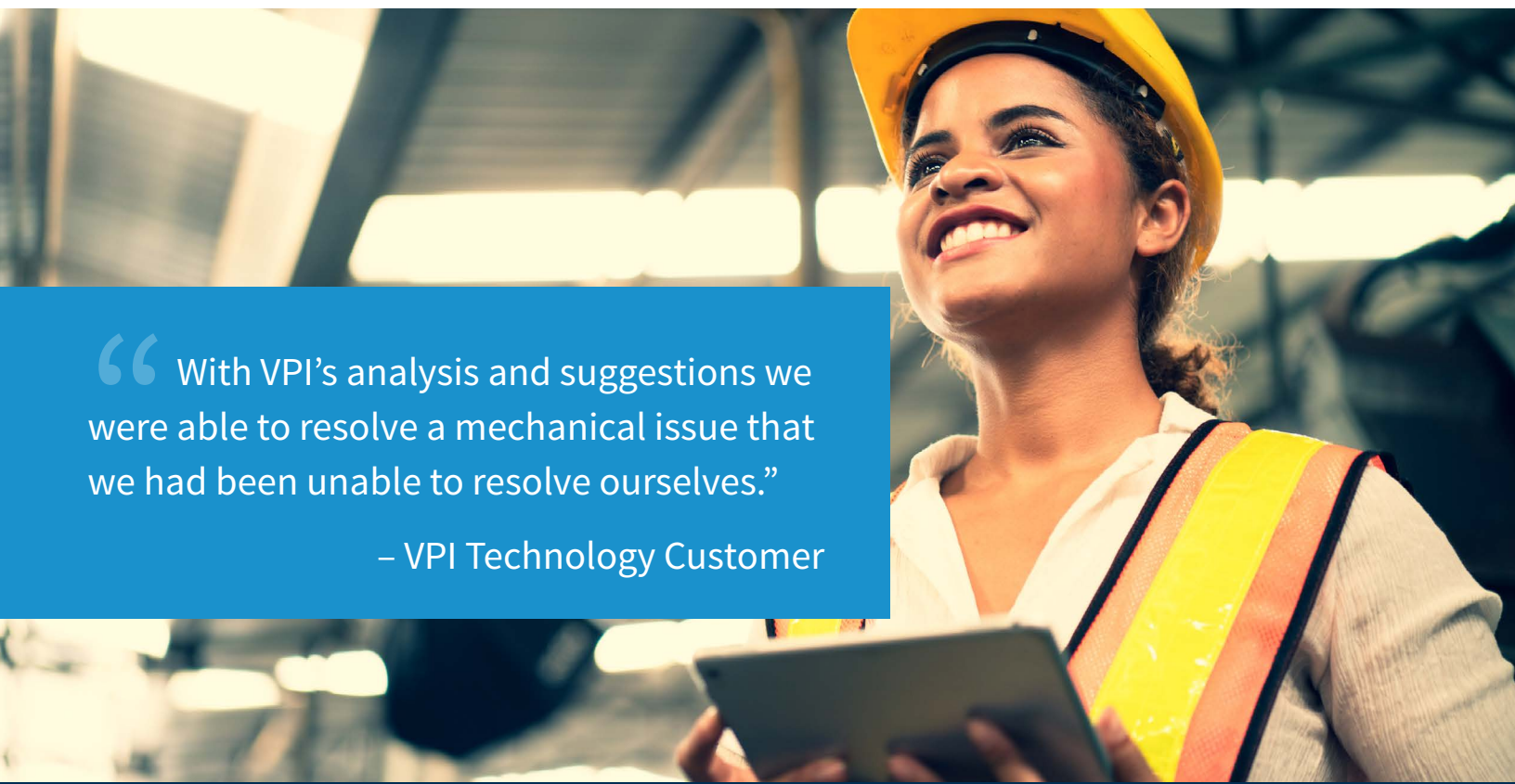
mechanics, firmware, software, or all of the above, you can rely on a firm's expertise to make sure it's done right.

Since firms have gone through the product development process many times, they may see pitfalls in the prototyping process that an inexperienced entrepreneur may overlook. They also have procedures and best practices for building prototypes designed for specific types of activities that you may otherwise not be aware of. As one [VPI Technology](#) customer shared, "With VPI's analysis and suggestions we were able to resolve a mechanical issue that

we had been unable to resolve ourselves."

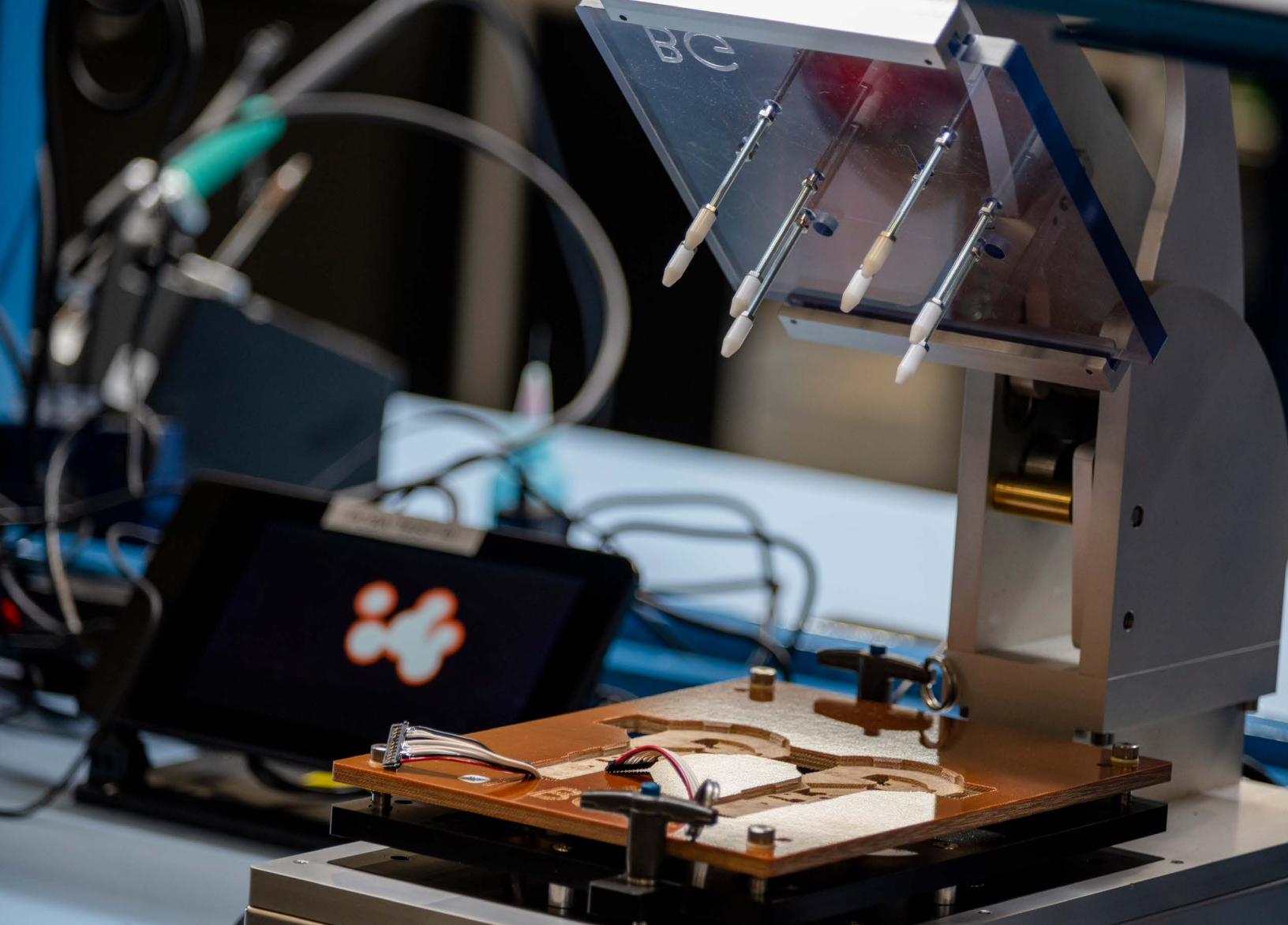
As you develop the electronics, mechanics, firmware, and software for your first product prototype; make sure your prototype is used effectively; and consult with a professional product development team, you will set yourself up for prototyping success.

Looking for professional prototyping help? Need help debugging or fixing your struggling prototype? Visit vpitechnology.com to learn how we can fill in the gaps in your prototyping process.



“ With VPI's analysis and suggestions we were able to resolve a mechanical issue that we had been unable to resolve ourselves.”

– VPI Technology Customer



How to Turn Your Prototype into a Product

Getting your new product ready to share with the world is an exciting process. Once you have a tangible prototype in hand, chances are you'll be eager to get it manufactured and on store shelves as quickly as possible. In order to make sure your product launch is successful, however, it's important to make sure that you've been thorough in every aspect of testing and preparing the tools necessary to create your product.

As you prepare to manufacture your product, undergoing comprehensive functionality testing, regulatory testing, and tooling will help to ensure that your product is perfected before you invest lots of [money and time](#) into mass manufacturing it. Once you're familiar with these processes, you can be confident in your decision to move on to manufacturing.



Functionality Testing

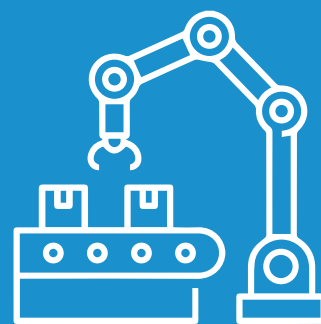
There's no such thing as too much testing in the manufacturing process. Even though your prototype has likely undergone some testing by the time you're ready to begin preparing for manufacturing, you will likely still find issues with the mechanical design, firmware, and software that need to be worked out. Continuing to perform quality functionality testing will help you finalize your product design so that it's completely ready for your future customers.

One company with a product funded through Kickstarter learned how important functionality testing is as it faced pressure to deliver quality products on a tight deadline. As the entrepreneurs worked with VPI Technology to test their product and ensure that it met high quality standards before they began shipping it, they discovered flaws in the product's design and were able to make the necessary design adjustments in time, likely avoiding a slew of bad reviews and product returns.

Environmental Testing

Another important aspect of functionality testing is making sure that your product can withstand any challenging environmental conditions it might experience. Depending on the function of your product, [environmental testing](#) may include drop tests, ingress protection tests, electrostatic

discharge tests, temperature and humidity tests, shock and vibration tests, and altitude tests. By testing your prototype in these different conditions, you will be able to identify and correct flaws in its design to ensure that it will remain functional in a variety of situations.



There's no such thing as too much testing in the
**MANUFACTURING
PROCESS.**

Regulatory Testing



“Failure is just the opportunity to begin again; this time more intelligently.”

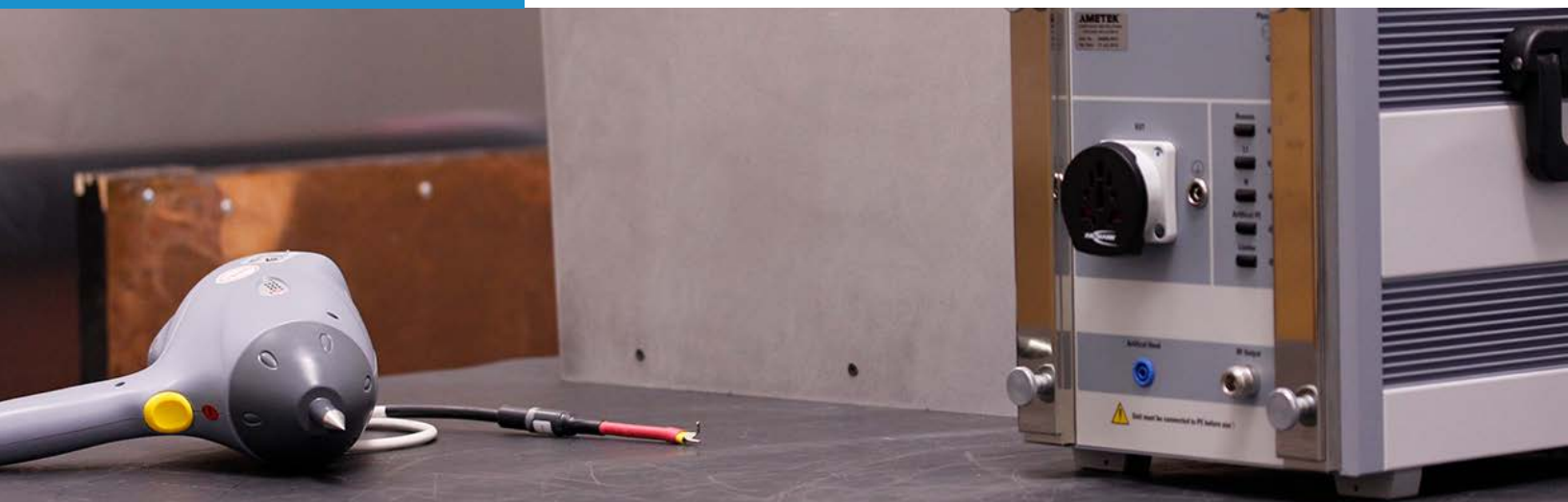
– Henry Ford
American Industrialist

Once you know that your prototype works in a variety of different scenarios, it's time to make sure that it can do so safely and within regulatory limitations. If you plan to sell your product through retail chains, it will have to meet certain [safety standards](#) that may differ for each company and country you sell through. Electronic products, in particular, must follow guidelines from the FCC in addition to other regulatory and safety requirements.

While these guidelines aren't necessarily difficult to comply with, be careful not to accidentally overlook any stipulations when undergoing regulatory compliance testing for your product. One frequently overlooked electrical regulatory guideline is the level of spurious emissions—i.e., unintentional

radiation of signals coming from your device. Although a few extra radio waves coming from your device may not seem like a big deal, you could have a lawsuit on your hands if your device ends up interfering with someone else's Bluetooth signal or pacemaker. As you test your product to make sure it meets safety and regulatory guidelines, you'll be one step closer to mass manufacturing.

Some product development firms also provide a prescan on electronic products to identify any EMI/EMC issues before further testing. This technology is not widely available, so consider reaching out to a firm with [this capability](#) to ensure that your electronic design is compliant with regulatory standards before you get too far in the process of transitioning your prototype to manufacturing.



Tooling

After your product has been thoroughly tested, it's time to move your sights to the production line. Before manufacturing can begin, however, all of the manufacturing tools required to produce your product will need to be set up. This process of acquiring and even creating all of the components and machines needed to create your product is known as [tooling](#).

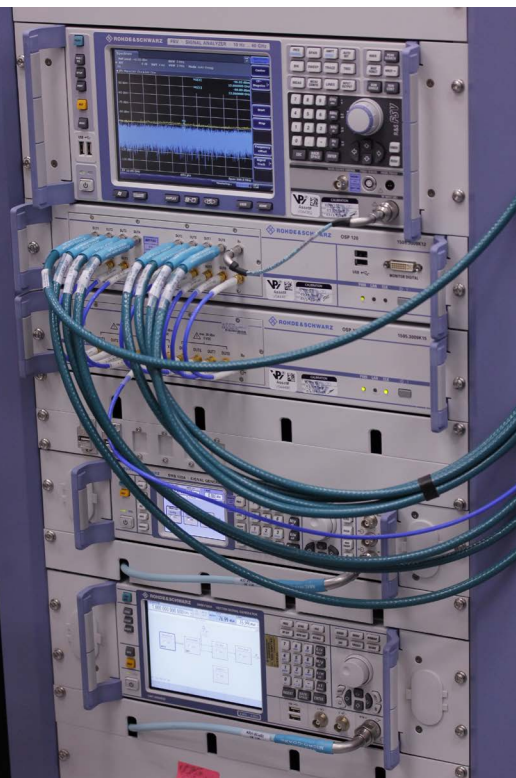
Making sure that all of your molds, gauges, patterns, automated testing equipment, dies, and other tools are designed and created properly is [critical](#). If any of these tools has an issue, your product could

end up being manufactured incorrectly, affecting the output and lifecycle of your product and your customers' satisfaction levels. Designing, creating, inspecting, and adjusting production tools takes between eight and 16 weeks, so plan accordingly. Once tooling is complete, your product will undergo a trial production run, and you'll move on to complete the setup of the manufacturing flow.

As you work toward completing the testing and tooling processes, remember that it will likely take more time than you think to create good, quality parts and products. Proper testing

and design are especially important—skimping on quality will come back to bite you with returns and unhappy customers if your product has issues or has to be recalled. As you put in the effort to make sure your product is completely ready for production, you will be able to move forward confidently into the manufacturing phase.

Are you looking for help with properly testing your prototype? Not sure whether your product is completely issue-free? Visit vpitechnology.com to learn how we can help get your product ready for manufacturing.





4 Key Steps to Manufacturing Your Product

After all of the time and effort you've invested into designing, prototyping, and preparing your product for manufacturing, it's time to see it come to life. Manufacturing a product involves [much more](#) than simply sending your design to the factory and getting a call that it's ready to ship a few months later. Entrepreneurs and experienced product companies alike need to carefully consider the manufacturing partner they choose to work with, the process by

which their product will be created, and the additional elements needed to get it ready for the consumer.

By following these four steps of choosing a reliable manufacturing partner, performing a factory audit, developing additional product materials, and defining the price point and legal agreements, you will have a good start on your manufacturing journey.

1. Improves Patient Comprehension

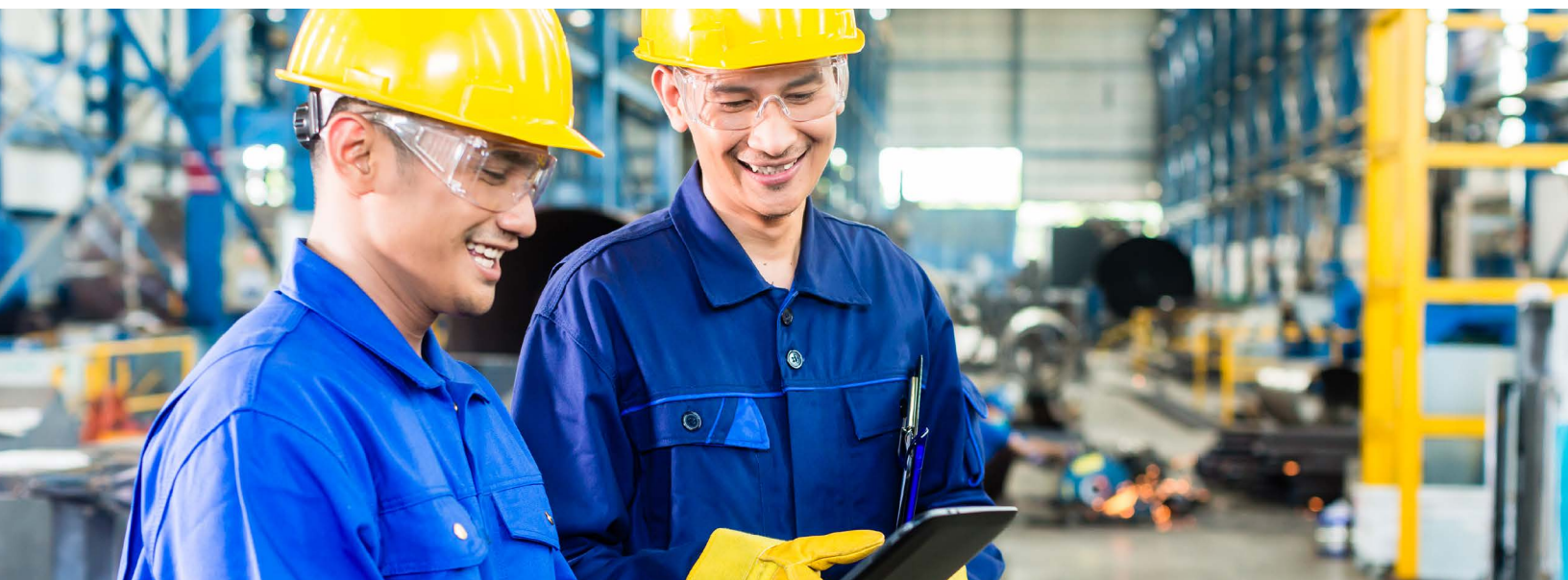
Choosing a reliable manufacturing partner will play a huge part in your satisfaction with the manufacturing process. As you determine which manufacturer to work with, make it a priority to meet with them in person, audit their facilities. While low prices may initially attract you to certain manufacturers, you'll want to make sure you aren't sacrificing your intellectual property (IP), the quality of your product, the transparency of business dealings, the clarity of communication, and the overall manufacturing experience.

Due to differing IP laws overseas, companies will occasionally encounter [international manufacturers](#) who change their product's design and

claim ownership of intellectual property by virtue of how their governmental laws give weight to the production process vs. the ideation. In our experience, the best way to protect your IP when you need manufacturing internationally is to make sure you have trusted and proven partnerships. Unfortunately, this takes years to develop. Referrals from a factory's existing clients that emulate your business needs will help you in your vetting process. Other steps you can take is for you to manage and control parts of your supply chain. For example, you can have one factory do the injection molding, another do the printed circuit board assembly, and another do the final assembly. The trade-off is that you're introducing additional expenses

into your supply chain. If cost is your number one priority, then you must narrow your factory search to factories that have proven IP protection records with clients similar to you.

Another way to ensure you'll find a quality manufacturer is to work with a product development firm that has proven manufacturing relationships and can help you with everything from vetting and connecting you with potential partners to providing fulfillment services. For example, VPI Technology's manufacturing partners must pass a critical onsite auditing process before being recommended to clients. By working with a trusted product development firm, you can ensure that you and your product are in good hands for manufacturing.



Step 2: Perform a Factory Audit

While you're visiting your manufacturing partner, make sure to also complete an in-person factory audit. During the audit, there are dozens of criteria to analyze. A few examples of things to look for include how the company's manufacturing workflow is set up and how the process is handled, material handling, certifications, reputable customer references, incoming inspections, online training, inventory counting, inventory storage, handling of defective materials, and how line workers manage the handling of product components on the line.

Transparency of communication is very key to having a successful manufacturing experience.

Another element to look for is the factory's [quality assurance system](#). Its quality controls should be compliant with existing quality assurance standards as well as any AQL standards you choose to set. Have the factory complete random testing on the products before they are packaged to check their functionality, appearance, and quality of assembly against golden sample standards.

“Testing leads to failure, and failure leads to understanding.”

– Burt Rutan
American Aerospace Engineer



Automated testing saves
TIME AND MONEY.

Step 2.1: Set Up Automated Testing

If applicable to your product, automated testing can also be a great investment in the manufacturing process. Since automation is a great way to save time and money, industry demand for it has [grown](#), especially for electronic products. Although it can be expensive to set up, it will pay for itself in the long run by reducing

the risk of recalls and warranty repairs due to human error.

One thing to note for electronic products is that the circuit board must be designed specifically to allow for automated testing. As you incorporate the possibility of automated testing into your product design from the beginning, you'll be able to take advantage of the benefits it can provide.





Step 3: Develop Additional Product Materials

A physical product isn't the only thing you'll have to create in the manufacturing process. In many cases, your product will need to be accompanied by an instruction manual, warranty, and packaging. Make sure to consult with an attorney to develop the warranty language.

If the manufacturer you're working with isn't a one-stop shop, you may have to arrange to work with a separate supplier to create the packaging and artwork for your product.

While packaging isn't much of a concern for B2B sales, it's usually a [big deal](#) in retail. When designing your product packaging, consider elements including the size of the packaging, its attractiveness, how visible the product will be inside of it, how the product will be displayed, and whether it will require any antitheft devices. By carefully developing these additional product materials, you'll be one step closer to getting your product to your customers.

While packaging isn't much of a concern for B2B sales, it's usually a **BIG DEAL IN RETAIL.**



Step 4: Define the Price Point and Legal Agreements

Though you should already have an estimate of your product's price point by this stage in the product development process, you won't be ready to set the final price point until you have identified all of the financial inputs required to manufacture and distribute it. When determining the price, consider the costs incurred in development, manufacturing, warranties and repairs, packaging, marketing, shipping, yield loss, and any other process required to develop and sell your product. Be sure to especially examine shipping costs since they can add up quickly with overseas customs and tariffs and tend to be frequently overlooked. Consider working with a shipping logistics broker that can provide you with accurate estimates for shipping your product.

Your [price point](#) should be high enough to cover all of your costs and appropriate margin. Calculating all of your costs goes well beyond material costs, and capturing a full set of those costs will keep you in the black. Keep in mind that each level of distribution will add to costs and come out of your margin based on your target sales price. Make sure the market can bear the target price of your product by doing market studies. Whether you will be using a distributor or selling your product directly or using another platform, make sure that you clearly define and understand all agreements for how you will sell your product. As you make efforts to understand and clarify your contract terms and set informed prices, you'll find success in selling your product.

All in all, manufacturing your product requires careful thought and planning. By choosing to do things right from the start, you'll avoid many of the problems that can arise in the manufacturing process. Working with an experienced product development firm like VPI to both design and manufacture your product will help you avoid many pitfalls. Stay tuned for our YouTube channel videos that give additional advice and help for your manufacturing journey.

