



Product Development: *5 Opportunities to Ensure a Fast Trip to Market*

Product development is not a commodity. It's a race — a race to see who can get to market first and get there with a winning product. But, all roads to market are not created equal. While some paths may promise cost-efficiency, and others high quality, both of these can lack an essential component of successful product development...getting there quickly. When speed becomes a top priority, there are several proactive tactics to prevent bumps along the way, including taking advantage of full-line suppliers, global resources, design consultation from the get-go, and more.

This White Paper discusses five strategies which you can employ that are essential to getting to market fast, and demonstrates how you can take this approach without making concessions along the way.

ARRK
PRODUCT DEVELOPMENT

1

Minimize Handoffs



Take Advantage of a One-Stop Shop

It can be tempting to just hand off every individual step of your product development process. Moving forward with the lowest bidder makes sense if short-term cost-efficiency is your only priority. But, this ignores an essential means to long-term profitability...time to market. Every time your project changes hands, you lose time and with it, whatever you think you're saving by divvying up the work. By minimizing your suppliers and working with a full-line product development company, you gain a host of benefits that all amount to speed.

While designers and engineers each have critical roles, their goals can differ greatly. But with a full-line product development provider, these groups can work together quickly toward the same goal from the start, avoiding missteps and attaining the optimum design.

Full-line providers also understand how each individual step of the process affects the others. If a vendor's sole expertise lies in creating prototypes, they can likely create an adequate design representation for you. But, if they don't understand how this

prototype is going to influence the tooling and the manufacturing processes, then how valuable is it?

Plus, with a single-source provider, when a design alteration occurs, the designers can immediately work with the engineers on the CAD changes, and you can get a head start on creating the tool while still fine-tuning your prototype. This ease of communication between departments allows not only for next-step preparation, but more importantly, for non-stop development.

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When tight timelines are a top priority – and in a race to market, they always are – choosing a supplier who brings a full-line approach to product development is a great way to leverage the benefits of concurrent design and communication to ensure success for your project!

2

Anticipate Design Problems



Eliminate Future Roadblocks

An initial design flaw can negatively affect each and every step down the line. Therefore, before you get too far down the road, you need to make sure your design makes sense in terms of speed, cost-efficiency and end game manufacturability. As you know, if you create a design that's aesthetically perfect, but has features that cause it to be inefficient in terms of manufacturing, you've missed your target.

For instance, maybe there's nothing inherently amiss with the actual design itself. But perhaps glass-filled nylon isn't the best material choice in terms of consumer comfort, and there's a workable alternative in ABS that provides the price point you're looking for. These benefits assist in offering the comfort your customers require, significant cost savings come production time, and a quicker path to market.

Or perhaps a small sizing change will allow parts to nest more efficiently. In terms of design, it makes no practical, aesthetic or utility difference, but suddenly tooling becomes 25% more cost-effective.

Or maybe your initial design approach calls for vacuum forming, but injection molding tools would make more sense in terms of accuracy, part count, and manufacturing costs.

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These are the kinds of questions that need to be asked from day one. If you don't take the time to catch these problems up front, once they catch up to you, starting at square one to correct them can be a costly waste of time. Resolve these problems before they start, and work with a company who will enhance your design in these terms and understands how each part of the design is going to affect development and manufacturing down the line.

3

Leverage Global Resources



The World: At Your Fingertips

There's a lot to be said for having access to the resources of a global company, especially when speed is your top priority. A global company means global assets and capabilities, a local presence in major markets, a larger staff, and more machines – all working towards your project 24/7.

A large staff doesn't just refer to more design experts, engineers and project managers keeping your project in check. It means more experienced eyes looking for possible setbacks and trying to determine new solutions that may not have been considered yet.

Global providers typically have access to the widest range of prototype and product development capabilities as well, and can open up design possibilities you may have not reviewed as options. A smaller company might merely advise you to take a path in which they have the capabilities and capacity to make it happen. Whereas, a global provider can advise you down the path that makes the most sense for your project.

Especially as of late, product development innovations

have made each stage in the process faster than ever before. By utilizing a provider with access to this new technology, you can take advantage of this time efficiency as well.

Global suppliers also tend to have a higher quality assurance record, and we've already discussed the time inefficiencies of catching a problem late in the game.

Global providers typically have access to the widest range [...] of capabilities, and can open up design possibilities you may have not yet considered.

Plus, global providers offer the flexibility to perform short-run solutions or full-run productions with a larger variety of injection molding and die-cast manufacturing capabilities that maximize design intricacy while providing you with the quickest path to market.

When it comes to ensuring a fast trip to market — bigger can be better — no matter what the size of your project.

4

See the Big Picture



Maintain a Bird's-Eye View Over Your Project

When your deadlines are set in stone, and getting to market quickly is a top priority, keeping strict supervision over your project is a must. With singular vision over your entire project from start to finish, you can be confident that your project specs will remain consistent, your processes will flow together, and that your timelines will be met.

This is specifically true because of all of the different communication issues that can negatively affect or hinder a project. The communication between designers, engineers, management and marketers is critical, because perceptions can vary, and there needs to be an objective perspective to filter all of this information into a single vision that makes the most sense in terms of speed, cost-efficiency and end game manufacturability. If people are simultaneously pulling the project in opposite directions, it only prolongs the process.

When you outsource, these companies really only understand the vision of their particular step. But when managing project timelines, in order to achieve

the project goal, it's important to keep everyone involved on the same page.

Handing over the reigns to a full-line product development firm is one solution to this problem, knowing that the entire vision will be understood by a single project manager throughout the entire process. This comprehensive vision over the project can assist in preventing communication errors that can cause major setbacks.

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The main goal is to keep everyone on the same track, on the same schedule, and working toward the same deadlines. Whether this person is you or a project manager hired out, this singular vision is essential to keeping your product development processes moving smoothly.

5

Impress With Your Prototype



Details Give the Green Light

An impressive prototype has an impact on many different levels. In order to display the passion you have for the future success of your project to the people who have the power to give it the green light, you need to pull out all the stops. Your prototype is the key to making your idea come to life. It puts the picture in place – it connects the dots – and it needs to have the aesthetic appeal so that people won't have to imagine.



Choose materials that give your prototype the best possible chance to shine.

Your prototype is the key to explaining your idea. [...] It needs to have the aesthetic appeal so that people won't have to imagine.

When you're looking to create a product that really shines, you want to utilize proven technology that gives it the best possible shot. Choose a supplier with a large array of prototyping technologies and capabilities in order to create as lifelike a representation of the finished product as possible. Make sure you choose a supplier that pays special attention to detail – that takes the time to hand-paint, finish and texture your prototype, and give it the best chance possible to clearly represent your idea.

The faster you get your prototype right, the faster you'll get the green light and get to market. Create a prototype that impresses and you're well on your way to project success!

Speed to market is essential, and as you can see, there are a lot of possible wrenches that can slow down your timeline. But, when you decide to make speed a priority, you will be better able to maneuver these problem points from the get-go. With these five steps as an initial guideline, you're already well on your way to ensuring a fast trip to market.

- 1 Minimize Handoffs
- 2 Anticipate Design Problems
- 3 Leverage Global Resources
- 4 See the Big Picture
- 5 Impress With Your Prototype

ARRK Product Development Group

Bring Your Business Goals Within Reach.

As the global leader in full-line product development, we offer over 50 years of successful project experience and the resources to ensure a rapid product development process. Our dedicated project managers will help speed your product to market through a single-source, concurrent design approach that leverages coordinated communication, keeps your design goals in mind and accomplishes both cost and time efficiencies.



-  Design Solutions
-  Rapid Prototyping
-  Precision Tooling
-  Quality Manufacturing