The Biggest Challenges for Electronic Hardware Startup

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Bringing a new electronic hardware product to market, you will definitely face numerous challenges. The best way to overcome them is to identify and further learn about them in order to develop a plan to succeed. In this article, we will discuss such major challenges and strategies to cope with them.

1. Product Prototype

Developing a prototype is the first barrier that arises on your path to product realization. While a Proof-of-Concept (POC) prototype is relatively simple in creation, a production-quality prototype is very similar to the final product that you will manufacture at scale. For this reason, the latter is much more difficult to create. To be more specific, a production-quality prototype often needs both PCB for electronics and a plastic enclosure. Creating these two parts requires different types of engineering. So, it is nearly impossible for one engineer to cover both aspects. In order to overcome this challenge, you will have to outsource at least some of your development to experienced engineers. For example, you can contact an experienced team of Axonim that will help you to create both PCB and a plastic enclosure for your prototype. Still, outsourcing of any work requires financial resources, so if you want to launch a startup, you should either fund the development costs yourself, raise money from peers, or find an early-stage professional investor.

2. Scaling to Mass Manufacturing

Another important challenge is scaling your product up to mass manufacturing. This challenge is one of the most difficult to overcome. Its difficulty stems from a lack of understanding of the complexity and cost associated with going from a prototype to mass manufacturing of a product in large volumes on the part of entrepreneurs. To overcome this challenge, you should design your product from the very beginning with manufacturing in mind.

3. Low Profit Margins

In the case when your product is manufactured in small batches, your profit margins will be low. However, you can overcome this challenge by benefitting from the so-called economy of scale. In other words, with the increase of your manufacturing volume, the production cost per unit will decrease, thus resulting in higher profit margins. Be careful and optimize your manufacturing process before getting a higher profit margin.

4. Marketing

Finally, in order to be sold, your product should be properly marketed. Nowadays online marketing is of the highest importance, however, it is a very slow process. To overcome the challenge of online marketing, you should start to market your product as soon as it is possible. The sooner you start, the more time your online community will have to grow. You can also use the idea of crowd development involving customers in your product at the early stages of production.

Naturally, this list of challenges in launching a startup is not exhaustive. There are also numerous other challenges for electronic hardware startups. However, in this article, only the biggest challenges are mentioned. Hopefully, you will overcome all the challenges on your way to product realization. If you need assistance, contact Axonim. We will gladly help you to launch your hardware startup.