Manufacturing challenges for hardware startups

The manufacturing industry is evolving with new manufacturing technology and materials. However, early stage hardware startups face challenges in keeping up with these changes in manufacturing and figuring out which manufacturing technologies and materials are required for a given application.

This article explains three key challenges hardware startups face and how cloud manufacturing as a service can help solve them.

Finding the right manufacturing partner

Looking for a manufacturing partner is like looking for a needle in a haystack. This involves searching for manufacturers, going through loads of quotes, explaining requirements, waiting for design feedback, back and forth communication, and so on. On top of this there is a trust issue if the manufacturer will deliver parts on time or as per expected quality.

Once startups bog down in manufacturing inefficiency, then the product deadline begins to slip and mount additional expenses.

The early days of any startup are constrained by money and resources. The greatest strength of any startup is customer interaction and hyper focus on product development.

MeruDynamics solves these manufacturing inefficiencies with software defined manufacturing. Our customers can go into manufacturing in minutes and not weeks. We save our customers time and resources so they can focus on product development.

Product Quality

There are loads of examples where early-stage hardware startups were in trouble because they worked with manufacturing partners who delayed manufacturing parts because of poor DFM feedback or substandard manufacturing quality. Further companies with bulk orders tend to get more attention from good manufacturers compared to low-volume orders by startups. This has resulted in many startups growing frustrated because their quality expectations are not being met.

The MeruDynamics manufacturing rating system and vetted manufacturing partner network solve quality problems. And low-volume orders can be bundled from multiple startups and sent to top manufacturers.

Manufacturing expertise

Hardware startups have high expertise in terms of product development and innovation, but when it comes down to manufacturing things change. Startups are short-handed in terms of manufacturing expertise as big companies have resources to attract skilled engineers.This means startups have to find solutions themselves or hire external consultants which might complicate things.

Taking advantage of established expertise through a cloud manufacturing service like MeruDynamics can alleviate these skill shortages.