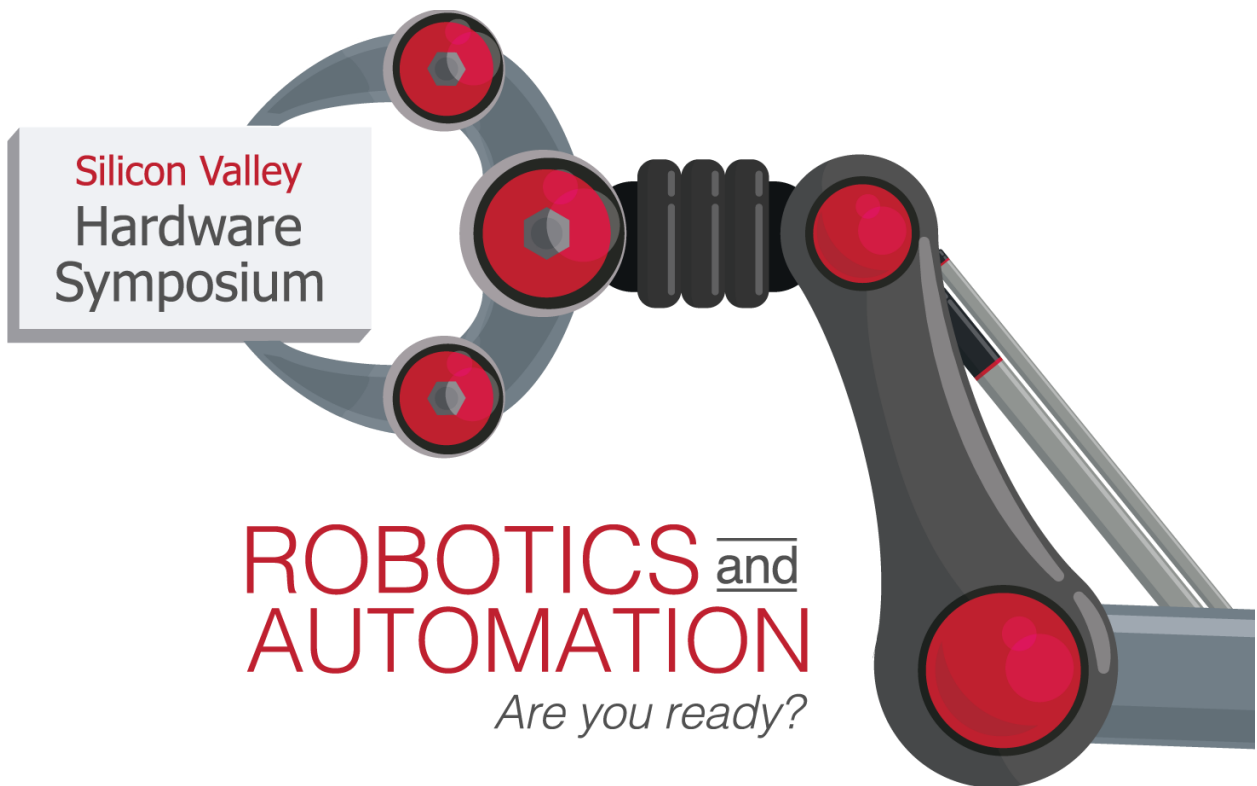


# Expert Tips from the 2018 Silicon Valley Hardware Symposium

Part 3



# Expert Tips from the 2018 Silicon Valley Hardware Symposium

## Part 3

[About Product Realization Group \(PRG\)](#)

[About the Silicon Valley Hardware Symposium](#)

### Supply Chain and Operations

[5 tips for Supply Chain & Ops](#)

[5 tips for Domestic EMS](#)

[5 tips for Asian Supply Chain](#)

### Business Process

[5 tips for Business Process](#)

# Silicon Valley Hardware Symposium -- Expert Tips

## About Product Realization Group (PRG)

Product Realization Group is an electronic hardware focused project management firm based in Silicon Valley. Our consortium of seasoned experts can help seamlessly transition your electronic hardware product from concept to scale. We pride ourselves on being your go-to source for prototype design and build, operations and manufacturing insights, and marketing consulting. Visit us at:

[www.ProductREALIZATIONGroup.com](http://www.ProductREALIZATIONGroup.com)

## About the Silicon Valley Hardware Symposium

The SV Hardware Symposium is an annual summit that brings together the best of Silicon Valley's professionals dedicated to the creation of hardware products. Professionals from the areas of product development, user experience, sourcing, engineering, testing, sourcing, manufacturing, and supply chain management come together to keep their fingers on the pulse of the industry, hear from keynote leaders and panelists, and preview breakthrough new products.

The "5 Tips" Series is a collection of accessible wisdom created from subject matter experts at the recent SV Hardware Symposium. The decades of knowledge, lessons learned, pain experienced, and success achieved from experts are being shared here.

# 5 tips for Supply Chain & Ops

Brought to you by: JSRosen Consulting

## **TIP #1: It's never too early for S&OPs**

Many companies wait to put in a supply/demand process until they are well into volume sales under the rationale that S&OPs is easy to manage in early stages. There are many benefits of S&OP beyond the core of establishing collaborative forecasts and build plans. Surprisingly many small companies are siloed between Sales, Operations and Finance. This S&OPs creates early collaboration and interaction which is critical for the more complex situations to come. It's an easy win.

## **TIP #2: How much process is too much process for young companies?**

The two biggest assets for most early stage companies are Cash and Engineering. Optimizing these assets is a critical area to focus on, putting in place scalable but rationale processes. S&OPs is a good place to start and use as a filter for what processes are necessary without binding a company's ability to be agile.

## **TIP #3: Define roles and responsibilities and communicate often**

Leaders think that people know what their role and job scope are but that is usually far from true. Additionally, often no one else knows what others do as well. This leads to faulty hand offs, dropped balls and lack of accountability. Roles and responsibilities don't imply fixed boundaries. Rather they are guidelines to help organizations be more efficient and effective. This is especially important when new people come onboard or existing people depart.

## **TIP #4: "Sell" all your suppliers on your company's opportunity**

Take your company's marketing/sales pitch and configure it to a vendor-facing presentation. Show where the company is focused, the technologies in which it is playing, its target markets, and a demand ramp curve. Then define what the opportunity is for the vendor you are meeting with at that moment. Keep this pitch on you at all times. Selling occurs in both directions between the OEM and the supplier, especially for young, emerging companies who may not have a ton of press.

## **TIP #5: Stay connected to your key component vendors, not just your contract manufacturer**

Companies tend to focus on building a supply chain partnership with their contract manufacturer. While doing that, they become less present and connected to their key component vendors. With contract manufacturers placing purchase orders, there becomes less and less interaction between the OEM and the component supply chain. This impedes direct efforts to reduce cost, time to market and lead time. Be regularly in front of your key component vendors. The payoff is significant!

# 5 tips for Domestic EMS

Brought to you by: Joe O'Neil, Green Circuits, (408) 526-1700 [www.greencircuits.com](http://www.greencircuits.com) info@greencircuits.com

## TIP #1: Find your fit

It is often lost in the noise that whether you are building your products internally or outsourcing the manufacturing, you need a solid documentation set. From there to find your outsource partner, just find the factory that fits your vision of what you would want if you had your own factory to support your products. Factory fit can include people, process, equipment but also "feel," that is--cleanliness, attention to detail, smiling people, flexibility, controls, and the like. If you're an emerging OEM short on resources and talent to develop your product, hire a contract manufacturer that does NPI to volume production launch. Don't confuse an NPI process to prototyping capability. Suppliers may not operate on the same ethical playing field. Work with people that know what they're doing.

## TIP #2: If you are looking for speed, don't forget to look in the mirror

Your assembly partners can place 25 components a second. Complex PCB fabrication can be completed in 3 days. We typically are shipping turnkey orders within 5 days of order receipt. There are dozens of examples every month where we are waiting 5+ days for purchase order processing from Customers. Manufacturing Service Agreements are one option to set out the rules of the road and allow both parties to move quickly without risk or confusion and take waste out of the process.

## TIP #3 : Materials don't just materialize

Identify your Product's **critical components** – If it's a critical component, it no doubt has one of the following challenges: cost, lead-time, single source. Having your contract manufacturer procure on your behalf is different than managing your suppliers. Your continuity of supply will only be as good as your good relationships.

## TIP #4: Manage your Supply base, don't let them Manage You.

Identify key partners, segment your supply base, establish metrics that involve your employees, and have a forum to meet with these partners quarterly. Suppliers want to perform and will perform much better with a clearly identified metrics plan.

## TIP #5: Think Ahead

Look beyond the tactical order process. Work to gain a better understanding of your customer needs so that you can provide your contract manufacturer accurate forecasting and improved product delivery. Excess and slow-moving inventory are costly and degrade trust in the relationship.

# 5 tips for Asian Supply Chain

Brought to you by: Bob Khor, Product Realization Group, Asian Operations [bkhor@prgnpi.com](mailto:bkhor@prgnpi.com)

## **TIP #1: The lowest price quote may NOT be the lowest cost**

Lowest price quote may be tempting, but there may be hidden costs involved. Check on reputation, size, other customer profiles and endorsements, delivery capabilities, and quality standards-- factors that are important to ensure that you have the best chance of getting the product that you have paid for and are not saddled with unexpected costs. Try to flush out all these hidden costs as much as you can.

## **TIP #2: Communication is key! Never assume. Always verify.**

In addition to the cultural and language barriers (even with English speaking partners), the lack of constant visual and body language cues, many things can easily be misinterpreted. It is important that you constantly communicate with your Asian partners, and use clear and simple messaging to get your requests across. And when there is potential for confusion, make sure that you over-communicate and clarify. And afterward, communicate again to verify that your partner understands the requests and takes the right action.

## **TIP #3: Build Trust in the Relationship**

Work with your Asian partners who you can trust. Let them know your vision. Follow through with your words, and always work with them to find win-win situations. Things get done more efficiently, and products can be had with better pricing and delivery dates if there is trust in your relationship with your Asian suppliers.

## **TIP #4: China + 1 Strategy**

The trade war is real and impacts all things China. However, it is not easy to exclude China from your supply chain strategy. Therefore, it is prudent that any supply chain strategy still include China, but have the flexibility to switch to another option at a moment's notice. Work with partners that give you such an option.

## **TIP #5: Patience Pays off**

We know doing HW is hard, and going to Asia makes it even more so. With time, you will be able to iron out all the kinks and reap the benefits of going to Asia. If you find the right partners and execute according to a well thought out plan, the payback period can be shortened immensely.

# 5 tips for Business Process

Brought to you by: ACS [adolphconsulting.com](http://adolphconsulting.com)

## TIP #1: Early Stage

Put in place minimal (yet scalable) NPI/Operations manual processes to effectively manage the key business functions.

## TIP #2: Early Stage

Establish the key set of business metrics to track business performance:

- product cost
- product quality
- customer satisfaction

## TIP #3 : Growth Stage

Implement integrated business systems solutions (PLM, ERP, CRM) slightly before they are required based on your product roll-out plans and level of data transactions.

## TIP #4: Growth Stage

Investigate leveraging manufacturing/distribution partners systems (“portals”) where appropriate to delay timing of a full scale ERP implementation.

## TIP #5: Growth Stage

Understand the trade-off involved in selecting “out of the box” SaaS based business systems versus Enterprise software. The goal is to minimize the total cost and time of implementation; pay attention to how the selected packages integrate with each other.