

# MEDTECH

Manufacturing Challenges in a Pandemic World

**Shalom Strickland**

**Sr Manufacturing Engineering Manager**

Interview by Darwin Shurig

President, Shurig Solutions Inc.



**INSIGHTS**  
2021

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### **DARWIN SHURIG**

PRESIDENT - SHURIG SOLUTIONS INC.

Darwin understands the key qualities that companies look for in candidates to grow market share, while enhancing their positive culture and team environment. He has a clinical background of over 20 years, including 15 years of sales experience within:

medical device, diagnostics, medical distribution, and sleep therapy; 8 years in sales management success; 3 years in operations; and extensive experience in negotiations and business development.

SSI has been growing for over 5 years with a focus on RA, Quality and Engineering within the Medical Device and Pharma industries. With over \$2.5 Million in revenue and a 91% offer acceptance rate, SSI is helping companies find unique talent that makes a difference, brings value and decreases the risk of a mis-hire.



### **SHALOM STRICKLAND**

Sr MANUFACTURING ENGINEERING MANAGER

Shalom Strickland is currently a Sr. Manufacturing Engineering Manager with Asensus Surgical. In this role, Shalom leads a team of engineers at the corporate headquarters in Raleigh, NC, and the office in Milan, Italy to transfer designs from R&D into Manufacturing.

Additionally, Shalom works to optimize the manufacturing process, focusing on methods that create continuous flow and reduce handoffs. Having a deep understanding of quality systems standards and requirements for manufacturing facilities, Shalom strives to exceed the customer's expectations by collaborating closely with product development teams and regulatory.

Shalom holds community responsibility close to her heart and personally volunteers with various local organizations. Shalom enjoys mentoring students at the high school and college level who are interested in professional careers in engineering and manufacturing. Professionally, Shalom is an active member of her company's Diversity, Equity, and Inclusion committee. Shalom hails from Grand Rapids, MI. She earned a Masters Degree in Manufacturing Management from Kettering University and has been in the medical device manufacturing field for more than 10 years. Shalom and her husband Terry Strickland have two children, Myana and Maxwell, and reside in Oviedo, FL. She enjoys traveling, listening to live music, and reading.

[Link to Full Webinar](#)

## Technology Transfer

**Darwin:** You're involved in an important technology transfer at your company, tell us about that.

**Shalom:** I've been with Asensus Surgical just under two years and we've made a lot of transformation and transition happen in that time, in that space. I came into the position to oversee a transfer of a manufacturing process from Europe over to the United States so, we moved a portion of our manufacturing process into the U.S. In that move we encountered a couple of things that are typical in moving both products and physical tools, nothing uncommon, that we could not get over. The interesting piece of being able to manage within FDA, also, within the European notified body was to make sure that we were compliant, with our documentation, validation, and EFTs (equipment, fixtures, and tools) that go along with those. (continued in video)

[Video Link](#)

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## Robotic Surgical System

**Darwin:** There's a lot of investment in artificial intelligence and the idea of that robotic piece and the lack of patient contact, obviously that ties into the positives from a pandemic standpoint of mitigating the risk of getting the virus.

**Shalom:** The product that we make is a solution for laparoscopic surgery. It enables the surgeon to have, within his operating realm, control of the device that is assisting with the surgery or performing the surgery.

[Video Link](#)

One of the things that we see in hospitals is overcrowding. When you are trying to create distance, this is one of the tools that has helped to change the market and change the way that we think about doing surgery, so it does encourage that distance between the surgeon and the patient but it's with technology that allows for clean room/operating room environment compliance, as well. (continued in video)

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## Pandemic Manufacturing challenges

**Darwin:** For the employees that are working on-site, how do you keep that environment safe? What are the two or three biggest challenges you've seen since the pandemic from a manufacturing perspective?

[Video Link](#)

**Shalom:** Number one is Supply Chain issues. Number two is getting PPE set up. (continued in video)

Technology

# Creating Efficiencies in the Hiring Process

**Darwin:** What have the challenges been in terms of your suppliers, managing the risk there from an audit standpoint, is it all virtual? Are you doing a combination of that?

**Shalom:** Some of our suppliers are international anyways, so we had already established a way to communicate with them virtually. We do have some local vendors that were coming on site to exchange and communicate with us, have weekly, monthly meetings. We were pretty much set up prior to the pandemic to be able to communicate, meet and to exchange information with vendors virtually prior to the pandemic. I think as a part of the COVID compliance and some of the setup, that companies are using this virtual experience and tool to do a lot of their daily operations. Some companies may have a daily walk-through manufacturing and how you can use a laptop or an iPad to do your walkthroughs for folks who aren't in the facility for the day. I think of even the things that you're doing at Shurig Solutions to foster virtual experiences that are beneficial to both your clients and your customers, some of your suppliers as well.

**Darwin:** Thank you; we are trying to create a better experience for the candidate and the hiring manager through our Position Brief process. (continued in video)

[Video Link](#)

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## Telehealth and Remote

**Darwin:** So now, it's like what's that paradigm shift going to look like? We talked about how much the growth in terms of how many people are working remotely, the most recent study I saw said 56%. So, when you look at telehealth for instance and in terms of monitoring, wearables, robotics, artificial intelligence, which are the five or six key categories in terms of where telehealth is going. In 2018, telehealth was about \$34-35 billion dollars globally. It is growing at about 24-25% continuous annual growth rate and is projected to be about \$185 billion dollars by 2026.

**Shalom:** Yeah, that's huge. When you talk about the healthcare landscape itself and you mentioned wearables, but then there's data with everything. Some of the opportunities for these roles in some of the companies cannot be done remotely. When you're dealing with analyzing data or providing feedback on submissions, positions from a regulatory affairs standpoint can be remote.

**Darwin:** Yes, so from a telehealth standpoint, McKinsey did a survey in January I believe, but before the pandemic only 11% of consumers in the United States were involved in any aspect of telehealth and that number has grown to 46% since the pandemic hit. And from that survey, over 70% of those surveyed said after we get out of this pandemic, they want to continue to use some type of telehealth, not driving to the doctor's office for some of these simpler aspects of care.

[Video Link](#)

Challenges

## Disruption Leading to Innovation

**Darwin:** In terms of startups, investment, and joint venture capital for telehealth, in 2019, \$1.8 billion dollars was invested in that area. In the first nine months of 2020, \$3.2 billion dollars was invested in startups. Now, across all the areas, telehealth, virtual health, wearables, monitoring, robotic, surgical, there were \$2.1 billion dollars of money invested into startups. A total of 121 deals were made in the third quarter this last year.

**Shalom:** Some people have taken advantage of this down time during the pandemic to foster these new ideas. So, all these startups are starting to come to fruition because people are really digging in and taking the time to invest, not only in themselves, but in the community. In a pivot situation you want to look for those opportunities that are going to meet a need, it's going to be a product or service that will meet a need, but you're also going to look for something that's going to be helpful for the populations or communities in need. Maybe that's speaking to some of the increase that you're talking about here.

**Darwin:** At RAPS Convergence in September, they did a great job, it's the first virtual one they've ever had. One of the three biggest categories discussed at convergence was innovation from disruption.

[Video Link](#)

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## Repurposing Talent

**Shalom:** Are you seeing positions in the marketplace open because someone was repurposed or repositioned to a new role?

**Darwin:** I haven't seen a lot of scenarios where we're working on something because it got repositioned. From a repositioning standpoint I've seen a lot of large companies with talent acquisition departments, shift that staff to work on more internal HR supporting business processes in the business unit, because they're not recruiting or trying to find talent. Also training and sales staff that's been repurposed to support operations, support managing tracing. Because they're not getting to see people, especially, if they're dealing with hospitals, surgeons. Companies are trying to figure out how to utilize resources and where people can bring value so they're not being laid off or furloughed.

**Shalom:** I think from Asensus Surgical point of view we saw early on some transition in resources, but we have recently been able to begin the hiring process back again. I think it's just ebbs and flows with where the market is in particular with the roles that we have. (continued in the video)

[Video Link](#)

Telehealth

# Flex Work Post Pandemic

**Darwin:** There was a CNBC article and survey done in November that said 75% of the people surveyed are expecting, post pandemic, to have one to two remote days, and continue to have autonomy or some sort of flex schedule after the pandemic. (continued in video)

[Video Link](#)

**Shalom:** They're going to have a lot of problems and they're going to risk losing some good talent. They're going to risk being able to meet project deadlines because they weren't able to hire in time, because they're not open to this form of working and that will be unfortunate. (continued in video)

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## Opportunities for Autonomy and Efficiency

**Darwin:** Are people going to continue to have opportunities to work remote? Is the company more open to remote talent because like you just mentioned software design, firmware, microcontrollers, all ties in to what Asensus Surgical does and a lot of that talent you know can work remotely.

[Video Link](#)

**Shalom:** Yeah, it can and does. I think with the leadership in our team is pretty open to it. We have been very successful this past year again but prior to the pandemic, we have a different set up, so prior to the pandemic we really did work internationally across the globe as a virtual company prior to the pandemic. In fact, half of my team is in another country. (continued in video)

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## Remote Employment Expectations

**Darwin:** The survey found that over two-thirds of workers, similar to what I mentioned about that CNBC article from October, want to continue to work at least two to three days, the Deutsche survey said at least two to three days after the pandemic they expect to work from home. Now the interesting thing, they also talked about in this study, that remote is changing and we talked about earlier about how 54% workforce in the United States. (continued in video)

[Video Link](#)

**Shalom:** I agree, and I hope that the companies are taking the data and collecting the data now to help them be able to make those decisions in the years end. Because I think towards the end of this year, we'll start to maybe see some things open up after several months of vaccinations, maybe towards the first quarter of 2022, but that would be interesting to see how they are going to use the data that they've collected from a productivity. Companies measure productivity different ways but it's also a satisfaction survey right so how is the employee satisfied and you can also see the company's results as well right for their gains and losses.

Talent

# PDCA and Proactivity

**Darwin:** PDCA, I know that's something that you're a subject matter expert in. When you and I first talked about it I was like wait a minute that's like kind of lean, Kaizen right, and you don't hear it talked about a lot at this point. So, I'd love for you to talk a little bit about your experience there and how you utilize that in your position now.

**Shalom:** I really wanted to touch on PDCA, and it's Planned Do Check Act. It's an older tool but, it's an oldie but goodie. It's also known as Plan Do Study Act and it's a way to involve your teams to continuously improve. So, it was supported by Deming, it is something that companies, maybe prior to the explosion of the lean scene, use as a problem-solving method and methodology along with the typical Five Why's and DMAIC and in those types of approaches. (continued in video)

[Video Link](#)

**Darwin:** Absolutely, one of the things I like about the types of positions we get to work on and really your background it all leads to do it well, proactivity. Everything about what you just talked about is proactivity based. (continued in video)

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## Pandemic Perspective: Positivity, Proactivity & Adjusting

**Darwin:** I think you're a very proactive, positive, person and I'd love to get your thoughts on it.

**Shalom:** It was a new way to do things in our household. I'm in a commuting role right now and the commuting stopped, and I was able to work from home which is in a different state than where my corporate headquarters is and that has afforded us some opportunities to do some things as a family.

I think that the pandemic has surprised me in some ways, I am impressed with these companies who are just doing the best at changing their product portfolio. (continued in video)

**Darwin:** I think that's great and as you talked about some of those specific things, there was an automotive plant that was repurposed in Kokomo, Indiana, to make ventilators and they did an incredible job at that. So, a lot of collaboration. (continued in video)

[Video Link](#)

**Shalom:** I think we also have a lot to learn and hopefully we're like we mentioned briefly we're using the data to teach us.