



Focus Group 1

10 AM, September 14 — Zoom

How has COVID-19 and the Delta variant affected your year? We were surprised last year that people were impacted differently.

- For us, last year was trying. Our manufacturing facility shut down for 15 weeks because of COVID-19. We walked away not knowing if we were coming back or not. At first, we were down for seven weeks, then we came back for seven weeks, and then we shut down again for eight weeks. We had to restructure on a pretty large scale, which included closing one of our sites down in Arkansas. We consolidated our business into one site here, which caused another eight weeks of shutdown to bring the manufacturing equipment up here for that product line.

We've been running for a full year, but not without challenges. We're about 57% vaccinated for the site, and we still have a mask requirement for those who are unvaccinated. We might be going back into a mask mandate for even those who are vaccinated because of what has been happening with the new surge that we're battling today.

The restructuring that you did: Was COVID a tipping point on that? Or was it an accumulation of other factors?

- COVID definitely played a big role. The [COMPANY] business, if you're not aware, was acquired back in 2018, part of [COMPANY], and so it was a complete restructure across the entire [COMPANY]. And a lot of it was knowing what [COMPANY] had gone through back in the 2008-2009 time-

frame. We were preparing ourselves for a very dark period from a sales perspective. It turned out to be the opposite, but it still was a main driver just kind of based on the unknowns of what was happening with COVID. That kind of drove the large restructure across the entire group.

- From our industry, we never shut down. We're a small enough employer — we have about 16 employees in our shop. We did have employees test positive, but we were able to isolate and quarantine and it didn't affect the rest of our workforce. The remodeling and new construction home market is primarily what we work in, and it's been extremely strong. As soon as everybody got locked down, they started painting their bathrooms, and then they started ripping them out, and then they started remodeling their kitchens. We've had a very good year. Our sales are up 13% this year versus last year, and last year was about the same as 2019. We've compiled some strong quarters and years. We are thankful that, so far, we haven't had large setbacks with COVID. We've had minimal impacts with supply chain stuff, but for the most part, we have been able to just switch vendors and keep projects moving. Overall, a good year.
- We sell heat exchanges to the industrial market, and we also stayed in business. But our experience was a little different. We have a large facility with a few people, so we were able to social distance without an issue. Our problem was none of our customers were letting people in their facilities, so all the products were being put on hold. Because our engineered product requires someone to go out to the end user and in-

spect, measure, and install it, they basically shut down all that work.

We were rolling out layoffs through the spring and early summer — 50% on one week, 50% off. Then after the summer, we started picking up again. We have been severely impacted by material shortages in the stainless and aluminum industries. I know we've turned away at least 15% of our annual business because we couldn't get material. It's been a good year, but it could have been a lot better if we could have found material. It doesn't show any signs of getting better, so all we're doing is ordering everything we can. Material that used to take six to seven weeks to arrive is now taking 20 to 30 weeks, and that's really affecting us.

- I'm located up in Alexandria. I'm the president and CEO of [COMPANY]. We have not been impacted. We have about 175 people, but we didn't have any shutdowns. From a company performance standpoint, we are 30-40% up over 2020. The year 2020 was a really good year for us because a lot of people did landscape projects given that they were at home. The biggest problem we have is labor shortage — trying to find people to work. Steel prices have gone through the roof from a year and a half ago, and that's impacted our business. But we've been able to pass on the increase in our material prices to our customers. We've also had material shortages, but early in the pandemic we doubled down on inventory to minimize those shortages. We've added about \$3 million dollars' worth of inventory, which is almost double our regular inventory, but that has helped us weather the storm. Overall, it's been very positive for us.
- COVID didn't have an impact on our worksite — we had one person out with COVID over the course of a year and a half. But now with the Delta variant, we have had three or four people out in just the last couple of weeks. That's gotten to be a little more contagious. Our growth hasn't really changed — we've been growing about double digits probably every year for 10 years. We've actually had more demand put on us. But we have such a labor shortage here and could use 15 to 20 more employees. We bought some equipment to use, but we have nobody to run it. That's our biggest problem up here. Otherwise, COVID hasn't really affected us a whole lot, other than the last couple of weeks.
- I'm [PERSON], president of [COMPANY]. We are a plastic extruder. When COVID kicked off, we did all the things that most of you have spoken about to try and protect each other. At one busy point, we had 60% of our employee base either with COVID or testing for it, quarantining for it, or some level in between. As the year progressed, we ended up from the prior year, which was up significantly, but the last half of the year was about a 60% growth in that period of time. The 2021 year started out even higher and has been about a 45% to 55% growth over last year. The problem this year is our

supply chain in the resin industry was devastated when the freezing hit the coast down in the Gulf last year. Then when they started digging their way out of that they got hit with the hurricanes. We, like a couple of you have mentioned, really pushed our inventory. We almost tripled our inventory just to have buffers. Many of our customers came back and said, "We will pay to have you hold inventory if it means we're going to get product."

- That helped on the cashflow side, but it also hurt us because we're carrying a lot of inventory. Fortunately, our building has the space for it. All in all, we've been very fortunate. Labor wise, we're okay. We have a couple of openings, but we've been very fortunate with the people who have been here. Somebody mentioned their vaccination rate, we're probably only at about 35%.
- We've kept going throughout the whole pandemic. Like others mentioned, we increased our inventory, especially the items that we knew would be hard to get anyway. As far as labor during the pandemic, like everybody else we're having issues getting people. We've done a couple of things to try and improve that, such as putting in some automation. We also went through an exercise to verify how competitive our pay was and we improved that.

Four or five years ago we were talking in these focus groups about people doing five-year forecasts. I hear five-week forecasts can be difficult because of what you've got going on in terms of employee cost and inventory. How are you coping with forecasting for your company?

- We've asked that our customers give us longer forecasts, if possible. We've also done some work with our business system so that we're able to see further out. But I have noticed that people are suddenly pushing out their orders.
- Several of our larger customers have been pretty good about forecasting. They basically layered in orders so that they can take the supply themselves on what they're projecting. The ones that are more intermittent, or spot buys, are where our problems exist. They think that we're going to be able to do what we did in the past — if we run once a year for them — and we can't.
- During 2020 and so far this year, we have had no shutdowns. We have had employee absences throughout though. Last fall we saw a peak, and then August and September we have been seeing increasing absenteeism. We have lots of safety measures in place, just like others here have mentioned. But 2020 ended up being flat for us compared to 2019. And while we are seeing major growth here in 2021, that's tempered by hiring issues, a lack of employees, and then supply chain and logistics issues.

- We are facing a lot of pricing pressure and massive shortages from our second and third tier suppliers. We're doing a lot of work with those folks to try to help them solve their problems so that they can supply us. We're not expecting the pricing and supply chain issues to resolve anytime soon. We're responding with increased inventories and extended forecasts — things of that nature. But it's been a wild ride with the supply chain. That's been our biggest issue. And then we've been held back by workforce availability.

I'd like to talk about the availability of employees with various skills. It's something that stresses out every manufacturer. And then add on the fact that employees are starting to change jobs every six months or so. Are you struggling to attract qualified employees and keep them?

- No. We've retained all our employees during the last two years. There are two different categories that we see. Some who really don't want to work, and they just come in and work for a month or so. Then, there are others who really want to work, and they stay on for longer than six months on the direct labor floor — the welders, assemblers, painters, that kind of workforce. With our other employees — sales and marketing, and finance and accounting — we haven't had any issues with people resigning.
- A lot of questions came from our employees who aren't vaccinated, and even some who are. They asked if our company was going to mandate the vaccine, and I said, "No, not at this point." If we did, they would leave, so why push it at this point? That was one of the things that we picked up on from our workforce early on.
- We did pick up a couple of employees because of a vaccine mandate. They left their previous employer because they did not want to get the shot, and it was mandatory to work there, so they left their jobs — even though they had been there for quite a few years — and came to work for our company.
- We've had people say that if we mandate a vaccine they'll go find someplace else to work, so we have not mandated it. I'm not sure what's going to happen with this new OSHA regulation, and if we will all have to abide by their mandates or not, but we're waiting and seeing what happens from a legal standpoint.
- We've lost one or two employees, and it was mostly just because of the opportunities that are available. Whatever they need to do to better themselves we have no problem with. I don't think I have people who want to change jobs just to change though.

Is the shortage of workers a way of life now that manufacturers are going to have to plan for?

- Yeah. If anyone wants to grow their business, they need to have the people to do so. The challenges that we face from direct labor, and the competition, are causing a wage war amongst all the different manufacturers. People can leave here and go down the block or a couple miles away and get a \$1.00 more an hour, and they're going to do it just for that buck. The concern for me is that we're increasing our wages to be competitive so that could become the new norm. It's going to be a challenge when it comes to staying competitive with labor costs.

Can you afford to stay competitive at this point?

- It's getting tougher and tougher every day, for sure. We're looking for different ways to try and work around the affordability piece because it's a challenge for us to continue to put more and more into our direct labor budgets.
- I'm a small manufacturer, so I need to attract people. I need to pay them competitively. I also need to make sure I keep the workers who have been with me for 15, 20 years. Those are the guys who get job offers quite often. They'll get job recruiting phone calls and will just flat out say, "I'm not even interested in the phone call." It's really about that company culture and building that group of core people and keeping that intact — using those employees to bring in new employees. The employees we want are the ones who want to work in this industry and be successful. We don't want somebody who just wants to punch a clock. That's not our type of manufacturer.

Do employees embrace automation as an opportunity? Is it a cool thing culturally within the company to talk about automation?

- I think for some it is. The younger generation thinks it's cool. There have been a few employees who were kind of scared about it, thinking it meant they were getting replaced. But I think we've done a good job explaining that they are working harder right now because we're short on employees, and I think they are starting to understand that automation is just to help.
- We're focusing on opportunities that can go toward automation. We implemented a job description/job skillset tied to automation that shows how an employee can move from one level to a level where automation becomes a higher paying opportunity. With the younger workers, that's a big thing for them. They see that as a large opportunity. We had a couple people who were thinking about going back to college, but since we implemented this structure, they're not going back now. They're sticking with us. They can look at the job description, the wage it's tied to, and the related skills and see the opportunity for growth. We're hoping that we can get automation put in place where there is an operator working off of two, three lines versus one operator per line.

- We put two or three automated robotic welding stations in over the course of the last several years, and we were met with some resistance from the workforce. They thought we were eliminating their jobs. The younger guys have more of an interest in automation. If you can show them it includes a career path where they can make more money, that's something they're interested in. But it's a mixed bag. Some are scared to death of automation because they fear they're going to lose their jobs, and others see it as an opportunity.

One of the surprise topics in last year's survey was the issue of cybersecurity. Is it a growing concern for your companies?

- We outsource our IT department, so maybe I'm taking a T-Rex approach to it, but they're supposedly watching for that and putting in the security patches over our system. It's not something that keeps me awake at night.
- We had an issue years ago, so I think we learned way back then. We have a very aggressive IT department. We do continuous training for anyone who is using a computer on a regular basis. We get little tests sent to us every couple of weeks. And our IT department continues to get better. I have faith that will take care of it.
- We have an outsourced IT department as well. We get phishing emails, but we also have penetration tests and that kind of thing to make sure our employees are educated so they don't inadvertently click on the wrong thing. We haven't had any real issues.
- When your inbox has 20, 30, 40 emails that come in every hour or two, it's very easy to just go click, click, click and hit something you shouldn't if you don't take the time to look at it. Phishing attempts can be very easy to spot. We have a very strong approach when it comes to cybersecurity, but we're seeing increasing attempts at simple money fraud. We received a generic invoice for \$2,000 of shop supplies. If somebody didn't look close enough it could just get passed on through and get paid.
- We had another person, a vendor, who was hacked somehow and sent a request into our AP department to change their wire instructions for payment. And it was changed. They were able to get \$70,000 to \$80,000 from that situation. I think there are a lot more attempts to scam people for money. I think more and more people have too much time on their hands, and more of these attacks are happening because people are at home all the time.
- We've seen the same thing, which has made us change our internal process. We've definitely tightened up all of our processes related to approved purchase orders. They've got to approve the purchase order in the quote, and the receiver, and

everything else before any money goes out the door because it is just too easy to get flooded with random invoices.

Given that this has truly been a weird economic time, what gives you the most heartburn about your ability to grow profitably in the coming year? Is it people? Is it the pandemic? Is it the government's response to the pandemic? Is it government, in general?

- People. 100%. People.

Retaining or recruiting?

- Both. It's the direct labor workforce. It's retaining the ones we have, and it's getting the ones that we want. People right now are not looking for careers, they're looking for jobs. They're looking for a paycheck for a couple months or whatever it may be. We need people who are going to be able to invest their time so that we can invest our time to train them and retain them. We could double our volumes if we had the people to build them.

We always used to hear about the incredible cost of replacing an employee. If you have people coming in for two months and then leaving that cost really sticks with you, doesn't it?

- Yeah. It's huge. We work with a third party, and those agency fees they don't go away. When you're placing 10 people a week and by week two, half of them are already gone, you have to keep that wheel turning. We've brought in over 300 people since August of last year, and we brought them in just trying to fill 25 spots. We're still trying to fill those spots because of that constant turmoil when it comes to people and their ability or desire to work in a manufacturing environment right now.
- Right now, we're growing even though we don't have enough employees. But it's hard to say. To respond to your question earlier, I think there are two opportunities for us to grow. One would be employees; another one would be government regulation.
- People is our biggest problem, as well, and their availability. We used to use a temp agency. But during the pandemic, we left the temp agency because they weren't able to provide us people like we needed. We've had better luck with retaining the employees we hired ourselves versus those with the temp. I think employees hired directly have a different level of commitment to an employer than to the temp agency. We still have plenty of people who come and want to work for a month or two, but we instituted an attendance policy, and we don't put up with people who don't show up for work. We've lost some pretty good people because they can't get to work every day, but it's also helped keep the lion share of the other people coming into work.

- We have a people issue too. We are looking at reaching people earlier in their career, partnering with career pathways at high schools, partnering with adult education centers, helping people who are under employed, providing others with basic skill training to see if manufacturing might be a good fit for them. But people by far are our biggest issue. I'd say a strong number two is supply chain, both domestic and globally, and the ripple effects there. We could be more efficient with the people we have. We could probably get another 10% to 20% output if our supply chain issues were improved. The two issues kind of go hand in hand a little bit.

How much energy do you put into retention? I'm reading more and more that you keep your people by improving the workplace culture. How important is that to you?

- For us, [COMPANY], that's a core philosophy. We have values that we emphasize. The culture piece, the inclusive environment, we've focused a lot on the last couple of years. We spend a lot of time on employee surveys, engagement, and feedback sessions. We do all of that on a regular basis not just with our top level but intermediate supervisors as well. We kind of have a tiered approach for that given the size of our organization. There's a lot of time and energy spent on engagement and retention. I think everybody is looking to improve culture, and offer more, so it's a little bit of an arms race there.



Focus Group 2

3 PM, September 14 — Zoom

There are a lot of challenges going on right now, and a lot of opportunities. What is the biggest challenge that you expect will constrain your ability to grow profitably in the next year?

- Outside of supply channel issues, labor supply is probably the most critical thing that's constraining our ability to grow profitably right now. For the most part, we are just looking for entry level people so that we can expand and train staff.
- By far, our major problem is labor and people — both entry level and more experienced workers. Number two is parts supply. Our local economy is pretty good, but our people count is too low right now.
- For us, our biggest problem is finding entry-level people. But we also have an issue of more experienced people retiring. So, we're faced with a sort of double whammy. We've raised our starting rates up considerably, and we still have a hard time getting people to come in for an entry-level machining job with good benefits.

There is polling out there that found 60% of American workers are primed to quit and change jobs and that it is pandemic related. Is that part of your experience as a manufacturer in Minnesota or is it elsewhere?

- I would say COVID made people really think about what they do for a living, how they do it, and whether they were satisfied doing it. I'm in an executive group, and I'm seeing a ton of my clients have similar discussions with their senior

level team members by saying, "I don't really want to do this anymore."

Is the worker shortage here to stay? Is it something that manufacturers in Minnesota are going to have to cope with forever?

- I think it's going to be a long-term trend. I don't think people are going to be very eager to jump back to offshoring their supply chains, so I think it's going to be a struggle for a while, absolutely. At least that's what we're predicting.

Where does automation fit in?

- Everywhere and anywhere that we can put a machine we're trying to. It's the first look on every process for us right now.
- We can buy CNC equipment like machine tools, but we're not really set up for robotics. So, we buy more and more CNC machines over manual machines and try to have one person running multiple machines as much as we can. I wouldn't buy another machine that didn't have some sort of automation in it, and I'm constantly looking for new automation. It's just hard with the particular type of work that we do. It doesn't lend itself to robotics.
- We have several automated processes that use a lot of material handling equipment and reduce our need for people. We put most of our emphasis on CNC or computer aid, not on robotics.

I asked about whether the worker shortage would be with us forever. What about the pandemic? Are we going to look back in a year and say, “Well, I’m glad that’s over,” or is this something that’s going to be engrained in our cultures and how we run our companies?

- Well, I certainly hope not, but I have a feeling that there are people out there who like this power to pull strings and make people hop. Right now, we’re running into supply chain issues. I think it’s partly because of the tinkering that has been done with manufacturing and shutting down certain segments of the economy.

What’s your experience with mask wearing and vaccine mandates? Are they becoming HR issues?

- We had a little issue with that within our company. We have about 200 employees, and most everyone ended up getting the vaccine or wearing a mask. We’ve had a few people who were just dead set against it. We were about to do something about it, and then the governor relaxed the restrictions on the masks mandate, so that helped a little bit. I believe it was last week the president talked about companies with a hundred or more employees either getting vaccinated or getting tested. I don’t know. I think we’re going to see issues with that. So, it remains to be seen.
- We have had very little pushback. When we developed our plan, people were willing to follow it. There are considerable rumblings out there about the vaccine, and HR is trying to determine just how many people are going to be impacted.
- We have a number of folks who one, will retire, or two, will quit if they have to get the vaccine.
- There’s a lot of misinformation that I’m hearing back from people, around COVID and vaccinations, which is really hard to overcome. We put out perks — when somebody gets the vaccination, we give them a pretty decent amount of cash because the impact to our business and the shutdown was massive. I think it’s completely irresponsible to require businesses to shut down for 10 to 14 days. How can we survive with these recurring shutdowns? We won’t survive if we keep falling through that same path or if our vendors do and they can’t supply us with parts. It just won’t work. The economy is going to crumble if that continues.

How optimistic are you about 12 months from today? Are you going to be more profitable? Are you going to be less profitable, or can you just plain not forecast?

- I have no clue on my end.
- I’m hoping that the federal unemployment benefits ending

will help us be able to hire people. Right now, if we could hire two or three more people, I’d be very optimistic.

Do you think there are people out there who are enjoying their government benefits in lieu of working?

- I think it is true that if you cut the unemployment benefits there are going to be more people looking for jobs.

How do you feel about the economy in general and how it will affect your ability to grow profitably?

- I think the economy is very strong, which is good. My concern, I think, is where does the road end? How long does this pull last? Where do we start running to? Where do parts and people fall short?
- Sixty percent of what we do has to do with new residential construction, and the balance has to do with commercial construction. With the inflation of building materials that we’ve seen, inflation is a big concern.

Have you lost business because of the price increases or are people just considering it the price of doing business?

- I wouldn’t say that we’ve lost any business. We’re passing it on, they’re passing it on. At what point can the consumer no longer afford the home? At what point does the builder say, “I’m going to stop”? And then, unbeknownst to most folks, a lot of building materials were being imported from Chile, Brazil, China, and from other markets in Asia. With the competition for containers, that price has been driven up, and that has put more demand on domestic sources.

Does it make you less enthusiastic about any capital expenditures?

- I just bought a new machine. I paid 10% more for the machine than I did on the previous machine, but if I didn’t buy this one that was here it would come over from Taiwan on a container. And apparently containers are very hard to get now.
- Yes. I’m carrying much more inventory than I used to because of price. If we can make a product that one of our competitors can’t make because they can’t get the material, then I think that’s a competitive advantage.

Has anybody been caught short on fulfilling orders because of supply chain issues?

- Absolutely, every day. We’ve had to cut orders out of the books. We lose the time and the capacity for it, and we can’t get it back because we don’t have excess personnel. We try to do some overtime, but we just don’t have the people to support it if and when we do get the parts. So, it’s a struggle.

- We spent half a million dollars last fall, early winter on some new equipment that hasn't shown up yet. We were supposed to have it in March and now they're forecasting December, hopefully. We made capacity plans for that equipment. Because it's not here and running yet, that is hurting some of our output.
- We've been looking at delivery dates quite a lot and pushing them out. I don't know, 12 to 18 months sounds like numbers that we've been talking about.
- In January, we were two to four weeks depending on the type of product and the volume of the order. We went from that to three to eight weeks. Now we're back down to two to four weeks. Part of it is demand. Another part of it is we were able to get more labor in Tennessee and more labor here than we had been getting. So that enabled us to operate more work sooner.
- On our OEM supply side early this year, we were in that three to four week range. That got stretched out closer to six to eight weeks. We've been able to pull that back a little bit, to four to six weeks or four to seven weeks. What's helped that is we're forecasting a lot more with our materials and buying a lot more.

Is cybersecurity on your radar right now? Is it a concern for you, for the way you run your operation, or is it someone else's problem?

- It's certainly a concern. We have a company that's supposed to be handling all that, and we pay them a fair amount of money. So far, we haven't had any problems, but it's certainly something that we're worried about. I'm not sure what more we would do than we're currently doing. We have an IT company that we contract with who is supposed to be handling all of that. My HR guy came to me and asked, "What's this? You sent something into the state saying that you're unemployed, that you don't have a job anymore." I got a laugh out of it, but I did end up calling up the state and asking, "What is going on?" We nipped that in the bud. That was our most worrisome one that I think I've had. But that's not really cybersecurity, as it's inside our own company.
- If people aren't worried about cybersecurity, they should be. In the first part of the year, Enterprise Minnesota sent out a notice saying, "Hey, this has happened to a lot of manufacturers in central Minnesota." So, I tasked our IT group with verifying that all our systems were in place and that we were protected. And then promptly, two weeks later, we had a ransomware, cyber-attack. It's easy to think that you're prepared, but it's amazing how much training we probably should have been doing. Training that we are doing now.

- We have ransomware insurance, and we have all the things we can on the servers, but the way they get into your system is through human error. At least that's what our IT people were telling us. It's exactly what [NAME] described. You have an email, a phishing email, and you have someone on your team who clicks on it and opens whatever the attachment is, and now they have your system. Unbeknownst to our employees right now, we have our IT people sending out fakes. We do training, and then after the training we have our IT people send out fakes to people to see who will click on them and who is not listening to the training. And then we can retrain those people.

Every year that we've done these focus groups, the cost of employee health care is the biggest source of heartburn for manufacturers and their ability to run their companies. Is that still a source of heartburn for you or has it just become an uncomfortable and unavoidable cost of doing business?

- We take it as a cost of business. The bigger thing right now is the wage war that seems to be happening. Health care is kind of what it is right now. But wages are up substantially — both with what people are asking for and what they are expecting.
- Health care is a cost of doing business. Because of the complexion of our workforce, it's an important benefit. We spend a lot of time reminding people how expensive it is, and we encourage them to talk to their relatives and others and find out just what a great plan they have. So, it's an unavoidable cost.
- For younger people especially, it is statistically less of a benefit for them — at least until they have children on the plan. It's frustrating because you're paying in all this money and a lot of your employees aren't necessarily seeing it as that big of a benefit until they have some sort of incident when they need to use it. It doesn't do us any good with retaining a younger employee. It does do a very good job, however, with the older employees.



Focus Group 3

1 PM, September 15 — Zoom

How has mask wearing and mandates become part of your HR apparatus at the office? Have you had an employee say if you make me get a shot, I'm going to work across the street?

- I think there are a lot of people who feel that way. And they are vocalizing it.
- For us, the masks and vaccination issues have become pretty divisive. Very few of our employees fall on the side of wearing masks. I would say a few others agree the vaccinations are necessary, but a lot of our employees don't believe they are necessary. If that mandate is carried out, I think it would be a big detriment on our employee base. We'd probably lose quite a few employees.
- I think the general feeling in our region is that we're far enough north so people aren't too concerned with the vaccination mandate. It hasn't really been much of an issue. At worst, it has been a hassle just dealing with putting up the signs and having all the PPE and all that other stuff in place. But beyond that, I haven't had any real issues with our employees.
- We're a small company. We're all vaccinated. We're not really concerned about masks. For us, it really has not been an issue. All of us follow the science so we're not objectors in any way, shape or form. We're not wearing masks, but we're not really concerned about it because everybody's vaccinated.
- I don't know how many employees have been vaccinated. We're not keeping track, but I suspect a pretty good number

aren't vaccinated. We've had a few people who have been in and out with COVID over the past year and a half, but everybody recovered. When things were mandated by the governor, we required masks, but we required everyone to keep their distance from each other during the greater part of the time. I don't expect that we're going to be forced to do anything, but it probably would be a problem if we were forced to have employees vaccinated. I think with masks we might be able to work around that. But it hasn't been a problem. We've been continuing business as usual.

- We have about 35 to 40 employees, and we have some who are vaccinated, some who aren't, and some who have strong opinions on one side or the other. We keep up with the current policies, and we try and educate our workers.
- We have about 60 full-time employees, and we have probably 45 to 50 temp employees. I would that it's a 50-50 mix with most of our office employees on whether or not they're vaccinated. During the high COVID time last year, everybody was wearing a mask to comply with the mandate. Right now it's more of the don't ask, don't tell. If you wear one, we assume you're not vaccinated, but no one's really asking questions. People are very opinionated about this in the community. I anticipate that if we had comply with everyone getting vaccinated, there would be issues.
- We have some folks who really want everybody to be vaccinated and some folks who are more on the "how dare you suggest that" side. We're a CNC machine shop and more of

a job shop type business. We're not producing our own parts. Machinists are very sought after, especially in our area geographically in northern Minnesota. Some of our employees told us that if we do mandate vaccines, they would have no problem finding another job. I think they're correct.

- There are some individuals who have asked us if we are going to require a mask. And honestly, I'd say we probably know that 90 to 95% of our workforce got vaccinated. So, we're fortunate there because they asked for help finding the vaccine when it was first coming out. Our HR person helped them find clinics that offered the vaccination. We did have a COVID outbreak here, so we did close in December. I think that prompted many of our employees to get the vaccination because we ended up closing for about five days.

No one will deny that this has been a weird pandemic-inspired year in terms of the manufacturing economy. As you look at the next year, say the next 12 months, what would you say is the biggest challenge that you face as a manufacturer?

- Supply chain security. It's been difficult just making sure that things are available. A lot of our stuff has to be made in America. The sourcing of some of those components and parts has become a little bit more of a challenge, and there are other delays that come in that are directly tied to COVID and what COVID has done to certain parts of our supply chain. Our ability to get needed parts has been delayed a bit, but our purchases are not very sensitive. We're lucky because our customers and our client base are both very understanding. It hasn't impeded our business yet.
- We're a seasonal company. In the past in the winter months, we haven't produced as much product, and therefore we didn't need to buy as much inventory. This year, we're going to have to continue buying the same amount of inventory that we do throughout the summer. We're going to have a lot of dollars' worth of supplies just sitting there all winter.
- I agree with [PERSON] about the supply chain and getting the items we need. There were points during COVID when we were having to ration what we were giving to specific clients. "Well, if you don't buy this product, we're not going to be able to give you as much of this product." I mean, just internally, but it had to be done because we only had so much of everything, and we couldn't get the containers with our supplies off the ocean. Some of them were circling for four months or longer with products or parts that we needed.
- One major thing holding us back is finding the skilled employees we're looking for. I think everybody's fighting wage increases and the challenge that brings, especially if you do any long-term contract work. That is our biggest challenge. Thankfully in our industry we haven't been hampered too much other than international shipping. We've had a few con-

tainers that took four months to get in, but it wasn't a material shortage. It was just the labor shortage at the port.

- The only thing I would add is, if you look at tubing, steel tubing, for example, the price has doubled. Our future material costs are uncertain. We're not only concerned about cost, but also the availability of materials. The bid might be there, but it might not be there when you need it. The result is that, even though you might have more work in progress, you might have to wait for something to finish a project. I think the labor shortage is a problem for everybody. However, I think the material shortage inflation is worse.
- The material increases are just out of control compared to the last 20 years. We've had to review quarterly pricing, where we never used to have to give increases as frequently. We are looking at doing that right now due to the lumber and plywood material increases that occurred during the last year. Our clients are not able to get parts, and we are pushing their ship date out. That is impacting our scheduling.
- Labor is definitely one of our top issues. We've also increased our wages by a little over 20% this year, which is more on the low end. On the other side of the coin, we're competing with McDonald's. I mean, we're at the entry level. It's pushing a button on a machine, and it's automated. It's not hard work, but people can find that work anywhere. So, we do struggle with that. We've had issues with third shifts and keeping people on third shifts. We used to run more weekends, and that's non-existent at this point. We have supply chain issues too.
- I would say supply chain is our number one issue, as well as employees. Also, just getting the materials we need and just following up with our vendors.
- Materials are a huge issue — getting the stuff we need. That never used to be an issue. We never had a problem getting the components to complete our assembly. We make track systems for industrial lights. Some of the rings we need are American made, and we're having difficulties with steel. We have issues with stuff coming through the ports, and we've had this problem the last six months.

Even if you did have the materials, would you have enough people to complete those orders?

- That would be another problem, and one that we would have to figure out. I've been fortunate to grow our workforce. We're working with local school boards. They are trying to bring in STEM-related fields, manufacturing, and get youngsters involved. If they succeed, we should be able to get the people we need for future work. We're working with colleges, workforce centers, and the state. Everybody is struggling, and I think I've been just a touch luckier because we've been able to bring on a couple of people. I spent quite a bit of time try-

ing to recruit. I think I've done a little more than some folks.

Is the worker shortage here to stay? Is it something that you as manufacturers are going to have to confront every day forevermore?

- I think so. I think we need to start thinking that way. We're doing a lot to train from within. We're getting qualified people with no skills, and we're training them. If we train 10 people, that's a lot of money. We're not that big of a business. So, we have to nip away at it year by year. Our growth rate, as far as bringing on employees goes, does not match the growth rate potential. That will be a big problem in the long run.

How much will automation play into your ability to make up productivity efficiencies in view of the fewer employee numbers available?

- We personally have started automating machines every so often, but robots are terribly expensive and that requires a lot of programming, time and energy. But yes, I do think automation is here to stay.
- I agree. We're actually right in the middle of spending about \$25,000 for a very minuscule automation project. But the reason we have to do that is the shortage of people.

Last year, one of the most surprising results from our focus groups was the number of people who had been affected by cybersecurity issues. Is that on your radar now?

- I just went through our business insurance renewal. That was an issue our insurance rep mentioned. If we want to be able to go out to market next year, we needed to increase our cybersecurity. We met with our IT company, and we're going to a whole new level of security. That's something I never thought we'd have to do.
- Same here, same thing.
- We're going through it because we are a defense business. We haven't had any incidents, thankfully, but they can be a big cost driver.
- We do a cybersecurity annual test. We increased our security last year with passwords, renewals, and expirations, as far as timelines go. We had one incident where an employee's email was hacked and information was sent out. Our insurance has us go through what our plan is, and we have a policy that has increased in the past few years.

What about the increasing incidences of things like fake invoices and things like that snaking through your systems? Are you seeing examples of that in your own experience?

- Yeah, all the time there are things like that. I think some of these things are preventable and some are unpreventable. The idea would be to implement a framework so that cybersecurity doesn't become an afterthought. It's part of our culture. I think of the biggest cybersecurity problems are phishing and social engineering attacks. We can educate folks to have a skeptical eye when they're looking at an email, when they're looking at a text message.

What's your sense of where the economy is going and how it will affect your ability to plan and your profitability?

- I think there are a lot of things going on with the economy, and that becomes somewhat of a geopolitical conversation. I think we've seen some challenges and risks, and they are impacting what many of us have come to assume was normal business. That makes us as a group a little bit more wary right now with the state of things. The question is whether it's going to get worse before it gets better.
- Our concern is being shut down again. We are retail, so when stores shut down that impacts our business. That's one of our biggest concerns. We are investing in automation, which is something that could offset the labor issue. I think for us, the biggest problem going forward will be the supply chain.

In the 13 years of doing this, the number one issue of concern facing manufacturers has always been the same thing, no matter what's happening in the marketplace — the cost of health care. Is that still an issue? Or has it just become a cost of doing business that you can't do anything about?

- It's still an issue. We've continued to see double digit increases every year. You can't just stay ahead of that without pricing yourself out of the market. It's impacting our margins and our strategies. That's another reason to push for more automation. The robots don't need much insurance.
- I'm just waiting every year for it to go down, but it just never happens.



Focus Group 4

2 PM, September 16 — Zoom

How have the last 12 months been for you, and has it been what you expected?

- Business this last year, compared to most, has been very good. We should continue our financial record performance as far as sales go. And while it isn't as good as it had been in the past years, considering some customers were down significantly we were able to pick up some new ones. The biggest issues we have had to deal with have been supply chain issues, shortages, and transit delays. But we have been far better off than, I guess, most manufacturers.
- The past year we've just kind of hung in there. Many of our customers had to cut back quite a bit because they're in the hospitality industry. However, we did have some other avenues open, and so we were able to hang on in that way. Obviously, we were also affected by the labor shortage this summer. That really, really put a damper on our capacity. We could've taken on so much more business but weren't able to because we can't get orders out the door. And that's slowly gotten better here towards the end of the summer. But a lot of it's too little, too late.
- In terms of COVID, we definitely saw a decrease. We make products for the aerospace, medical, and general industrial markets, and we are down 20, 25%, depending on the month in 2020. This year, starting in January and February, and then ramping up into June, our backlog doubled from where it was. That is fantastic, but just like everybody else, finding labor has been the biggest challenge. And we've had to do wage

increases for current employees so that we could hire new employees and not have current employees at a lower rate than the new people coming in. We've been doing signing bonuses, referral bonuses, overtime bonuses, trying to be as creative as possible.

- We're a custom injection molder for the defense and medical markets, so we had a record year last year. We were doing a lot of COVID-related products, which we're very fortunate for. Labor had been one of our bigger challenges — we've got two temporary staffing agencies on site, and we still have 30 openings right now for people. Supply chain has been a little bit of a challenge as well, and price increases. We're facing that all the time.
- Our trailer business has historic backlogs in front of it right now — levels never seen before. The challenge with that because of labor pool challenges along with supply chain issues is getting them built. Those are the major factors we're fighting right now. We are passing along quite a bit of price increase to try to manage the input costs we're getting from our supply chain. It's a constant, daily battle to make sure we're covering our costs appropriately in the process.

How do you view the state of the current economy?

- I view it as good. We work with some very well-known customers who have growing sales, so I view it as very positive.

Is there overbuying going on because of supply chain issues?

- We're still seeing material delays on a lot of fronts, and that is due to delivery trucks not having enough drivers in the industry to get material shipped to our sites. I've had subcontractors of ours say, "Yeah, we have the material, we have the product, it's all ready to go. But we can't get it to you, and we won't be able to get it to you for a number of weeks due to backlogs."

What's your sense of inflation and how that will affect your supply chain and ability to get materials?

- The inflationary piece is the lesser of the evils. We're able to pass that along to the customer, especially in this market, as most people are expecting increased cost. But the availability piece is the tough nut, and if we can get access to more materials than we need right now, we're going to grab them.

What about the pandemic? How has that affected your ability to grow profitably in the last year, and maybe into the coming year?

- That's a tough question. We have about 12 employees total, so it affects us big time if we do have one person out. COVID's impact on the hospitality industry is huge with our customers. So if they're closed down, that's going to affect their output, and it's going to affect other output a year from now.
- We have had this post-pandemic spike in orders. And I think people are potentially ordering more so they make sure they're not out. We have one customer who has been placing way more orders than usual, and I think they just wanted to make sure they don't run out. We've also had price increases on the materials. Labor's our biggest driver for cost, but material, metal, is huge for us. I certainly hope that material prices calm down, but we haven't seen that yet.

Are you getting customer pushback from that, or are they in the same position with their customers?

- They're in the same position almost every time. Customers are accepting it, and we haven't had a lot of pushback.

We're all hearing about masks, mask mandates, and vaccine mandates. How much of an impact is that having on the HR culture within your company?

- Currently, we are not mandating masks, but we certainly did last year. We also have been paying people to get vaccinated. When we track that, we've got about 25 people or so out of 60 or 70 who actually got their first or second shot. That's a pretty small percent in my mind, which is really frustrating. If we have to mandate masks again, that's going to be really challenging for us.

- I think we have a couple of people who would object very strongly to it. They may say, "I need to work from home because I can't get the vaccine, I don't believe in it, I don't think or that." We have a decent number of our production folks who are wearing masks on a daily basis. They aren't mandatory.

Is the worker shortage something that's cultural now?

- We had to raise wages, but I think that has also forced us to do a better job of scheduling. Scheduling is the balancing of resources, not just equipment. It includes manpower. From that standpoint, we can't afford to be as sloppy with our scheduling. I think it's made us better and more efficient because we aren't bringing in new temps, and the ones who are here are staying because they aren't being jerked around and sent home for a week.

But we're in a unique situation. We are strongly encouraged to invest in capital to automate. My goal is to automate fast enough so that, as we bring on new business, those people can just slide over and our headcount stays the same or can be lower with the increased business. Whether it's a reality or not going forward, I don't know, I'm just trying not to focus on it. If I've got a case for automation, whether the people are making their old wage or their new wage, we're going to go ahead and do it.

Are you leaving money on the table because you don't have enough people to make the products that you need to make, or is it more inventory or supplies related?

- It's both, but we're definitely missing opportunity with not having the headcount. But from a strategy standpoint going forward, we're looking at where can we automate, where we can do some design for manufacturability to get some labor hours out of builds, that kind of stuff. Almost a year ago, our leadership team decided we'll never be staffed to the levels that we were even a year ago. I think there will be a little recovery with some of the extended unemployment benefits coming off and such, but there are fewer young people coming up through the trades, fewer people going into manufacturing in general. We're looking at how do you get more with less.

What's the bigger challenge, recruiting new people or retaining the ones you have?

- I think recruiting right now for us is the biggest challenge. Just finding them. We're really big on culture here. We have some people who have been here 40 years, so I think that's a testimony to our culture. We make a lot of medical products, so we do try to tell people what the product is and how it's saving lives and try to give them a bigger purpose and connection to some of the products — make them feel like their job is important and meaningful. So, we're definitely

focusing on culture.

- Culture is important for sure. And that's an ongoing thing — you always want to improve your culture. Right now, we have a really high number of temporary employees, probably 25 or 30, out of a total of 85. So that's a pretty high percent. We have hired a number of those directly, and sometimes we'll buy out the contract from the temp agency if we really want to keep them and they want to stay.

Are wage pressures on your radar?

- Yes, we increased our starting wages from \$14 to \$16 an hour. That helped us get in the people we needed right away to fill the shifts. Since then, we've had a few issues, primarily on third shift. Our biggest issue is Friday night, where I could have anywhere from 10 to 30% of that shift either call in sick or no call, no show. And they don't think anything of it. Ideally, if the economy would be better, they'd get away with that a couple of times and then they'd be gone. But if we can't replace them, we might as well keep these people for now and get the most out of them Monday through Thursday.
- We are dealing with that too. It's easy to get frustrated when you talk about it. Now we're paying people on top of their paycheck to show up every day. It's a shift in culture that we're learning to manage differently, because it's not the way we were managed when we came up through the process.
- One day we had 15 people call in, and our first shift is 57 people. So that definitely hurts. There are certain jobs where we need seven or eight people to run the project. And when that many don't show up, we have to figure out what we run, what we don't run.

Cybersecurity became a big issue last year in some of those focus groups. Has it been an issue that has confronted your company?

- Our company, knock on wood, has not been affected by that. We do know our cybersecurity company, the company that does all our IT work, hasn't been on site for a couple days in a row because they were dealing with a cybersecurity issue with one of their other clients.
- We haven't had any issues from a cyberattacking standpoint. We don't have a huge office staff, so we outsource our IT to our part-time consulting guy who helps us when he can and when we need him. And he's been doing it for a while with other companies and with us, so we feel pretty secure. Everything is backed up and all that. For the first time last year we bought cyber insurance, so that was a new cost. It's on our minds, but it's not at the top of my mind every day I walk into the office.

- We haven't had any issues here, but we definitely had to hire a new IT person because we do defense products, and they're very strict on cybersecurity and information is transmitted. We have a dedicated IT person, separate servers, and such, in order to be compliant.

For the past 13 years that we've done this poll, no matter what has happened, the number one concern among manufacturers has always been the cost of supplying health care for employees. Is it still that much of a concern for you, or has it just become the cost of doing business?

- It's actually something that we've been looking into supplying for our employees, because we haven't been able to up to this point. But we think it will make us a better business, a better company to work for. So, that's something that we are in the process of looking into.
- We have supplied health coverage for employees for a number of years. Ironically, I just had a call yesterday with our rep for this year, as a couple of months ago we decided to shop our plan. And we came back, for the first time I've seen it in many years, with a reduction in our health care coverage costs.

I asked you about wage pressures and trying to become competitive when we're all competing for different employees. Do employees factor in health care as something tangible?

- I believe they do. It does depend on who it is, and what age and what stage in life they are. As you can imagine, it's not as important to the younger, single employees. But for people who've got families, and the older you get, you need the coverage. It is an important bargaining chip.
- We did shop our insurance this year as well, and we got a lower price, and our provider matched it. So, we've absorbed more money as a company into what terms we pay just to keep the minimums, so the employees pay less. I think some employees value that we offer insurance, but again, I agree with [PERSON], it's kind of where they are in their life.



Focus Group 5

2 PM, September 22 — Zoom

How have your company revenues proceeded against expectations in this weird COVID year? Or even just the last 12 months?

- I would say about 12 months ago now was the start of the giant uptake for us. Q4 was very strong in 2020 and exploded in early 2021 from a quarter intake standpoint. Unfortunately, our retention and people didn't follow with it. But we have had more orders than we can produce in the last 12 months. We've been out pushing pretty hard to grow the company. And so we did land a couple really good customers at the start of 2020.
- We're a composite injection molder. We're doing great. Year over year, we're up about 65%. When COVID hit, I think it caught a lot of people off guard because their salespeople couldn't be salespeople. We were ahead of the curve. We don't have any salespeople. We have been doing Google ads and online marketing extensively for the last five, six years. We've picked up some new business, increased existing customers, so things have been really, really good.
- September was when things really kind of started coming back for us. Certainly feels like we're going to see continued growth. Maybe not at the same rate because of the strain on a lot of aspects of the supply chain, but we're booming right now.

Was there a pandemic economy or did it move along as it had in past years?

- No, for us, we were very strong through the first, well, maybe quarter and a half, and then things dropped off quite a bit. Our third quarter in 2020 was 40% down from the same quarter of the previous year. And then right at that point backlogs filled back in and things really began to hum again. And we saw it across the board from our existing clients.

Do you worry about being able to keep up? Could the backlog overwhelm you at some point if things continue so well?

- We won't let it. I believe it could, but we put some tools in place to force ourselves to meter it out. And we have been pushing back on clients and orders saying, "Hey, we're really interested, but you can't have it until December or January or some timeframe like that." I'm a great believer in promising things that you can do and being upfront when you can't.

And the customers are okay with that?

- No, they're not happy. But I think they're getting it from enough sources that they believe it. And I don't have clients flying off the handle and going elsewhere. I'm seeing some orders in my backlog from people wanting to save space there because they don't want to not have a place.
- While we started off 2020 set to have a record year, COVID just took the wind right out of our sails. We ramped back up steadily, and then this year has been very consistent to where we were last year. But now as we look to the fall, it's just

bananas. There's just a lot of demand to keep up with. We're also struggling to find people.

- We started out last year with really strong sales, a good forecast, and when COVID came along we hung onto people as long as we could and then ended up laying off 39 people the end of May, as we moved into a new addition on our building. So, it was interesting times. About August, everything came back with a fervor. The orders came back in, and we found ourselves about \$6 million in the hole. We needed to start scrambling and hiring people. We have way more business than we can produce every month. We'll be about \$7 million more in sales in 2021 than we were in 2020. And next year we should be about \$14 million more than we were this year. So, we are definitely on a growth path. And we're turning business away like crazy.

Are others leaving any business on the table because you don't have a sufficient number of people to complete it?

- No, not at all. We've hung on to everybody through COVID and have picked up. We're small, we're less than 30 people, but we've added three people in the last couple of months — two operators and a new production manager. And that was through word of mouth. We have built up a reputation in the area and the community that we are a desirable place to work. So, that's really worked out for us.
- We've been trying to build our workforce the entire year. We've done the radio ads. We've done referral bonuses within the plant. We have made compensation and benefit improvements as well. We've located people, but they don't stay. We have enough competition in the commercial world, and we don't need the government competing for people as well. That certainly didn't help us.
- Retention is a bigger issue than attracting employees. And it's not just retaining the people you recruited a month or two ago. It's retaining the people who've been here two or three years. To [PERSON]'s point, jobs seem to be pretty disposable right now. So, why not go chase the money while you can, because you can always pick up another job somewhere else. I don't think there's really a fear of any long-term unemployment for people who want to work. And you can't blame them.
- For us, we get a lot of people in the door, but they can just hop around. Because we're smaller than some of the other manufacturers, we get those just entering the workforce or those who have maybe stayed at a job six months and are constantly hopping around to other jobs. So, while we can get bodies in the door, it's a matter of whether we can keep them or if they're even worth having. We've moved to working interviews. We actually have them come and work a couple of days before we decide whether we're going to keep them. And that has helped significantly.

We're doing a referral program now where it's actually a raise for the employee who refers someone. So if they stay six months, they get a 50 cent raise. If they stay nine, they get 75 cents. If they stay a year, they get a dollar. It's hard when you have employees who are really good. They don't necessarily want to refer family or friends in case it doesn't work out. But if they're incentivized, then they're more likely to bring them in. It's a struggle to find employees with just a strong work ethic who are willing to show up every day. We've raised our wages, and I think we're going to have to go up again here now this fall. Because of course, especially in this booming manufacturing area, as soon as we go up, everyone else goes up.

- We're starting to see a decline in sales more than we thought this year. Our total sales for 2020 only decreased less than 3% because we had so much more defense work. Toward the end of 2020 is when we started to see sales start to slow down. We expected it to be a lot sooner because of the aerospace work. But we were going strong until the last quarter. And we're seeing that kind of continue into this year.

As far as people, we are starting to see more retention problems. I just had an employee quit. Last week he gave us a notice on Monday that his last day was Friday. He worked here eight years. He got a job at a competitor as a machine operator for five or six dollars more an hour. And he was a good operator, but we couldn't justify the increase, so we had to let him go. We're trying to think of different ways to bring in people, but that's definitely our biggest challenge right now.

- We did not lay off anyone during COVID, and we didn't cut a lot of hours and things like that. We built inventory, and I'm glad we did. I wish we would have built more, to be honest with you. We actually have a thank you bonus, service bonus, retention bonus, whatever you want to call it. We've been paying that for years. The longer they've been a team member here, the more potential they have to match the incentive compensation bonus that we offer. We also raised wages across the board in August for everyone. But we're still down 50 people, and we could hire 100. It's crazy. Regarding demand, we're actually starting to book orders for 2023.

What are the attitudes of the students coming through technical programs with regard to their attitudes toward work and hopping from job to job?

- I think the attitude of students today is a lot different than my attitude. I'm not a big fan of job hopping for a number of reasons. Number one, I found my dream job. Then number two, I don't want to change my health care, and I don't want to change my 401k. I don't want to go through all that hassle to change jobs. But it sure feels like the modern student is a lot more connected. They're a lot less concerned about staying in

one position. If they stay at a job for three or five years, they consider that a long time. I think they are more likely to jump for \$1 or \$2 more an hour. But I also think it's not always the money that makes them want to leave. I think it is the idea of working in an inclusive environment. I think it's the idea of working at a place where they believe in the product.

How much will automation help you become more productive with fewer employees?

- Automation definitely helps with rework and efficiency, but you still need staff to run those robots. So, it doesn't replace jobs. It just changes the job.
- We just ordered our first robot because we don't have enough engineering hours to do the end of arm tool design. We're buying a complete package, and we're looking to put that at one of our presses to make our operators more efficient. We already have nine robot trim cells, which certainly help on the safety side. And it's way more efficient.

Are you worried about attracting people and getting enough people to fill the orders that you have for the foreseeable future?

- We're small. Adding one, two or three people is probably my challenge, not the 20, 30 or 100 that some of the others are talking about. So, it's not as big of a factor for me. We have employees that drive 35 miles a day to get to work here. We do have other large manufacturers in the area. But from a general labor type position, I don't think that helps us, other than you get those employees who will come here because they can hop between all the different manufacturers. Which again, are not the ones we really want.

If mandates come, are you going to lose people?

- We didn't lose any people because of mandates. One thing about our operation is people are very spread out, and they end up wearing PPE anyway. So, in a lot of cases, we didn't have to require masks because they were already wearing something else. Minnesota and Wisconsin behaved fairly differently through the pandemic. And I did hear about people who said, "I'm done with Minnesota. I'll go to Wisconsin and be free." If we continue to push mandates, people will — if it means something to them — look for a place to go where they get their way, whatever that happens to be.
- We will lose people if the vaccine mandate comes. I've checked into the weekly testing protocol that you have to do if you don't mandate the vaccine, but we'll lose some folks anyway, as they're just not going to deal with that. We are currently at about 130 people. So if the mandate goes into effect, it'll drop us down. Don't know how far, because I'm not asking people if they're currently vaccinated or not. But even if we had to do masks again, people have come and told

me that they will leave. So, it is definitely an issue for us.

- We have 155 employees, and we have 90% who have completed their vaccination. I think one of the contributing factors is that we have a lot of Asian people here who have dealt with SARS or other things back in Vietnam. And they were more willing to wear masks and get vaccinated. I'm not excited about the pending vaccination mandate though. I would probably go with the testing as well. Some people have said outright they will not get vaccinated. They're long-term people, people I really need. And it puts me in an uncomfortable position to keep asking them about getting vaccinated and they've already said no. So, I'm going to go with the testing as much as I can.

How have supply chain issues affected your ability to complete orders?

- We've had issues all summer long, but now it's literally getting to the point where we're going to have to start missing deliveries. I placed a call to one of our suppliers this morning saying, I've never asked you for a favor before, but you need to help figure this out because we're going to be in trouble. And it's not just that one supplier, it's multiple ones across everything from an eight-cent screw to \$30 a pound resin. It's across the commodity chain.
- We've seen our customers struggle again, being a service provider of providing paint. We haven't seen shortages until now. All of our lead times went from four to six weeks to now 12 to 16 weeks. So of course we're carrying a lot more inventory. And then of course, logistically, we're struggling as well. Normally I would be panicking about something like that, but we have customers who can't get us parts because they don't have the labor. So it's not only the materials but also labor.
- Since February, when Texas went down with their power outage, prices have doubled in less than a year. And we've passed along the biggest price increases to customers in my whole career. I've never done anything that big before.

Is manufacturing in Minnesota in a position of vulnerability to economic downturn?

- It feels like the bottom could fall out at any moment on any of us with the bubble bursting somewhere. But that said, there are so many factors between inflation and worker shortage and whatnot. I don't think we're vulnerable, necessarily. I think it's probably more prolonged agony than anything until we get things sorted out. I think from the supply chain, I think the biggest threat we face is inflation.

As someone who's not a manufacturer, how do you forecast with so many unknown variables out there?

- It is a challenge, definitely. Especially when you have the staff numbers. It's a balancing act, and you do your best. Customer communication is key. Having open and honest conversations with them has always been one of our core values. Letting them know, "Hey, no, as much as you want that trailer in March 2021, you're not going to get it until June, July." And they appreciate that about us because they've gone to competitors who tell them a date and then that date comes and goes, and they don't have the product. So being honest with them and then working with our suppliers as well and trying to stay on top of that. It's a no small feat, but it's lots of communication between all the departments.

Anybody have urgency about cybersecurity in the current management of your company? Is it something you're thinking about?

- We definitely are. We are required by our customers to put it in place and get a certification. We're working to do that this year yet. And we've had to do a lot of updates with our security and server and trying to find a way to get it down to our supply base as well. It's definitely a priority for us.
- It is on my radar. We're not direct defense, but we are a few tiers down. So, we've had to do the initial self-evaluation, and the results showed we're going to have to do some things. I also had a conversation with my insurance carrier and got a quote for cyber coverage. In spite of, I use a third-party provider for my IP. We've had to ramp up the filters from them several times, and we still see phishing emails that get through. At this point, everybody's reasonably trained, so we haven't had any problems. But it's certainly something that we expect to have to address.



Focus Group 6

9 AM, September 22 — Zoom

What was the biggest impediment of the last 12 months? Did the COVID economy keep you from growing as fast as you might have otherwise?

- The biggest challenge for our area is our employee base, trying to find skilled labor in a small town, small market, and getting the resources we needed through skilled labor to help us grow.
- I would say our biggest issue over the last year is our supply chain and just getting motors, pumps, and things like that in a timely fashion. Our backlogs are at a record level. And, that's really just because our supply chain is challenged with getting products in to support the backlog.
- I think the biggest issue for us was the sudden drop in need for our tooling. The medical industry put all the elective surgeries and elective procedures on hold. A lot of our work is tied to the medical industry and to other things that became non-essential. Since then, it has picked up on a gradual basis. By the time we got into last winter, we were back to what was normal pre-COVID. And we've been growing quite fast since. It seems like everybody else is now behind.
- We are the premier manufacturer of custom flooring accessories. For us, the biggest surprise was a month or two of a downturn in sales. But then it rebounded very quickly because people were working from home and looking into sprucing up their home and getting an office ready. So, that was a bit of a surprise. I'll admit that.

The other issue that we seem to have is on the supply chain side. We can get the products to port, but we can't get them out of port. So, there are a lot of fees that go along with storing something that we feel really doesn't need to be stored. Also challenges in employee hiring for sure. But, our retention has been really good. I think that's because our short period layoffs were shared. We didn't make everybody go out, we rotated.

And, have you grown? Have you been able to add employees to keep up with the business?

- I would say we're a little bit flat, and definitely under that 100 employee mark, which we've always been. We have focused more on employee certifications so they can learn different positions and can rotate.
- We do promotional advertising as well as packaging products. Think of the caps, jackets, pens, mugs you might use to market your organization. So, that market certainly took a huge tumble early on in COVID. Thankfully, we pivoted to manufacturing isolation gowns and face shields so that really helped get us through COVID. I look more at the last seven months and see how demand has just gone through the roof. For us, the challenge is finding the available workforce to scale up fast enough for that. So, we've raised wages, we've added additional vacation time to new hires, referral bonuses, new hire bonuses. We've even increased our overtime. I think somebody else mentioned the backlog. Our backlog is the

highest it's ever been. It's mainly a lack of available workforce, followed up with some supply chain challenges.

- We manufacture farm, ranch and pet products. The last 12 months our business went crazy. When COVID hit, I immediately had a need for 100 additional employees. We worked overtime on weekends for more than a year. We were non-stop. We filled the majority of our openings, so we're sitting good there. But as far as the ability to fill customer requirements, still lacking. And it's shifted a little bit away from labor requirements to supply chain issues. So now, I've got a lot of labor in place, but the supply chain is horrendous. And it's difficult to get what I need. I've got backups to backups to backups.
- I lead a professional audio-visual hearing assistance company. We were hit by COVID in a really big way. We lost about 60% of our business overnight. A lot of our business goes to public venues, meeting spaces, museums, airports, and so on. So that business declined. But it did come back very rapidly in different places like creating safe meeting spaces for courtroom hearings and educational settings, remote learning and so on. When the business came back, our biggest challenge very quickly became supply chain. And, I want to say, our employees really rallied and got around looking out further into the business forecasting. We've had this dramatic increase in business, like several other people have said, and we have record backlogs right now. Staying ahead of the supply chain issue has been a real shift in focus across the business. Early on, we were making moves to reduce our dependency on China suppliers because of the tariffs and everything else, and move some of that supply to other countries, but the shipping logistics and COVID in countries like Vietnam became a big challenge for us.
- Our biggest challenge is recruiting. Just finding enough people. I've been happy with the efforts of our HR team, and we've been getting more and more people, but we just need a lot more. Retention has been fine. No issues there. For our interview process, we bring them onto the production floor so they're seeing what type of work we do. We've really upped our game as far as probing into making sure they match the values that we have. I think that's improving the level of individual we're bringing in, which also then helps with retention too.
- I have six locations across Minnesota, South Dakota, and Wisconsin. We've had some locations get hit with localized competition, which has driven our wages up very quickly. In six months, they went up 10%. We are having a hard time passing that on to our clients. You can sometimes, but a lot of times you obviously get pushback. Then, we'll have other locations that don't have that localized pressure, but four months later it swings. And then, we have people come back to us who left us six months ago. There's a lot of movement out in the

market with labor. And we're all rural. None of my locations are in big cities. They will drive about 45 to 50 minutes, and they'll do it for a decade, but they won't drive 65 minutes. We are also seeing the wage pressure. Like someone else said, we did the double time on overtime. We did the extra mid-year bump on 401(k)s, we've done flex labor, we're letting people do four 10s, and/or five 8s. But we're 30 people short. I would take 30 people tomorrow.

We read a lot in popular business media how COVID has forced people or has encouraged people to rethink their career paths. A big Microsoft study of 20,000 people said that 70% of them are rethinking their jobs and whether they'll stay or go. Do you see that?

- Yes. I believe a lot of it is predicated on the work from home environments. A lot of that was established with COVID. People have gotten a taste for it, and it is definitely a desirable thing that they're looking for in employment. And it's opened up the radius a lot to the indirect areas. People are looking at jobs much farther away than what they previously did because they might only have to drive one day a week, one day a month, and then the rest they can work from home.

Are the manufacturers going to deal with these same issues in a year? Or is this a blip related to COVID?

- I think it's here to stay because it's beneficial to the employee, and, once embraced, it's beneficial to the employer as well. So, I think with a win-win on each side, it's something that's going to stay.
- For us, we're more about the culture and the environment. We've done some things years back that have allowed a lot of our younger people to experience different careers within the walls of our company. And, to some of the comments made, I think we have a very young workforce, and they do like to experience different things and try different things. One example is a young man who has worked here since he was 18 and is in his early 30s. He's been a night shift supervisor, a senior operator, a roughing operator, a finishing operator. It fits his personality — he likes to try and do different things and experience different things. And in the end, we've retained somebody who is trained. It's kind of been an indirect way of him being cross-trained.
- Retention for us has been the key. In a manufacturing, production environment, you can't work from home. So as basic as it seems, our recruitment ads simply say, "Hey, if you're a people person, if you want to be around other people and grow as a team, then this is the place to be." Even my HR team has always felt that we need to be in person, even during COVID, to show that we can work safe, and we can have those relationships.

In the retaining sector, we do basic things like you can have your birthday off during the month, ice cream Thursdays, and other food opportunities. My team seems to be driven by food. But I do think that we foster a really good team environment paired with the cross-training and the certification for learning other positions, with extra pay. It's been pretty successful for us.

How much of an HR/culture issue is the idea of masking and vaccine mandates? Is that something that comes up? Have you had people say, "I'm out if you make me get a shot"?

- We have. We've struggled with our employees coming in and requiring them to wear a mask throughout the day. We've changed it up where a lot of our workstations are far enough apart where they can unmask in their workstation, and then getting them to mask when they walk to the bathroom or go to lunch. But it has been a challenge for us. We just talked yesterday about changes with the Delta variant and if we need to re-mask. If we required the vaccine, we may have employees who want to leave. We have about a 40%, if that, rate of employees who are vaccinated. So, it is a big deal up in this area. And we tread very lightly when we talk about it.
- I'd say we are similar, as far as having a team member say, "If you're going to require this or that, I'll quit. I'll go to South Dakota and work there instead." So, we get some of that. In general, we don't have people masking at this point. And, as far as who all is vaccinated, we don't keep track of that.
- It's a little more nuanced for us. But generally, we've tried to respect individual beliefs and understandings. Early on, a masked mandate during the peak times was clear. As things settled, we also recognized that people wanted a choice. When we got a higher percentage vaccinated — we're about 78% as of today — masks were voluntary. We respected people's choices. The rule was, if you're vaccinated, you don't have to wear a mask. If you're not vaccinated, we need a mask. But we honored people's individual positions. I think a lot of people really appreciate the flexibility.
- I'm not sure if we would lose people over a vaccine mandate. We do have to know if our employees are vaccinated because of the customers we serve, and so we know who we can send out on a call. So, that's probably the biggest issue. This is all political, I think. For us it's more about dealing with our customer, less about our internal workforce. I don't think we're going to have an issue on our internal work, it's just dealing with our customers, making sure we're meeting whatever their requirements are.
- All of our locations are outside the metro and are rural. The biggest town I'm in is Watertown, South Dakota. And they have a whole different viewpoint over the border. We have not had a mask worn in my facility since last September. Not a single person. I could have mandated masks, and they

wouldn't have worn them. We immediately put out a note after Biden's comment saying we will not mandate vaccination, and we'll fight it. I immediately got dozens of emails back from my employees saying thank you.

- We definitely take our mask wearing very serious here. We monitor everything. We compensate people for being vaccinated. Probably every other week I have at least one positive case that's brought to my attention and a person is out for. So, a lot of people are out.

A year from today, are we still going to be talking about COVID?

- I hope not. I hope that it just blows over and goes away, and we can get back to business.
- I think we're going to be dealing with COVID for at least a decade, maybe longer, because I feel like it's going to take a long time for the world to get back on track from a health standpoint, from a supply chain standpoint, all of that. I think we're just going to have to learn how to live with it and work through things

One of the ways that manufacturers have been looking at addressing productivity issues regarding employee availability has been through automation. Talk about your sense of where automation is going to evolve in the new economy.

- Our director of operations is subject matter expert in the world of continuous improvement. A few years ago, we brought in a robot, and we had the employees name it so that it felt like a part of the team. And we didn't freak people out about their jobs being replaced. But we've not been able to implement it in the way that we thought. Even with all our expertise, we bought something that at least for us right now is not going to meet our demand. I think we did fall prey to something that we thought would help and it really has not. Does that mean, we'll stop? No, but I think our due diligence process has been challenged a bit.
- We've historically done quite a bit of automating. I think the challenge that we have with expanding further is our product mix. If we could do more with reducing setup time and changeover, I think it would have a bigger impact for us than some of the automation things. When we get longer running products, we absolutely automate it. We went from 25 people down to one person through our automation effort, but it's really the product mix.
- Like [PERSON], we bought a robot. We were not able to get that functioning well. We bought a CNC cutter this year, and it does have a robot on it to pull products off the discharge station. People realize we have some significant goals to reach

for revenue, and there are not enough people around southwest Minnesota for us to hit that revenue mark. That's why we've made no bones about it, we're looking at South Dakota and Texas. I realize South Dakota doesn't have a lot of people either, but it's certainly got a lot better tax situation.

- We've looked at robots, we've looked at robotic systems, we've looked at all of that. The cost to bring it in is so much higher than what we really need to invest. If we bring in faster, better, more efficient equipment, we can do a process better.

How does a manufacturing executive forecast? There are so many moving balls and so many inconsistencies with supplies and people and productivity and all of that. Do you think manufacturers will be vulnerable if we face a blip in the economy? Do you worry about that at all in your planning?

- No, we're fortunate. Our industry is pretty recession proof. Whether it's a down or up market, people are still going to pay to have their elevator serviced. You need to get people up on floors, and no one's figured out a way around that. We only do a one-year plan, we don't waste our time with three-year plans. What do we need for the next year? What are we going to work on? How are we going to cross-train? It's all about a focus of one year.
- We've set goals for 2025 for automation and technology. But I agree, I don't really spend a lot of time worrying about budgets in 2023 because it's just fallacy.
- We cherish our banking relationships. I think the key message is do what you say you're going to do. Consistency, whether it's integral strategy or managing even a down cycle, has been critical. Communication, and over communication, and having that relationship is outstanding. We've used our last year and our excess profits to really get ourselves in a better financial position and pay down bank notes and things like that. So, we've improved.
- We serve a number of different markets. From a pure forecasting standpoint, we've relied very heavily on better tools and better usage of tools to do forecasting. Salesforce and a stronger sales engagement to understand what's coming in, in a very volatile world, has really helped us out on the backend with being able to forecast and build what we need to build.

With COVID and the rise of Zoom meetings, is sitting across the table from someone still important in developing your market?

- Our means of getting out digitally has definitely enhanced and has certainly filled the gap during the COVID times. But a lot of times our business is project-based, and capital equipment based. So, we have to be out there in front of customers. After a lull of 12 to 18 months of not being able to do that, there's

a pent-up demand where people do need to just get out and work on some of these projects face-to-face. We have relied a lot on trade shows. Those are dead. I don't think they'll ever come back the way they were. So, we've got to find a way of plugging that gap going forward.

- A lot of our buyers who we work with are still working from home with their companies. So, it's a lot of Zoom calls, a lot of Teams meetings, emailing back and forth, quoting. We have a lot of long-term relationships with our customers, so to meet with them periodically, maybe annually, even just a phone call or a Zoom call, works tremendously well for us.



Focus Group 7

8:30 AM, September 23 — Roseville

How has the last 18 months affected your business? Is it better or worse than you might've thought it was going to be?

- The last 18 months has definitely been slower than what we were forecasting for. We haven't had much of an issue on the labor side. Our biggest constraint has been the supply chain. Overall, demands are down from our customers as well as our suppliers. They're just not providing the product in a timely fashion. I mean we're talking 69-week lead times. It's starting to return, though.
- We have been steadily increasing to the point of being overwhelmed at this point. It's been incredibly busy. There is a huge aerospace demand. And it's all new projects. Almost all of our business is referral. Engineers talk to other engineers, and we end up with new customers. We field the opportunities that come our way and hope to try to be more selective on it. But there's a lot of opportunity right now.
- We make high-end alloy bike wheels, aftermarket bike wheels, and some OE bike wheels. COVID has been good for us. We ship to bike shops around the country and to international destinations. International business has been off by probably 50%, but overall our sales are up. Since certain countries have shut down, their distribution has shut down. Our web store sales are up quite a bit. Next year we're going to be up probably 30% from this year.
- We are business to business manufacturer. We have experienced COVID not as a single wave but as wave after wave

of variations. We started off by reducing our workforce by about 10%. This was before PPP came out, before we realized that would come back to bite us. Then there was the sudden evaporation of all orders. And when I say all, I mean like 80% of them. A lot of our customers simply closed — some temporarily, some permanently. We had a lot of in-house orders that were ready to ship, and the customer would call and say, "Don't ship, we are not open." So that was kind of wave two, if you will. Wave one was our workforce reduction. Wave two is we're sitting on all these orders, and we can't invoice, we can't do anything. A few of our customers fortunately said, "Go ahead and invoice us. We'll pay the bill, but don't ship anything, because there's nothing to ship to." Orders did pick up rather quickly within the next couple of months, and that was a surprise and hit us again because we'd already reduced our workforce. And people were afraid to come back to work. Then came our slow season after that, where we just didn't have a lot to get done.

- We've added about 20% to our inventory cost in the last few months to have just-in-case inventory because we don't know what that supply chain is looking like. In the past, we could call up and get off-the-shelf components.
- There have been cases where our material supply has been a huge problem. We've had up to a four month wait for some special alloys and things. The bigger challenge that we wrestle with is some of the outside service. The lead times on that are just horrendous. Blaming COVID might be the root of the symptom, but there's got to be more going on than that.

- I've been with the company for three years. We've gone from \$13 an hour to \$18 an hour, just because we've had to. And we still can't get enough people, but we've had great retention. We have great, loyal employees. I think it's our job to figure out what the best practices are as far as management tools and culture to keep the people there and engaged. If we're improving our onboarding, if we're improving our processes for company meetings and communication, that's going to improve our retention. That's going to improve our employee engagement. That's going to improve our efficiency and our production. That's going to improve things. It's one thing to blame external factors and say, "It's the pandemic. It's China. It's this." That's fine. We can use those as excuses too. But what can we do? We can improve internally.
- We haven't had any retention issues. We've been fortunate to make some really solid hires recently. There certainly is wage inflation though.
- Most of the manufacturers I've been talking to can't find enough people. A couple other companies are dealing with both the supply chain and the workforce and are to the point where they hired up because they projected some big sales. Then they couldn't find the materials and vice versa. The supply chain is a big issue. The workforce shortage is a big issue.

Talk about wage inflation and its impact.

- It's very real for us. We've lost about five people, which is almost 10% of our workforce, to a competitor who easily offered 50% increases in wages from where we were at.

If you go back a few years, we used to talk about three, four, even five-year plans. The bankers used to ask for five-year plans. Then they said, "That's kind of irrational, three-year plans." Are you still doing three-year plans, or are you doing one-year plans or even two-month plans?

- We are doing three-year plans; five-year plans are nice to have. Three-year plans I think are practical, but obviously you've got to get really good with budgeting. You've got to build your plan for next year. You've got to keep a good scorecard, keep good metrics, figure out where your margin is going.
- We're looking at five years out. One thing we're taking into account in our five-year plan is relocation. Where are we going to be in five years? But a lot of our planning is what next year will look like? What will the next three months' or four months' supply look like.

With expanding and relocating, what are the factors today that you have to think about that you maybe wouldn't have thought about a couple of years ago?

- One of the things we look at is minimum wage increases. We're also in downtown Minneapolis. We've seen the highs and lows of downtown and have had to make changes.

Has automation been accelerated in your thought process this past year? Does it fit your organization?

- We have done some automation. We have a robot that builds the bike wheel. So, it can take the rim, take the spokes. It saves probably half an hour of labor and has greatly helped our capacity to produce wheels.
- We just recently added a person with automation and continuous improvement in his background.
- We want our people to have better jobs so they stay with us longer. And automation hopefully allows them to leverage and take advantage of the skills that they have.

Have you had to up your cybersecurity through either training or new technology?

- Yes, we have. We're starting to do more training on multi-factor authentication. It's not just click the email, and you're good to go. No, click the email, and it goes to your phone. Then you have to verify it. So yes, we're doing that.
- Has anybody implemented a regular program of sending phishing emails and other things out to try and trick employees? We had a manufacturer do that, and the executive admitted that out of the 85 employees, he was the only one who did it wrong.
- We're looking into hiring an outside firm to bait our employees with fake phishing things as a training tool. We haven't implemented it yet, haven't had to. Most of our employees are pretty good about identifying an email and saying, "Yeah, this isn't right."
- We've seen some attacks on our website. We don't manage it, but we get the reports of the attacks, the different login attempts. And when we see 5,000 attempts of people logging in, using different names, you know something is not right.
- We just went through a program called KnowB4. They're pretty innovative.

What gives you the most heartburn as you think about the next few months?

- Supply chain. Not knowing when the product that's supposed to arrive two weeks ago is going to actually arrive. Or the product you ordered four months ago because the manufacturer still can't give you a delivery date.

- I think supply chain. But also inventory — increasing inventory, which is going to raise prices, which is going to lead to inflation.
- I am very fearful of this present climate — no control of budgets and spending money worse than drunken sailors. It's got to come home to roost at some point. We are so interconnected. Interest rates go up two points, and the whole thing comes crashing down. It doesn't matter what my five-year plan is at that point.



Focus Group 8

10 AM, September 24 — North Mankato

Did you guess that business over the last 18 months would end up like it is?

- Okay, 18 months ago we started to see big changes in customer outlook. About six months after that, we saw significant changes in customer demand. Our business level was falling fast through 2020. It started the same way in 2021. Then in the second quarter, suddenly, all sectors, all industries, went crazy. We had some lead time issues with materials. We had some material that was just flat out unavailable. Same thing with some of our outside services. People wise, we've done well with the skilled side. We've hired 23 people this year. We've had about 13 of them stick. The hardest for us is filling the frontline, first-level position. We are competing with a lot of companies for that person who isn't very skilled right now. Despite never having a problem with that level in the past, that's our big challenge now.
- What really comes to mind is we're only as fast as our slowest vendor. As far as demand for our product, we manufacture boat lifts and boat docks, so that's recreational spending. When COVID came around, a lot of people working from home decided to work from the lake. So, there was a big demand on the boat industry. We grew about 35% two years ago. This year, we were up about another 25%. We've been able to hang on to our people. The lower end positions, like [PERSON] mentioned, tend to turn over seasonally. Although, I think that will improve. Material costs are going up, labor costs, distribution issues. The challenges are great.
- We don't have any products. We are casting components that our customers use for their products, so our growth is dependent on either bringing in new customers or our existing customers' projects going up. Typically, with our diversification of customers and markets, one is up and one is down. As we're coming out of the pandemic, everybody is surging, and we don't have capacity for that. Right now, it's not the machine capacity as much as it's the operators to run the equipment. Would we have anticipated this big spike? No. Were we anticipating the business coming back? Absolutely.
- I wouldn't say we don't have problems finding people, but we have very little turnover. We're fully staffed. If we could get components, if our supply chain could keep up with our demand, we would probably be hiring right now. But because there's a lag in the supply chain right now, we're holding off on hiring more employees. Competition is huge right now. Everybody's hiring, everybody's looking. You're seeing sign-on bonuses. You're seeing immediate benefits. You're seeing companies willing to train, willing to give you that skill. It's very competitive out there right now.
- Pretty much all our skilled students in manufacturing have jobs. We're hearing from employers that they can't find people, but you're really not going to get new employees from the community colleges right now. They've got choices. They're pretty much fully employed.
- When we started this pandemic, the confusion around the messaging with COVID was difficult for our people. We did

a good job providing information so they all understood what they were dealing with, but they resisted it. They still resist wearing a mask. We have lost people because they don't want to wear a mask. We are in the federal contracting database. If there is a vaccine mandate, I fear what that will do to our workforce and the resistance that we will see.

Have workforce and supply chain challenges prompted you over the last few months to think more aggressively about where you might be able to automate some of these processes?

- We've spent probably well over \$2 million this year on products that have either an automation component or are completely automated processes. We have a few other things that are yet to arrive. The problem? The ports. We have a machine that's been in port for a month, and we're still waiting to get it through.

One of the things that we added is a robotic press brake. It's a unique press brake because it's designed to be run by a human and/or a robot. For the robotic component, you roll it over and you hook it on, and it can run with the night shift crew. It runs a lot of small clips, a lot of the repetitive stuff, and it puts them into bins. In the morning, you just roll the bin into the next operation. That's a game changer for us.

- We aren't doing the fully automated thing, but we are adding more collaborative robots into cells so that we can run two of our die cast machines next to each other with one operator rather than having an operator per machine. The robots do more of the handling of the casting. You still need an operator, so we can't fully automate, but we can run more machines with the same number of people.
- Some of our automation is simply reconfiguring light curtains and things like that. We used to have an operator, and then you'd have somebody handling the castings as they came off. Well, now we are asking can we change the controls so that the operator can also do that function? We're looking at more of those types of projects.
- We're doing some similar things. We've also made a conscious decision not to look for silver bullet solutions for automation. If we can find a piece of equipment that will save \$1,000 a year on something, even though it still requires an operator, we've been pulling the trigger.

What are you seeing with regard to employees and wage inflation?

- We're exchanging employees every three months, and that drives up wages. If you open the paper, there's a whole page ad about a company paying a \$3,000 sign-on bonus. And then we have to match those wages. Then that impacts the wages of those who are already at your company. We've done three

rounds of wage adjustments this year because competition keeps putting pressure on the current wages. Thankfully our employees are helping us with employee referrals, and that's how we have been able to hire, but we're getting the older folks. I wish we were able to get more from the younger groups.

- There have been people who have approached us and said, "I have this opportunity. It's closer to home, it's more money." We've adjusted accordingly. We're not a union shop, so we don't have to deal with that. We've taken an opposite approach to the whole automation thing. The people you can get in, grab them and make them stick right away. Get them in the door and then make sure that it's a pleasant work experience. That they succeed. That they see that growth. Then you can retain them and hopefully keep them for a long period of time.

Has the onboarding process then changed dramatically?

- Correct. We're currently working with Enterprise Minnesota on onboarding. We've created job instruction trainings, so when they get in the door, they have good training and get up to speed quicker. It's the whole onboarding process. What does their first day look like, their first week, their first month? Providing them feedback so they know how they're doing.
- Well, the foundry isn't for everybody. We find we have a high level of turnover in the first six months and the first year. If we get people past that first year, we tend to have them for life. But it's really challenging to get them through that first year. I've been taking some notes about going back to review our onboarding. We did so a couple of years ago, but we probably need to go back and tune it up some more.

We're spending a lot more time with them trying to figure out what they want to do versus what jobs we have. It's changing that dynamic from the employer saying, "Here's what I have to offer, you conform to that," to us conforming to their set of skills.

- What we're seeing is making sure you have the right people in the right seats who are committed to your company values and who work hard in your environment. It doesn't matter if it's hot and gross or whatever during the day. If you have the right culture, people will join and do it. We recognize the competitiveness of wages. We've always been competitive, but we decided here in the middle of a contract that we're going to raise those wages. I mean, this is one of those rare years where you can pretty much put your price where it needs to be. I just feel like as we get more people involved, we have career paths. If you're in a company that's been committed to that in the past, and/or you have a new commitment to that now, those are the winners.

When a multi-national company gets breached, it makes

headlines. But there are a lot of examples of small companies that also have cybersecurity challenges. Have you gotten a little more concerned about that area?

- Yes, and I guess it's because of the space we're in.
- We've hired [COMPANY] to help us not only monitor our mainframes but also to provide educational information for our employees on how to spot the nefarious emails and websites that are not real. People are not necessarily just hacking and getting through a firewall. They're coming through somebody who has made a mistake and gave them credentials to get in. Several of our large customers are saying that the biggest hacks they've had come from their suppliers. They're also working with us and asking, "How do we make sure that you're not allowing somebody in that then comes upstream to us?"
- Yes, our IT department is an outside service provider, and we are going through the NIST protocol right now this quarter. Next quarter we should finish that. We do phishing, constant updates to our firewall and servers. We still have onsite servers because of our paper-free environment, but it's a challenge because we cannot afford to have our system down in our environment.
- I'm from the bank side. Obviously, we have a very good firewall system and are up to date on phishing emails, but I'm seeing it more from the customer side. I got an email from a business owner at night that asked, "Hey, can you send this money?" The fraudsters are really, really good. I could tell just from the wording it wasn't right, but that's an example of one of our customers getting hacked and trying to wire out money. We're seeing a lot of increase in that.

Where do you think the economy will be a year from now?

- I don't think it's going to be significantly different than it is right now.

You think the economy will continue and the supply chain will still be as stressed as it is today?

- I think the economy will soften. If you look at the stimulus money that has been pushed to the consumer, that has been artificially driving up the economy. As that wanes, I think the economy will remain strong. Not as strong as it is, but I don't think it's dipping down significantly. I think it's going to take time for the employment side to settle itself out and get more stabilized. Again, I don't think we're going to be significantly different than where we are right now.
- I think in a year the supply chain issues will ease. Everything I've been reading says six to nine months, and I think we're starting to see that already. A lot of the stuff that we get from

overseas is still an issue, but globally it's starting to ease up a little bit. You can feel it. We've been struggling with skilled labor for the last 10 years. That's an issue regardless, and I think we'll see that continue.

- I think the supply chain challenges will, within a year, come a long way. I just want to be optimistic. I think all the vendors are trying to readjust to figure out how to deal with it and are getting a little better at it. I think that will improve. As far as people, I think that's going to be the number one struggle going forward.
- I'm really anxious to see what happens when the automotive companies really get back in the game, if they get back in the game. If we think certain kinds of aluminum and steel are tough to come by now, if we're competing with them, it's going to be very interesting, especially if the supply from overseas is unavailable or unwanted. I'm anticipating supply chain challenges and material challenges well into 2022.
- I see our industry sustaining, growing. I do worry about the economy as a whole. I see surcharges upon surcharges, and prices continue to increase on everything. When do people finally say I'm going to stop spending?
- I think our employees, especially the professional workforce, will have different needs. It's already emerging. They're asking for different things, so as employers we're going to have to try to figure that out to keep our businesses running. I don't think the economy will slow down. There is enough demand to keep it going, but we'll be grappling with inflation.
- I agree that in the next six to nine months the supply chain is going to settle down. I mean, stuff started coming in already. It's just that the lead times are longer. We are working on projects for the future that could drive our workforce up into the hundreds, and I worry about not being able to find enough people to support that in the next year. I have an upcoming trip to Mexico to explore some other options because we must figure it out. I won't be able to hire 300 people, I know that. Where will they come from? I'm already looking to Mexico as a possible solution.
- When you're running a manufacturing firm, you have to think about inflation. Inflation is going to take hold in a very big way. The only way we're getting out of this, and obviously this is not new news, is to inflate our way out of this deficit spending situation that we're in. It's going to drive a lot of things. It'll drive raw materials, it'll drive wages.

Then in terms of talent, some of the very successful strategies that I'm seeing are people making sure that they have that relationship at the high school level. The kids are ripe to be talked to. Bring the students into your shop with their parents and have some sort of internship available for them. I also

agree that this whole pandemic has driven a stunning cultural change relative to how people are viewing their lives. However you define culture, it's a generational thing, and they're voting with their feet.



Focus Group 9

1 PM, September 28 — Duluth

What's happened at your organization in the last 13 months?

- We manufacture industrial paint and coatings. We do considerable volume, but the number one challenge we face today is labor. We can't get people to work. Can't find them. I have 15 people on staff. But I need three more laborers. Next to labor, we're facing raw material shortages. We can't tolerate delays in shipment, but we're forced to.
- Labor, yeah. It's tough to find. Especially the warehouse staff. We've had cyberattacks now in our industry. Inflation is tricky. We're about 130 employees, with an inventory of maybe \$7.5 million. It's tricky to manage inventory when inflation is the way it is. What we wish we were better at is automating. We're so labor intensive. We fill 300 orders a day. They have to get packed and shipped. If we could figure out a way to automate that, we wouldn't need this much labor and we could scale better as we grow.
- We cut and sew upholstery. Our challenge this year is definitely supply chain, supply chain, supply chain. That shut down in Texas killed us.
- We build industrial-sized pumps. For us, the challenges have been supply chain and labor too. But we've also learned a lot in the last 18 months, the last two years. From the automation side, we know where we want to go, we just can't get there yet because we don't have the resources. Everybody's hands on deck right now in getting our product done. We bumped our inventory up to where our warehouse started to balloon,

but we're starting to run out of those products, those materials. We're starting to get to the point now where we have to have lead times that are almost a year out.

- We have had our hiring struggles as well. We have strong pay and benefits across the board for our employees. A really strong hourly rate, strong benefits. We haven't necessarily had an issue attracting people, it's keeping people. To get that longevity out of these candidates. So, we've tried different programs, referral retention programs, to try and increase that. Getting people in the door is great, and they get trained and start to really be a value add on a shift. But then when you lose them that hurts even more, and you're starting all over again. How do we incentivize people to stay?
- COVID has given us struggles with labor shortage, but I think another big factor is what we have for COVID protocol. If there is an outbreak in the facility, which thankfully, we haven't had, we're sending everybody out. Then we're waiting on testing, which takes seven to 10 days to receive back. In that scenario, you have people there, but just due to your own absenteeism, you don't have people there. And we're fighting a lot with absenteeism right now.

Are workforce issues limiting the growth of your company?

- I got started in workforce development before my current job as director of HR. This shortage was coming. It was always coming. The Baby Boomers are retiring, there aren't as many new high school graduates, and you know, a bunch of people

did just die the last year. So, this is no surprise to me, and I remember feeling some of these same struggles before COVID hit. For us, I have no problem filling positions. I am getting qualified applicants. I can be choosy, and it's weird.

You're a little more optimistic or positive than some of the people who we hear from. Have you changed your onboarding to get people comfortable quickly?

- I have changed some of my recruiting tactics. I did a virtual job fair with the University of Minnesota when I was looking for professional staff, which really increased my exposure. I'm very deliberate with how I write my job postings. Job postings are different than job descriptions. All of that is marketing. I want to make sure people can get a feel for how it's going to be to work here. Having a specific marketing HR approach is critical for us.

How are large customers coping? Is it different by region by region?

- It isn't different. It's the same problems that all of you have described. I got a phone call from Estée Lauder in China, who wanted a million masks, and they're about a buck apiece, something like that. And I could feel my father and grandfather rolling over in their grave, but we turned the order down because we have so many customers that depend on us for that N95 mask, and we had to focus on making those.

With all this conversation about workforce and social distancing, was there opportunity to reconfigure manufacturing facilities?

- Not so much actually. I expected that we would see more demand for that. We are hearing that some manufacturers have really done well over the last year, year and a half, so they are expanding. The other thing we're seeing with manufacturing plants is what you described — they are all hands on deck. They don't have time to think about expansion or building projects. They just have to get the stuff made and out the door. Those are the kind of scenarios that we're seeing.

Automation has been mentioned a couple of times. Are others thinking more aggressively about automating certain processes based on the workforce challenges?

- We're currently trying to buy a new wire cutting machine, a large Komax machine. We have one, and we're trying to invest in another. Labor really hasn't been a problem for us. It's parts, materials, commodities, things like that, that have been killing us. That is what's preventing us from hiring new employees. But, I mean, the applications keep coming, so we have them there if we ever get the parts.
- We have had to get our orders out fast, so it's all hands on

deck right now. We are letting overtime go as much as employees want right now. I just did payroll this morning, and we had someone with 75 hours of overtime.

- We have a lot of customers who automate their finishing operations. And we have some who are looking at diminishing the labor requirement by increasing automated operations. More would automate if they could get the equipment to do so. If they can't seem to meet the demand, and the market suddenly dries up, the investment they made in automation is a big risk. That's the same with us as well. We know we have to make some kind of investment to make things better and easier. But right now we're just in the learning stage. I think we have a pretty good handle on what we want to do, we just have to figure out what the right timing is.

So have banking relationships evolved over the last year, year and a half?

- Customers are being more proactive. They're sitting down with their banker and saying, "You know, here's my problem. How can you help me?" We are trying to work hard to help our customers, as we know it's been tough for them. We're trying to be flexible and think outside the box when working with our clients. A lot of our clients are not getting to their lines of credit right now. That's a good thing for them; they're reducing their costs that way. There are a few customers who are investing in new equipment and ways to work smarter. We have a product line that can really help customers out that way as well.

We used to talk about five-year planning, and then we talked about three-year planning. Has your planning process shortened or changed over the last year and a half?

- We tried to build a five-year plan, but with the supply chain and the struggles we're having, it doesn't happen. Right now, it's almost day-to-day. Hopefully we can get back on our feet a little bit and get things more organized. And hopefully supply chain will start coming around.

So where do you see the next 18 months?

- We have orders and we have new customers. It goes back to supply and what's going to happen with this Delta variant. Or if another variant comes into the mix in the early half of next year. I don't see the supply chain getting a whole lot better until a year from now.
- I think other supply chain issues, outside of us, will halt [COMPANY]'s goals a little bit. But it's been challenging all around. We've had at least four new customers this year, or customers who used to order this much, which is great.

Are there any workforce programs that have helped you address finding and keeping workers?

- You're not going to be able to go out there to hire and have them step in and hit the ground running. It requires a lot of training. We're talking months and years even to get them trained to where they could be fully contributing. And that's the hardest part. We can get people who can walk in the door and do basic labor, but they don't have a skill set, so we have to teach them. And it takes a long time. That's where we worry about spending six months training them and then losing them. So, the challenge is getting the right labor and getting good resources. We did use a staffing agency. I suppose that started five, six years ago. We almost do exclusive direct hires now. I think we've seen a big difference with that. It really changed our onboarding process.

How did you structure your incentive program to attract new hires?

- We did a referral bonus program. If an employee refers someone, and they come on board and are there for six months, the person who referred them — as well as the employee — gets a \$500 bonus. And then after another six months, the employee who started gets another \$500 bonus.
- We are also seeing a higher retention rate on those referred to us versus those off the street.
- We've got a very good retention rate, but it's just attracting new laborers that we struggle with. And we're starting at \$16 an hour.
- We have done three pay increases in the year that we have owned the company to bring their wage up to a more livable wage from where they were. Our starting wage right now for basic entry level is \$14 an hour. We're not in the metropolis — down here the cost of living is a lot cheaper. Our wage is the norm for that area, for a basic entry level position. If they are interested, we want them to take the time and spend some time shadowing and observing so that we don't hire them and then after a day or so they're like, "No, this isn't for me."



Focus Group 10

9:30 AM, September 29 — Brainerd

As we look back over the last 18 to 20 months, share two brief comments about how business has been different or the same as what you thought it was going to be.

- Pre-pandemic, we were very busy, we were getting probably 90% of our deliveries on time. Then the pandemic hit. We lost about 40,000-50,000 production hours because our people didn't want to come to work. And I think everybody kind of went through that. Since then, we saw about a three-month period where our incoming orders fell 50%. And we struggled with on-time delivery. We take pride over our on-time delivery. We hadn't struggled like that for a long time.
- We probably had 60% of our customers deemed non-essential. All of a sudden, there were no orders there. The 40% that remained still required my full shop. They actually make products. So now I'm sitting with 40% of my business needing all my people. And you can imagine what that looked like. To this day, we have not caught up. We're probably pushing anywhere from \$200,000 to \$300,000 worth of orders that we could ship in a month to the next month. And it just keeps going downhill. Our lead times are long right now, 8-10 week lead times. Part of that is obviously due to suppliers and being able to get materials, components, you name it.
- We're a little different. We're not dealing with OEMs. So, we sell through a bunch of channels. When the pandemic hit, all the resorts were closed. That industry is usually about a third of our business, and it dried up. We do have internet business as well, such as through Wayfair. Well, Wayfair went crazy

because everybody was sitting at home, making money and sitting on their crappy furniture. So our Wayfair stuff went absolutely bonkers. We are strictly a build to order. We don't have inventory anywhere. So, our lead times are normally four to six weeks. They very rapidly went to over 20 weeks. Our backlog exploded, and it's still there. We're still quoting 18 to 20 weeks. As things kind of opened back up, the Wayfair business has slowly died down, and now the resorts and that business has just gone absolutely crazy. Lead times for furniture were crazy. So I didn't feel so bad about us being at six months. And our customers very quickly got accustomed to it. Because it wasn't just us. It was business in general. We're still seeing a 16 week to 18 week, 20 week backlog. We expect our demand will stay very strong through next year.

- Immediately at the onset of the pandemic, the first thing customers did is call and say, "Put things on hold," just like everybody else. Employees were nervous. They were scared. So, we came up with some different plans of what we were going to do and how we were going to navigate those waters. But we still got hit with our lead times going out, and materials started to become a challenge. And of course, not having enough people, like everybody else. So, we've doubled down on our automation side to try and combat that as best we can. Ultimately, we were able to make lemonade with the lemons that we were given.

Talk a little more about supply chain — getting materials so that you can build your product.

- Last year was our busiest and best year ever. And this year is ahead of last year. We really didn't have any supply chain issues until this year. The lead times went from a typical three to six weeks to maybe six to 12 weeks. So, that kind of pushed what we could do in a short amount of time. We've really diversified into different markets. And it's a good thing and a bad thing. It adds complexities — it helped us to balance the slow down in some areas, and other areas became pretty busy. So, our supply chain issue for the most part has gone away. There is still the labor piece.
- We were running what we thought was healthy growth, 8% to 10% going into COVID, and we were meeting budgets and so on and so forth. And then we really only had about two, two and a half months of stomping on the brakes. Surprisingly, it was only the residential side of the business for us, residential construction. Our commercial side never slowed down. It never stopped. Every one of our customers was essential. We never had a missed purchase order or a canceled order. This year we'll have about 35% growth. Last year was a record, and this year will be a record. As of last week, we had 52 open positions, which will put us at about 300 employees. We have turnover, but all our open positions are related to new opportunities. We're getting new customers.
- We have to buy from China and different places. So, we kept a large inventory. We had a six-month backlog so that we could ship no matter what. If we can't ship, then we don't have work. As far as hiring people, it was very hard up until about three weeks ago. Then we noticed a difference in the quality of employees who come in. We were able to hire a tech from another company, but we're still looking for techs.

Let's talk about wage inflation. Is it happening to anybody?

- Yes. The saving grace has been that everybody's in the same boat. And our customers understand that. We've raised wages continually, and that has to get passed on, obviously, in our products. There is a lot of pressures from all sides. And even at that, we're 30 to 40 people short. We're handing out Subway gift cards just to get people to show up. We'll see if there are people who just want to eat, or if they are actually interested in working. We'll find out.

With all the people you brought on board, have you changed your onboarding process to get them into the system?

- We're always looking to improve that. We're trying to develop a better culture for our people. We went from three shifts to seven shifts. The idea with seven different shifts is if you can't work a typical eight-hour day, maybe you can work the weekend shift and still get paid for a 40-day work week. We're trying to be more flexible. We have part-time people now, which we didn't used to have. We've been adding a lot

of automation too, to try to get around this need for labor. And we started that about three years ago. We've been very successful with it, but it's a slow process. It's expensive. It costs us about \$200,000 a piece to automate a punch press. We have about 8 to 10 of them in place right now. And we're dedicating a million dollars a year in automation on top of \$2 million a year in equipment. So we're still spending a lot of money, but automation is going to be a big part of our future. And we just have no choice. We can't count on assembling the laypeople we need.

Did this last year accelerate investments in automation based on the workforce challenges?

- No, we made that decision like seven years ago. So, we've been pushing automation for a long time. We've seen the labor challenges. Our approach to it is a little bit different than most. We're not trying to go after the high volume things. Even though we're bringing in a lot of automation, it still requires a lot of people. When we look at the automation side, that's just part of who we are now. We've got a full automation team on staff to build our own automation at this point. If we wouldn't have made that decision quite some time ago, we'd be on a struggle bus.
- Automation is definitely on our mind, but we've struggled more and spent more time and effort on making sure our current equipment's reliable. That's been a challenge for us. And then investing in more capacity. Most of our machines are fairly automated, but they still, no matter what, require an operator to operate them. For us, it's been about reliability and building either redundant capacity or additional capacity. We're going from a traditional three shift to, in some machines, 24/7. Automation hasn't been as big for us just because of some of the complexities we have, but we're definitely moving in that direction.
- CNCs are probably still better for us and what we do. So, we'll be adding more and more of those.
- A few years ago, we started replacing equipment with high-speed equipment. But we have been also looking at a lot more automation. [PERSON] was kind enough to let part of our team of engineers come tour and see some of the robotic pieces at work. We're really working and putting a lot of emphasis on automation. Entry level positions are what we're looking to automate. We're going to invest a little bit in automation as well as faster, higher speed equipment.

What are you offering benefits wise — other than health care and wages — to be able to approach a broader range of potential workers?

- Probably the biggest thing would be flexibility. We don't run three shifts. We run mainly one shift, but we are very flexible

with start and end times. We literally hire somebody and ask, “Okay, what time works for you?” I have people starting as early as 4:00 a.m. And I have people starting as late as 9:00 a.m. And we have added a lot more part-time people. I’ve added six people who work until eight at night. They only want to work three, four hours a day, but they’ll work in the evening. Because we produce manually built furniture, and it’s not one person handing it to another person, we can be pretty flexible that way. I’d say that’s the biggest advantage we’ve had in finding people — flexibility in hours.

[PERSON] said your supply chain has gotten a little better, so it can’t be an excuse any longer. How’s the cost of the goods and materials coming in? How has that changed?

- I would say cost for our resident supplies has probably gone up. Nothing like steel, but probably about an 80% increase in some of the materials. Corrugate has also gone up. Again, not as bad as steel, maybe 25%. Freight’s double, triple. We’ve tried to push some of our customer base to pick up the freight cost, but most, at least ours, don’t want to do that. Plywood hasn’t really come down yet. At least not on the wholesale level. We struggled with glue this year. We struggled with screws. We couldn’t get screws for a while. Suddenly it dried up, and we went from getting it overnight to it taking 10 weeks. We don’t carry that much inventory of glue, so we had to get creative and we found some other places to buy it.

One of the topics that never seems to come up anymore is health care. Is it just accepted as part of the business?

- Yes. It’s now part of the package. If you’re not offering it, you can’t be competitive, because everybody else in the room has it. So, you’ve got to start looking at different things to add on to that package that can make you more attractive. It just depends on who you’re trying to get in your door. The young kids aren’t as concerned about their health care and disability and all these different pieces. People who have families are a lot more interested in those benefits.

Are there other benefits that just popped up that hadn’t been addressed to attract that broader range?

- We’ve added in short-term disability as part of their package. That’s been helpful.

What about cybersecurity? Is that something you’re thinking more strategically about?

- I guess we’ve been forced in that direction a little bit. Not that it wouldn’t have been something that we need to consider anyway, but we’ve been forced in the sense that we inherited a couple of customers who are military contractors. So anytime you do work for the military or federal government, it’s an absolute requirement.

- Our IT guy is not a popular guy because of how he limits access to certain things. You just have to do it. It’s frustrating. Some employees say, “I can’t get to this and I can’t get to that.” And it’s like, well, there’s a reason.
- Cybersecurity premiums went up 800% for us. Granted, in terms of the overall insurance spend, it’s a relatively small amount, but 800% is a lot of money. Our property and liability insurance numbers are up. I bet in the last three years our overall insurance expense for business insurance is triple. That’s a way higher increase for us than our health insurance premiums.
- I’m not that familiar with IT, but I do know that we’ve increased our training for users on our system — educating them on what something looks like that you don’t want to open. I’m not aware of the increase in cybersecurity costs and insurance. I think we have maybe 170 users who use our system. So, a lot of people there, a lot of opportunity for error. Of course, we restricted the things that they can do and access as well.

Over the last year and a half, have you made significant differences in the way you look at forecasting and strategic planning with five-year, three-year, and one-year plans?

- We are pretty diligent on that. We put a 10-year plan in, and we just adjusted it a couple of weeks ago because we’re not going to make it. But our one-year and three-year forecast plans are looked at on at least a quarterly basis to see where we are. Labor is such a huge part of our work that it has to be part of our plan. And our automation is not quick enough for us. So, we still need 30 to 35 people. We’ve made some progress, but HR and labor is a big part of our future. And I don’t see it changing.
- We’ve been giving a lot of thought to resizing, maybe selling off some equipment. We’re not going to run it anyway. It’s not doing us any good. Instead of fighting it, maybe we need to embrace it and figure it out. I think it’s an efficiency issue. How efficient you’re running obviously includes your equipment. We’ve spent a lot of time and a lot of money on continuous improvement exercises. That’s been a huge part. I know everybody thinks of that. With a lack of people, we just have to embrace the shortage as a fact and try to adjust our business accordingly.

Could the inability to find workers limit future growth?

- For sure. That’s always in the back of your mind. We don’t have a lot of automation. So, I’m looking at what else we can add to eliminate some labor. Our furniture builders are craftsmen; it’s not something that we can fully automate. The inability to find technicians is affecting our growth. We have

millions of dollars in orders that we could ship if we got the engineering done. And we can only schedule so much engineering, so those orders are scheduled into next year.

What's going on with the banking business?

- I think, like everybody else, we're trying to reach our customers in many ways. Traditional banking, going into a bank, is changing rapidly. I have customers who have never stepped in the office. They don't need to. Our bankers, and even our credit underwriters, can work remotely, which is good. Labor is still an issue with us too though. The good part is rates are still extremely low. There's a lot of money out there right now. We're aggressively seeking out how do we get that money in the hands of owners who need machines, stuff like that. And it's going to continue to change. Online banking is becoming more and more popular. Everybody's getting more robust on that. And fraud protection is big right now within the bank because we're trying to protect your money. We're trying to protect ourselves, too. There are still a lot of companies that are writing paper checks. And every time you write a paper check, there's risk. We're having to adapt just like everybody else right now and meet the customer's needs however we can. Banks can only really do three things. We can save you time. We can save you money, or we can make you money. So, we're having to figure out how to be more efficient with that.

Anything that came out of COVID that you think is going to stay with us a while?

- We have a sales team that loves to be face-to-face with their customers and travel. But oftentimes, they might spend three days traveling for a two-hour meeting. So, it becomes inefficient and very expensive. I would say today we have a lot more customer interaction via WebEx or Zoom. We certainly have seen travel expenses drop big time. And I think we're also moving projects along faster because we're not waiting to set up a meeting next week or two weeks from now. That speed to market has improved for us. We'll continue with that method.
- We do the same thing. I'm old school though, so I don't like it. I like to be in front of my customer. Obviously, the efficiency perspective and being able to cover more things in more time makes sense. But on the other side, when you do meet with your customer face-to-face, it's going to have a lot more meaning. There's nothing like looking at your customer in the eye right across the table from you and understanding all the nonverbal communication that is happening. It's hard to do that on a Zoom call. You're not seeing everything. I would hope that interaction between people would never completely go away.
- I've seen a lot of budget cycles, a lot of ups and downs with

business. This all feels to me like the golden age of manufacturing. Precipitated essentially by a pandemic, sales are up, profits are up, you're expanding, you're buying assets. I mean, holy mackerel. Does anybody remember this kind of growth?

- Another is drug testing. I don't know if you all deal with this, but I'm seeing all types of good candidates show up and blow the drug test. And what do you do? You need the person, they're qualified, but they smoke some weed on the weekend and they can't pass the drug test. How you alter your HR programs to deal with that is another big thing we're working on.

Is there anything that you'd like to share regarding hiring strategies or employee development?

- The encouragement I would give you as business owners is to look at how you invest in your leadership teams and your management teams. If you have extended shareholders in your group, how do you invest in them to educate them to be good stewards of your business? That does trickle down into your whole company, and building that culture is really what helps you attract the workforce that you need. You can just keep throwing money at it too, raising the hourly rate, but people are really looking for a lot more than just that hourly rate. Once they get to the livable wage, they're looking for the future. What other things do I get from working there? Do I make a difference? Do I have a path to grow? So, all that you can do to invest in your teams who are driving that culture and company will help you build that workforce and keep them there. And that's difficult to do when you have all the other responsibilities of running a business. But somehow, you've got to slice up your time and find time to invest back into them.



Focus Group 11

2 PM, September 29 — Zoom

What has been the biggest opportunity for you within the last 12 months of the COVID economy?

- The biggest opportunity that I've seen for the company is the change in our sales. We have gone to a more direct marketing approach that covers more people than historically we've had through trade shows.
- We build city transit buses. Right now, because of the same issues that all of you are facing in terms of supply chain, labor, etc., we're currently running 10 a week. So, we're down to 50% on a good week right now. There were many opportunities given to us during COVID, but one of the positive things that we took from it is that when things are running normal, your processes really aren't challenged or stressed much. By having a supply chain issue and half the plant being gone because of COVID, it really stressed out our processes. So, we got a great chance to look at them, identify the weaknesses in them, and then fix those weaknesses so that once things get back to normal, we'll be even stronger yet.

Would you say that you're actually more productive today because of that?

- If we had parts, we would be. I think once the parts start rolling in, yes, we will most definitely be more productive. We'll be running at a higher efficiency than what we have in the past.
- Because of the supply chain interruption and how terrible

it has been sourcing anything from China, domestic manufacturers and businesses that need wrenches like ours have returned to us, even though we are a higher priced, higher quality item than you would ever buy from China. It's overwhelmed our capability. Normally we ship domestic orders within 24 hours, and there's just no way that we can do that right now. So, with cost increases from our vendors and problems finding workers and sickness from COVID, it's been very high stress. We've been open the whole time because we're an essential manufacturer — we supply the Defense Department and the automakers — so it's been very high stress and crazy.

- During the stresses of COVID, it allowed us to see which of our partners both value us and have it together to go forward with. And it's shown us which of our partners we thought might have been something to bank on and yet now showed us we should be looking elsewhere.

Have you found yourself firing a lot of suppliers?

- We're not currently firing a lot of suppliers, but we've been substituting out with our stronger vendors. Other substitutions that we previously didn't make, those secondary vendors have either been able to move into the primary slots across the board or they've gotten to be on parity with that vendor, so they get an equal shot at every choice. Some vendors just haven't been fired yet because there's no replacement. I'm suspicious of a lot of vendors who have a ton of excess capacity in this environment, because I would be concerned

about what you're going to get. But it gives us a clear focus of who our reliable partners are and who they aren't because this is the most stressful time we've been through with our supply chain.

- I would echo the supply chain issues, which have taught us creativity. I think it's given us an opportunity to look at our processes, like [PERSON] mentioned, and we've found some weaknesses there that we can fix to become a better company. Internally, we've learned who we can count on and who we can't. And with vendors too, and our supply chain, who we can really lean on and who we can't. It's made us look more toward automation. If this is the way it's going to be, how are we going to survive and thrive?
- Obviously, things have been a struggle. But one of the biggest opportunities we have had is we decided at the beginning of last year to invest in a capacity project in our largest production lines. The goal was to improve capacity by X percent and to maintain the same head count. We're coming up on that achievement, on that goal, and that's been huge for us. It helps keep our lead time down compared to our competitors, and not having to increase head count and being able to keep that labor consistent is also helping. So, we've seen the benefits from that.
- I would say our biggest challenge has probably been on the labor side. We make letters, logos and plaques for the sign industry, and we're in somewhat of a unique position because our customers are also our competitors. They're small sign shops that can make our products too, or at least some of our products. But as they navigated COVID, they're also struggling with labor. We didn't lay anyone off. As the economy has come back, we're in good shape to be able to meet their needs, and we're having a record year because of it.
- Two things: We figured out a way, as our volume went down, to creatively retain all our employees using the Minnesota shared work program and things like that. We didn't have much turnover during COVID last year and into this spring. Then we also realized the supply chain got tighter and deliveries got delayed for major assets, and our customers started to realize they had to plan further ahead. They couldn't call us and say, "We need a concrete pump truck, and we want this model, and we want it two months from now." They started planning out on a yearly basis. The more planning they can do ahead of time, even though we have long lead times, has helped alleviate some of the disruption that we have in our production. We've gained more efficiencies by our customers doing more planning and telling us. It's definitely making us more efficient.
- Through COVID, our company has been extremely busy and exceeded our sales forecast for the last fiscal year by almost 20%. We've hired an additional six or seven people

in the last year. Our biggest issue is lead times for our major components, and we are trying to find solutions around that. Positively, we never laid anybody off, and we had overtime. Our biggest issue is lead time and not being able to find product that we need.

Is the worker shortage here to stay? Is it something that manufacturers are going to have to contend with forevermore?

- Possibly. A major problem is several of our positions are unskilled. We used to find people who had a basic understanding of what a workplace is all about and expectations, but we aren't finding that anymore. I mean, things as simple as you have to show up on time, you have to show up every day. We've been doing rudimentary training that we've never had to do before. And then in the past, we've been able to supplement our workers with temporary workers, and we can't even find temporary workers. I heard someone else mention that they are investing in automation, as are we. When McDonald's and Costco and places like that are starting workers at \$21 an hour, it continues to push the wage scale and limit the people who are applying for certain positions. We don't know if this is permanent, but it's not great.
- I think we have to plan more. I've changed our business model so I can handle surge and some of the scaling. I'm trying to bring interns in and coach them through their last two years of college or university and win them over to keep growing in the business. I don't have a business that grows 50% year over year, so I can handle a slower pace.

Is your bigger challenge finding and recruiting employees or retaining the ones you have?

- Between those two choices, finding and recruiting. The problem is not necessarily the number of people in the labor pool, it's just that there are several industries very similar to ours in the area, and we're all drawing from the same labor pool. Our challenge is finding a way to differentiate our company from the other companies in the area so that we can attract them. We're getting creative in our recruiting efforts. We do employ an employment agency; we are doing more advertising than just attending job fairs. But even that has been a challenge because the job fairs have all gone virtual lately because of COVID. So, that avenue has even been cut off. And then the other thing we rely a lot on is word of mouth. Hiring your cousin and your brother and sister.
- Filtering out people early on in hiring is what we're working on. We're a direct hire company, so we have our own HR department doing the interviewing, screening. And then we hire on a probationary, but we hire them as a full-time person with the intent to keep them. But turnover's been high this year. Around 60 or 70% of our successful hires come from referral rather than our advertising efforts. And that's really

where we've focused.

Are you seeing people wanting to be mobile with their employment?

- It goes in cycles. When I started here 2009, business had the advantage over the employee. Right now, the employee has huge advantages. They can go get a job anywhere they want — easy come easy go. I don't know how long we can go with these types of price increases, the disruptions in the supply chain and things like that. That's going to hit a wall somewhere. And when it hits a wall, I think people will reevaluate company loyalty again, when the employer is in a more powerful position than we are today. So, it just goes back and forth. It's a matter of how you ride the wave to get to a position that's a little more stable and advantageous.
- Getting people has been a challenge at all levels in our production — from entry level to supervisory level. We get folks lined up who don't even show for their first interview. And our temp pool has shrunk quite a bit, which is why we spent more time on direct hire. We've also recently added a talent manager to our group to help us understand the employee experience, especially in our production area, so we can better understand how to make it better and improve our retention. We're spending a lot of time and energy on that right now.

News stories that we've all been reading suggest that with this kind of employee, it's a lot less about money than it is about inside culture. Are those the kind of things you're looking at?

- Yes, exactly. And how we can improve it. Where are the weak spots for us? We're not all down there on the floor, so now we've got the face for those folks to better understand that.
- We have the same issues from a supply chain standpoint. As far as hiring, I would say that our biggest struggle has been recruiting. Retaining hasn't really been an issue, as we've taken steps to retain our good folks — analyzing our labor rates and making some adjustments, looking at benefits, all that kind of stuff. In the last 12 months, we've learned to work more efficiently, and we've seen a bigger focus on cross training because of COVID. That's helped us improve our efficiencies as we start to at least try to come out of this COVID mess.
- We also have a changing workforce to deal with. Being to work on time, showing up every day, I think priorities have shifted a little bit with some of those folks. And I think as manufacturers, we're going to have to learn how we're going to deal with that. Can we adjust schedules, can we be more accommodating? I think this is a wave that's here to stay.

How much of it is just supply and demand? The workers are

getting a sense that they can leave and go across the street and work somewhere else tomorrow in a way that they never could before. Is that a false assumption? Is it true and a factor?

- I think it's a factor. There's always an opportunity to make more money if they're interested because there's a lineup of people ready to employ them. If you don't have those opportunities for them, they'll potentially go and look for them elsewhere. We've been fortunate we've been able to keep our turnover down. We have lost some people to career opportunities, but if they're going for the right reasons, we've tried to embrace that and just reinforce a culture that maintains high retention. One of the things we've really tried to do is build strong relationships with the local schools. We have 16 year olds in our production plant doing work study programs. And some of them are doing a program called SLAM, Students Learn Advanced Manufacturing, in partnership with some of the local technical colleges. Many of those folks after they're done with those programs have stayed and become full-time employees.

Have masking and vaccine mandates become internal HR issues for manufacturers?

- Yeah, there have been some issues. We followed the Walz mandate and we had some issues, but the fact that it came from the governor gave us a little bit of a pass. I think it's terribly sad that it's become so political, and that's what it was here too. For the most part, we're not masked now, and we're fairly spread out as a company. We don't have a lot of people very close to each other, so it really works. And even when we did mask, everyone was able to take off their masks in their work area because we were spread out enough. So it wasn't the issue that it could have been. And it certainly wasn't what it was for some companies.
- It has gotten very political, and some of our employees are very against it and very adamant and speak up very loudly. Although they've never said we'll walk, it wouldn't surprise me if they did.
- We put the mask order back in place probably about six weeks ago prior to everybody going back to school because we were a little concerned about the uptick. We have decided we were not going to ask about COVID vaccinations, but we did provide vaccinations back in April. Cub Pharmacy came in, and we had over 50% of our staff vaccinated at that time. I'm concerned that if we would say, "You need to provide me your vaccination card," we would have people leave. I know there have been some people who strongly feel that it's their choice to get the vaccination or not, and that they would leave us. We have had more recent turnover just because the job market is so hot, and people can go somewhere else. We'll get somebody who accepts an offer, and they'll get an offer the next day for a quarter more an hour and they'll accept

that offer and go there. So, we're towing the line on whether we ask about vaccinations or not, but we're taking the more cautious approach by wearing masks, social distancing.

**Is automation going to play a role in increasing productivity?
How is that going to help alleviate the worker shortage?**

- We're a low volume, high variability shop, and so our focus is on good equipment. As we add more complex equipment in, it just moves labor from factory to engineering, where it hasn't been easy to get labor either. We had a welding robot, and we actually kept it for less than a year because of the amount of labor and engineering labor it took compared to what we could get with welders. We decided it didn't make sense. For us and for high variability, I see it as very hard to automate your way out. But I think manufacturing, engineering and design processes are where we've seen a lot of gain. Our productivity's up about 15% this year per hour worked, and it's all from how we assemble — the sizes of batches we run and things like that — and that's where we've seen the easiest gain, rather than automation.
- I come from two decades of automation, developing automation equipment in an aerospace and semiconductor, and I don't think you automate your way out. You have to understand how you'll adjust your workforce and your processes to have automation. It is probably a bigger task than many people estimate. Our organization is very much like [PERSON] described, sell based variability on everything we do, so automation is not going to work for us.

Last year, cybersecurity became a huge issue in focus groups. Is cyber on your radar as a significant concern?

- Yeah, absolutely. We were hit a year and a half ago, just before COVID, and it's unfortunately one more thing to worry about. We're doing all the things that we can do, but I think it's something in our society that's here to stay. I think they're hitting us smaller manufacturers easier. So yeah, IT and security is a huge issue, absolutely.

What was the lesson you took from your incident?

- Probably that no matter how hard you try, you're not going to avoid exposure of some kind. I would say it was a unique incident. I don't know what we could have done to stop it except just being more diligent. Everyone being more diligent.
- We are seeing these events more and more frequently, even with the Targets, Home Depots, large Fortune 500 type organizations. And they aren't necessarily targeting you. When they send out these malware infected emails, they're cascading them and casting a large net, or using another analogy, throwing as many bobbles in the water as possible and seeing which one bites. And by bite, meaning your

employees click on a malware infected email or attachment or link. So, what we're telling people is you'll never be 100% breach proof. What you can be though is resilient; you can minimize the impact it will have on your organization. Having a plan in place, focusing on preventative measures, multifactor authentication, training your employees, using SOC monitoring, effective backup — those are preventative ways that can improve your resiliency. I think it's a misnomer to think that you're going to be breach proof at any point. The challenge is that the bad actors always seem to be one step ahead. They're nimbler, they're well-funded, and it's very, very difficult to keep up with where they're at from a sophistication perspective.

- We have not been burned yet, but I expect that it's going to happen someday. But what we have seen is that the insurance carriers are becoming much less tolerant. We must have the right things in place. But also the cost of coverage has gone up dramatically in this last year. So, while we haven't had an incident, we've had to do more, and it's costing us more to protect ourselves.
- It's more of a fear for me right now, especially as a small business and looking to subcontract out people to help. It's a customer issue for people we have that can't allow us to be attacked. So, it's one that is on my mind. How do I find the right organization, that helps you protect the company and its customer base?

Talk about where you see supply chain operations evolving in the coming year. Are things going to settle down?

- I don't see it ending for at least another six to nine months. That's what I'm hearing from my supply chain. I have two of my major vendors up in the Twin Cities area who have told me just today that the one company needs at least 20 people, and they still won't be at full capacity. And the other one is telling me they need 12 to 15 and they'll still probably have a three- to six-month backlog. So, I don't see it changing anytime soon. No.
- I wish I knew the answer; it would make my forecasting a lot easier. I'm working on one of two scenarios. I think the supply chain is going to taper back to normal, or I think it's going to come crashing down. We have a stockpile of parts, and we're still ordering because we're going through the stockpile of parts so fast and we don't know when our deliveries are going to be. We've had some people who cancel orders, but people are still picking them up. But the end of that is unclear to me, and I think that's going to affect the supply chain. Generally speaking, we all ramp up and overshoot and then it takes a long time to work that inventory out of the supply chain once we're on the upside. The question is, are we on a 1990s long-term surge, or is this a short blip on upwards? When the supply chain is increasing pricing at the rate it is, where you

have multiple five to 10% price increases in a year and they don't phase people anymore, eventually people are going to run out of money. People can't pay unlimited amounts of money for a generator or anything else. So, whether that tapers slowly or tapers quickly determines how painful it is on the manufacturing side.

Where are you on the economy in general? Do you think we're sitting at some economic vulnerability as manufacturers?

- That's a tricky one there. That would take me a while to really formulate a good response. But as a rule, I would say the economy is fairly strong. I mean, what we're seeing is strong. Everybody knows about the supply chain issues, and everybody knows about the labor issues. I think I heard six to nine months, and my guess would be six months to a year, maybe 18 months, that things will start to click with the supply chain. I'd say that the economy we're involved in is fairly strong.



Focus Group 12

9 AM, September 30 — Zoom

How has the COVID economy affected customer relationships? Do you deal with your customers a little differently because of it, and will that be permanent?

- The COVID impact on our relationships with customers has been quite interesting. Obviously, we don't have as much face-to-face as we previously did. That is starting to change though. We're seeing a lot more customers interested in coming to visit us, and part of that is because we are so far behind, just absolutely overloaded. Our current demand from customers is at about 150% of our maximum capacity. We are a contract manufacturer, so our stuff is repeat orders. We're not taking on new contracts; it's just the current demand from our current customers. We all have become more comfortable in Zoom meetings and thinking that we can get a lot more down than we thought we could previously.
- We're trying to renovate our newsletter but also thinking through what other methods of communication and contact we can have to continue to be a supplier of choice to many of our customers. So, it's causing us to act differently. We're finding customers are easier to work with because there's an understanding that we're not being dummies about running our business. It's just the demand put on our industry. We get back to a more reasonable relationship with our customers, and customers with suppliers. So, that's one thing that we're seeing as a positive, and I sure hope that remains constant as we get out of COVID.
- We build conveyors and material handling equipment. We

too are extremely busy right now. We're behind schedule, and there are a lot of reasons why, but as [PERSON] stated, the customers seem to be more understanding. Supply chain issues, workforce issues — several things have put us behind schedule. Right now, we're not dealing with COVID issues as much as we did a year ago. But it's still out there; we still have those issues to deal with occasionally. We are starting to get back to more face-to-face meetings with our customers. Our sales guys have been traveling to trade shows, but they're saying attendance is down. The thing that I see coming out of Zoom and Teams meetings is the flexibility; they're very common right now with everybody. Plus, it gives us the flexibility to stay here, it cuts down on traveling costs, all of that. I think that that's here to stay.

We've been reading and writing in the *Enterprise Minnesota* magazine about the coming permanence of the Zoom sales call. Some customers say they prefer the sales call via Zoom because it's so much more efficient. But then again, as you said, it removes the personal touch. Where are you on that?

- I know our salesmen are split on it. They want to get out there, and they want to visit customers. So, what they're doing right now is basically reading the customer. If the customer doesn't have time for in-person meetings, but will meet on Zoom, that's what they're doing. If they can travel, and the customer allows it, they will.
- It's been very uncertain with our customers. We've had customers who say they're not going to buy at the normal

levels, and then they change their mind in the middle of the year and order twice as much as they had previously. We've had other customers who say they're going to order high volumes, normal volumes, but it's been slow to actually get the orders. So, it's been very uncertain with customers.

Do you sense that Zoom technologies are going to take hold in the future of your sales relationships?

- Yeah. We use Zoom quite often and anticipate that will continue to be a prevalent thing. We have a trade show next week that we're going to, and while all of our customers are going, we expect that it will be well attended. So, that will be good to still have some face-to-face.

With the worker shortage, do you see a different attitude among young workers coming into the system?

- Our challenge is their unwillingness to comply with any type of mandate related to the virus. So, when they hear that they may need to wear masks, often some of them will retreat, particularly those in career technical programs. Those students would rather go work the farm and sit it out until all these mandates are over with. And I think that's had a real impact on us. We consistently have done a good job in retaining the students who do come to us, but we have heard from them that if we were to force vaccinations or testing, we would lose a good number of those students in those programs. And so, that's the attitude.
- And the learning environment obviously changes when you require masks and recommend distancing. So, I think you're right, [PERSON], that group has not been particularly excited about restrictions of that nature. But the ones who decide to stick it out, they're a resilient bunch and despite what they're having to go through while they're here, they're remaining, overall, pretty positive. They're a motivated group just trying to learn as much as they can about welding, machining, and all the other manufacturing programs we have. Like many of you, our customer is hard to reach too, and we're just now starting to get back into the high schools a little bit. So, reaching students has been a challenge for us too.
- We have incredible supply chain problems; we keep running out of stuff every day. We've also had three rounds of price increases. The content of the conversations we've been having with customers is focused on price. We are not able to take on any new business from a raw material point of view. So, my sales guys are not allowed to call on any new customers right now. They're not allowed to take on any new business; we just forbade that. The cold calling piece of it, which people like, we don't do anymore. So, that's obviously a big change for us right now. We hope that the supply situation would get better, but since it's not, we're changing the narrative with customer meetings. We're really trying to be a little bit more

proactive on helping them with all the supply chain problems we've got going. Most of our customers don't really want the whole Zoom thing.

What's your experience with the politics of mask wearing and vaccine mandates? If you mandated vaccines, would you lose employees?

- Yes. We would. They're asking a lot of questions regarding whether a mandate is coming. And expressing their desire to go elsewhere if that is implemented. A little bit less for masks, but there are still some who would leave.
- It's a challenge for us. We got to the 70% of employees vaccinated, and our rule was when we got to 70%, we'd follow the governor's rule and lighten up on things a little bit at the factory. When I tried to get above 70%, the 30% of employees not vaccinated came up to me and said they wouldn't get the vaccine and will go somewhere else.
- So, we have a similar experience. Our employees are asking regularly about mandates, and we have a segment of our population that would easily go somewhere else if the vaccine was mandated. They're watching our every move.
- There's a lot of passion around it. I don't pretend to understand it, but I think there's a lack of trust in the system. And the younger employees say, "What's the big deal? I don't need to do that." At one of our locations, we did have an employer state they were going to mandate vaccinations, and we immediately started seeing applicants come in from that employer.
- Same exact thing for us. There's a lot of passion around the COVID issue. I know we would lose people if we mandated the vaccine.

Is the worker shortage something that manufacturers are going to have to cope with forevermore?

- I think it's been here for quite a while. If it's going to change, it's going to be a little while yet. So, I would say for the foreseeable future, yeah. We're going to have shortages, and we're going to have to figure out alternative ways to work around it.
- I hope it's not forevermore. But it's going to take a while to normalize some things. I don't think 2022 will be different. The price of steel has been the biggest issue for us. We use a lot of it, and right now customers are willing to pay extra, but I don't know how long that will go on.

How about the people part of the equation? Are you leaving business on the table because you can't find enough people?

- Yes. Certainly. We had a slow start to the year because of some fickle decision-making on our customers' part. Since the middle of the year now, we're just overwhelmed with business and volume and like everybody else finding it very difficult to move the needle with gaining employees. We're more focused on retention than anything at the moment — doing everything we can to retain who we have. If we can gain some employees here and there, we will. But we're not very confident that we're going to have big gains in employment.

What's the bigger challenge, recruiting new people or retaining the ones you have?

- Recruiting. We have some good incentives to retain employees with, being an employee-owned company. But recruiting is hard.
- Yeah. For sure. I mean, we certainly got crazy busy last November with compulsory overtime and all of that. A lot of people are just tired. So, we've got to be very careful about that. We certainly had to raise wages a lot. And then it has been hard to find people. Although, in the last month we've seen an uptick in applicants, for sure. Maybe because the stay-at-home money is disappearing. I don't know. We certainly saw that at our location in Kansas City. And our staffing agency said that was one of the causes.
- We thought the unemployment money would have a bigger effect. In the last month, I've had more no-shows to interviews than I've had my whole career. I don't know what people are doing, how they're surviving, but it's crazy. HR will do a pre-interview on the phone, so they spend their time doing that, but the applicants won't show up to an interview. So, recruiting has been very difficult. We've had to adjust our wages, and we have other incentives where people can work overtime, flexible hours, that sort of thing.

Which is more compelling to those new employees, the financial aspect or the cultural aspect?

- I think there's a little bit of both. Some people are looking at getting rid of a commute so, there's that. Some people are tired of what they're doing — if it's a seasonal type of job they want something more permanent. So, we've seen a little bit of that. But then there are people looking for more money.

Has nurturing workplace culture become more meaningful as you struggle to put people on the floor?

- We certainly have a greater focus on it. We think it's an advantage that we don't want to get lazy on, so I can't say we're doubling down, but we certainly are paying attention to it. What we're finding is where there's a values alignment, retention is really good. The culture is extremely important, and it's a real sticky for the right people. But not everybody

who is coming is coming for the culture.

How important is automation to improving your productivity and overcoming your workforce challenges?

- Going forward it's going to be much more important for us. We have a ways to go on that. We have some gaps in what we could automate, so that's going to be a focus going forward. We're in the midst of working on plans to further automate some things.
- We looked pretty hard at automating some of our end-of-line packaging and that kind of stuff a couple of years ago before COVID. It certainly is more attractive now for us to do it, knowing how hard people are to find, how expensive they are, and how unreliable some of those positions are. I would think there's a huge opportunity for robots just to replace a pair of hands in a lot of our opportunities.

Do you see schools playing a role in helping companies prepare workers for the workplace and helping them become more productive through automation?

- We've employed a number of tools or initiatives to try to bring more students into our manufacturing programs. Everything from promoting the industry differently to reaching kids at a younger age to scholarships to offset the cost of an education. During COVID we learned that the area employers were vital in helping those students get across the finish line and graduate. So somewhere in there we need to figure out how to package and work together. A student comes to us, they're in our program, they're earning credit towards their reward but they're also able to work and gain actual workplace skills simultaneously. Not all communities have those kinds of relationships with their industry partners.

As an economist, do you envision an end to the way COVID is affecting us? Are you bullish, generally, about the economy?

- That is a question that I've thought about a hundred times and came up with zero answers. I would have never thought the bubble that hit after COVID would last this long. I think everybody is so dizzy with what's going on, and nobody has a perspective that it's going to slow down. My concern is with the supply chain being so fragile, and inflation, there's got to be a backside to this that isn't pretty. So, I'm more concerned than I am bullish. This should be the time of the year that we're asking all our customers, "What's your forecast for next year?" But we're not asking them a thing because it doesn't make any difference.

Back to the previous question about automation: We've been using robotics for 20 years, but now we're automating stuff we never would have thought that we would try to automate. So, yeah, I think the economy is going to be bullish, but I'm

nervous about the backside of this with the inflation because people are just willing to spend money crazily right now.

- It just seems like it's fragile right now. Some other event might happen, and it could just kill it off again like it did when COVID first hit. So, we're trying to work through it and get as much work as we possibly can. Our lead times are out a bit right now, and we just don't know where this is going to go.
- I would agree. Normally we worry about the sales funnel and what next year's going to look like from a budgeting point of view. We're not really worried about that at all right now. We reached out to our customers last week, just to try and get a feel for the fourth quarter, and some of our kitchen cabinet customers who would normally be out 12 weeks are out 24, 26 weeks. So, they're saying they want to make 20% more in the next quarter because they just want to get into their backlog. We can't supply them 20% more. We'll be lucky to supply them 80% of their normal amount of paint.
- We had to react to COVID as well, and we had to cut back and allow some attrition in our workforce. And now all of a sudden, everybody wants to go back to normal levels and even higher levels to get caught up on their own demand. Our capacity is constrained because the workers aren't there. So, we're booked out now through the middle of next year. We could grow if we had the workers, obviously, like everybody else and get caught up, but we're just going to be constrained and sucking through a straw for a while.

Are you tempted to fire some of your low-margin customers?

- Yes. It's easier to say no to non-mainstream, small-volume, one-off type deals. There are some big whales who want a lot, and it's a lot easier to take the big business right now, for sure.
- For sure. When we have limited raw materials, we're making sure we're putting them into the most strategic or highest margin products. We've had to spend a lot of time working out who we're going to sell to, and the low margin guys are not going to get that product. Or they've got to take a big increase. That's been a big exercise for us this last year.
- We're looking at our product line and what's the most profitable. And those are the types of jobs and customers that we're going after. We have a lot of great relationships with long-term customers, and we don't want to throw those aside just for the quick spin that somebody might be offering. But we certainly are looking at the low-margin business. We're encouraging those customers to try to find a second source or something. The hard part for us is as we've been tempted to get rid of some customers, our industry is so swamped we just don't feel right about throwing somebody out because we know they have nowhere to go.

One of the big surprises in the focus groups last year was the rise in cybersecurity issues that manufacturers were facing. Has anybody had any of those issues that they'd like to talk about?

- I don't really like to talk about it, but I will. We had a ransomware issue about a year and a half ago. We got hacked, and it was a company from North Korea. We put all hands on deck to see what we could do, what files were backed up elsewhere, and we got back about 80% of the information we needed. The problem is the 20% we couldn't get to was our inspection data on automotive customers. And that's pretty important. So, we ended up paying the ransom, and we got unlocked. So, yeah, it was a crappy week trying to get things back together. We thought we were in pretty good shape prior to the attack, but boy, we ramped that up in terms of testing and other things. Now we're constantly putting out teachable moments through phishing opportunities. The scary part is even with all the training, every month we'll get a report that shows two people or 10 people clicked on an email that could have put us back in the same situation. Now, hopefully, we're a little bit better on the inside, but it's a scary deal.
- We haven't had any problems. I think our consultant has it under control, but I guess we'll find out one day. We've added a lot of ransomware insurance to our core program that we never used to have five years ago.
- In hearing some of these stories about the cyber issues, our college has added a cybersecurity program. It's online, it's topnotch, and I think the last step for us is to get the word out on that. But we are poised to produce more IT professionals with cybersecurity as an emphasis in their area of training.



Focus Group 13

1 PM, September 30 — Zoom

Please share the one thing that you're hopeful will improve in the next year of the COVID economy so that your company can grow profitably.

- The thing that I'm looking forward to is getting people back in the workforce. Hiring has been one of the biggest challenges overall, and right now material challenges have a stronghold on everybody. Not only is the price going up, but we aren't able to lock in contracts that are reasonable for a small manufacturer — or a large manufacturer for that matter. When is that bubble going to pop? When are we going to get people back in the door? When is material going to at least level out instead of continuing the upslope so we can actually plan and budget for growth rather than just trying to keep our head afloat with rising costs?
- Our top three concerns I would say are people, materials, and price. Kind of exactly what [PERSON] just mentioned. In the construction industry, we do have fixed-price contracts. With the materials though, we would have been able to lock in six-month pricing from a lot of our vendors. We can't do that anymore. The price escalation and the tumultuous material markets are almost worse this year than they were last year in this industry. I shouldn't say almost — they are worse this year than they were last year in our industry. Especially in the wood markets. The thing that I would like to see improve is number one, the labor side. We're probably about 10% understaffed right now from where we would like to be. We are trying to install a second shift in one of our lines to help with that. So, that would be my number one followed closely

by a moderation of the pricing markets. I hope getting that stabilized will happen over the course of the next year.

- To echo everybody else, we are probably close to 40% understaffed, and I know that percentage increases since we have fewer people, but we're looking to bring on probably six people in the production side and two salesmen. So, being able to attract those people is a concern. The second thing is price stabilization. We sell our product to a church or a cemetery. And we've been able to adjust our prices as we've seen the price increases come from our vendors. But we do have some catalog items, and nobody is real happy when the price goes up.

Everybody is having trouble fulfilling orders and finding price stability. Are people pushing back more than you'd expect, or are they being more reasonable?

- They are being pretty reasonable. We have a long lead product. So, even when we get a signed contract, our lead time is still 20 to 28 weeks before delivery. We try to get our materials ordered for that job as soon as they sign a contract. One of the things that we've done to protect ourselves a little bit, and also give less pressure to the client, is instead of a contract that's good for 30 days or 60 days, the contract is good for 15 days because I've got a 30-day window from my own vendor that they'll offer.
- Our market is predominantly office supplies, but we also make quite a few light industrial products as well. The chal-

allenges in our business are very similar to what everyone is talking about. Labor, of course, is everybody's issue right now. We're operating at about 90% of what we would like to have in terms of staffing out on the production floor on a given shift. No one has mentioned this, but we also have absenteeism every day that's a little bit higher than what it historically has been. I think COVID is driving some of that.

We preach every day to our employees on how important it is to keep one another safe. We encourage them if they're not feeling well to call in and not come to work if they think there's any chance that they might have COVID. I guess we were part of the problem, but on the other hand, I think sometimes employees take advantage of that as well. That's an issue with the labor side. On the supply side, it's a challenge to get material and get it on time. That's more of an issue for us than price, although we are seeing price increases on a regular basis. A lot of our material comes from Asia, and it's a challenge to get it through port.

Are you leaving any sales on the table right now because of that confluence of circumstances, or does it just delay delivery times?

- Well, fortunately, our customers have been pretty good about working with us on it, and we haven't lost orders because of delays. But that's not to say that couldn't become a situation. We're coming up on the holiday season, so a lot of product that's going through the plant right now gets added to the shelves for Christmas. That could be an issue because Christmas will not be delayed.
- I would completely reiterate everything that everyone has said here. I would add that we are seeing a huge brain drain in our industry as well. People retiring, people changing careers. So you add to the labor market, you also have this brain drain of talent that is starting to leave. Couple other things I would add that weren't mentioned, I think we're seeing a lot of private equity come into our industry that wasn't there two, three years ago, as companies are healthy with balance sheets. We've got a lot of competitors, other companies that are starting to get bought out by private equity, which is changing our industry.
- We never saw a COVID slowdown except for one week, and we've actually seen a lot of customers dramatically rethink their supply chains in the last year. Several customers of ours have consolidated factories and have looked at doing more permanent outsourcing, which has really put a stress on our business. Frankly, there just isn't enough capacity right now, which is causing a lot of other issues. We are rural Minnesota, so like everyone else on the personnel side, there are labor shortages. We also have a housing crisis and a daycare crisis, which is keeping people away. We're not only seeing absenteeism, but we're noticing more and more people aren't willing to work overtime, or they are restricted to 30 to 35 hours a

week because they have to run kids, tend to parents, etc.

We've been fortunate. We've added 42 bodies this year. We have a few more to go. The supply chain has been mentioned, but even the lead times that we are getting quoted from our subcontractors, whether it's paint or hardware or steel or a gasket or something, are stretching 30, 40 weeks, which traditionally we're used to two to four weeks. This disruption is not going to go away overnight. This disruption is going to last well into next year. I think the same thing with inflation — it isn't going to go away overnight. For the first time in maybe 15 or 20 years, us manufacturers have the upper hand in pricing with some of our larger customers. We can get our price increases that they then have to pay. There isn't another choice.

- I work in human resources, so one of my main pain points would certainly be staffing. But another pain point for us has been with supply chain. It's not when we're going to get it, but if we can get it at all through our current vendors. We're having to reinvent the wheel and start new contracts with new vendors who are also likely in the same boat as our current vendors and are also running into issues of not being able to get the product.
- Our biggest challenge hands down is supply chain — from pricing to lead time to vendors who can't commit or give us any kind of upfront notice. On the labor side, we have been challenged for years with the lack of finding workers with a good strong work ethic. We're still struggling with that. We're about 10% down from where we'd like to be, about 12 positions. But what has really hit us hard from the financial side is the cost of that labor. And I'm sure everybody is challenged with the competitiveness going on out there. It has forced us to jack up our labor costs substantially and unfortunately, we are not in the position to quickly pass on that cost increase through our large OEMs.

We read a lot about the changing attitudes of employees — where they want to work, what they want to do, how they want to do it. There is an increased emphasis on culture and those kinds of things in the company. People care more about what you do and how you do it than how much they make. At the same time, everybody has to jack up their wages to stay competitive. What's more important to emphasize to keep your workforce going?

- We're doing a lot of what I call soft things interlay to try and keep people motivated. We're doing a lot more lunches, food, treats, you name it. We are offering double-time. We're doing everything we can to try and keep people motivated and interested in being here every day. So, culture and dollars are very important for us right now.

How do you look at forecasting for your company compared to

the way you did 18 months ago?

- You hit the nail on the head; it's very challenging. Fortunately, we've hit the majority of our forecasting and our numbers. Unfortunately, some of that profitability wasn't there that was forecasted. Sale numbers are there, but the profitability percentage of that has been a challenging part. As far as forecasting, it is a constant and daily update of spreadsheets and material pricing and single part pricing. Next quarter, if material drops, then we'll make all of that up. But are orders going to taper off? We don't know. We used to not spend an abundant amount of time on it, and now it is a full-time job for multiple people — updating spreadsheets, getting new quotes and RFQs. I keep my hair short because a lot of it is going gray now.
- In the construction industry, we're a lagging indicator in a lot of ways in terms of the forecasting. Especially when you have longer-lived projects. Probably one of the biggest challenges related to forecasting for us is being able to manage all the changing lead times and know when it is that we tend to supply X, Y, and Z. And then being able to communicate what the timeframe is to the customer because a lot of these projects are boots on the ground.

We've doubled the amount of inventory that we have taken on in order to be able to react to our customers and keep them moving from a building perspective. I think our biggest challenge from a forecasting perspective is managing the changing lead times. From a sales perspective, sales forecasting is relatively easy for us because of the long duration of the contracts in comparison to the fulfillment side.

- I can relate to the inventory side and the increase in the lead times. I've doubled my standing inventory of the raw product that I use to make our various products.

We're in an economy where jobs are plentiful, which is not always common. And the attitudes of workers seem to be changing. If they don't like something, they can go across the street and get something else the next day. How has that affected your ability to recruit the kinds of students that you want and the kinds of training that they expect? Are they looking at getting life-time training from you or are they looking at finding ways they could get a foot in the door and then just play it by ear until they find something they like?

- Our state system is down about 8% in enrollment in our two-year schools. But we're actually growing again, and we've had year over year growth for the last few years for different reasons. Our average college student is 25 years old. So, we do get a lot of students right out of high school. But those non-traditional students are the ones already working somewhere, maybe part-time, and they're coming back to school. Our enrollment in our manufacturing areas is under more

pressure. That's not growing. To some degree, they can walk off the street and get a job right now. Long-term, are they going to come back to school or not? I'm not sure yet. We'll see how long this thing goes.

From an HR perspective, talk about the power of COVID related to masks and vaccines and how it affects inside cultures at companies. Will employees walk and find a job somewhere else if these things are mandated?

- If we're forced to mandate the vaccine, I fear that day because we have a very strong workforce that is not supporting the vaccine. We are only about 35% vaccinated as of today. We've been very fortunate because our COVID exposure and breakout has been very minimal. We have not lost a single day of operation. We've had a few teams down for a few days, but that's about it. So, for a team of 120 plus, we're proud of the fact that we've been able to implement a lot of safety features internally and keep people safe. We are a low-skill, unskilled labor force. So, it is much easier for our employees to go find a job someplace else. Especially with the competitive pay that we're facing in our area. I really do believe we will lose a significant portion of our workforce if we're forced to go there.
- I've been in manufacturing for many years, and I can say that in my past 10 years' experience, I am seeing the loss of work ethic. It used to be that if you had an employee in his forties or older, they were thinking more about a career. Now that 40-year-old plus person is walking out the door just as fast as the 20-year-old and is looking for the next opportunity, thinking short-term. They're not looking at the bigger picture. I wonder what it's going to look like 10 years from now when that 40-year-old is 50 and those 30-year-olds are coming up. I feel like our workforce is deteriorating faster than we can keep up with it.
- I echo the same comments — we would certainly lose employees with a vaccine mandate. We've had people who have been very upfront since President Biden's announcement on mandates that they would leave. We don't track our vaccination percentages, but we have certainly encouraged and hosted numerous onsite vaccination clinics. But it's the employee's choice at this point. We have taken precautions with excessive cleaning, making sure we have hand sanitizer available for employees, things of that nature. We'd have a lot of disruption to our workforce with a vaccine mandate.
- Early on in COVID, we decided we were going to treat our employees like adults. We think they're old enough, smart enough and educated enough to make their own decisions. We've supported each of our employees and the decisions they've made based on their situation with COVID. And that is our continued stance. The one thing we don't want to have happen is the government intervene between employer and employee. I think the government is walking a very fine line

with how they're playing this game and using OSHA because OSHA doesn't get involved with those types of issues.

Are the effects of COVID with us forever?

- I believe we're going to be dealing with this for quite a long time. Employees who want to stay safe resent the fact that others are maybe a little bit more reckless or are willing to take more risk. But on the other hand, I think everybody is an adult, and we need to allow people to make their own decisions about their health. That's been our position. We've done everything we possibly can to keep our employees safe. But I tell my employees almost every day that this isn't going to be going away anytime soon. So just be safe.

Is the shortage of available workforce a fact of life for manufacturers forevermore?

- I think so, yes. In general, the manufacturing community is going to get hurt going forward just due to the nature of how the world works. Now, nobody wants to work with their hands or let alone work in general. When the free money distribution and the stimulus checks stop, we'll start to see some labor force come back into all realms, not just manufacturing. We need to do something different to be bright and shiny and to attract the young talent. The good thing is that the newest generation coming out of high school is circling back. A lot of them want to work with their hands, and a lot of them want to build things.

We're starting to see manufacturing courses, shop classes, and woodshop going back into high schools. Manufacturing as a whole is going to be more difficult to staff, but I do think with the end of the stimulus checks we'll start to see more people interested in earning a paycheck. It's kind of a double-edged sword. Are we going to deal with it? Yes, absolutely, because we're manufacturers and there's a whole new generation of people out there. Flexibility is number one. You want to start at 5:30 a.m.? Great. You want to start at 9:00 a.m.? Awesome. A lot of the newer generations are really looking for that family flexibility, their time off, and their vacations. They value that more than working 40 hours a week.

Do you think it would be wise to improve your productivity through automation?

- We're a small company. And with some things I'm asking the question, why am I paying this person to do this? In-office, I'm looking at things that I can automate. On the production side, there are definitely improvements that can be continued to be made. We've got a new piece of equipment where I took a three-man sell and made it a one-man sell. Not that I'm necessarily able to cut a lot of costs, but I can then reallocate those man-hours into the next area that was short.

- I completely agree. This labor market is going to accelerate the push to automate. Even if it's a cost-push, if it makes the labor situation better and you're able to reallocate resources, that business case looks a lot better. If it's a piece of equipment that A, we can get and B, we can take a two-man job and make it a one-man job, it's something we're looking at. We're not planning on having that reduce our workforce at all. It'll just make us increase our capacity with the workers we're able to have. This labor shortage is going to accelerate the adoption of these types of automated activities. That and the fact that they're now getting more and more cost-effective as well.

Tom Mason:

I'm jumping around a little bit, if anyone wants to contribute something, just give me the hi sign and we'll do it. But in the meantime, Joe, I would like to ask you, as we look at diminished numbers of potential workers coming through your program at Pine Tech or all programs into the workforce an added need for automation on all this. Pine Tech's always been innovative in how it looks at all these things. Does that change your model at all, your model of delivering tech education to Pine County and elsewhere?

As Zoom sale technologies become more entrenched as an everyday policy, are the costly travel of in-person sales or trade shows becoming less compelling?

- Maybe for other industries. We still do trade shows, and we're out in Ohio next month doing a show. We try to hit that a couple of times a year at different locations. Our industry, for whatever reason, is hands-on, touchy-feely, so I think it benefits us to go out in person versus doing a Zoom or Teams session. We still do a bit of that, but we don't seem to have the same response. We seem to attract clients when we can get them in-house, show them what we do, how we do it, and try to help solve some of their problem products.
- I think Zoom calls are going to increase. With our company, we have done sales calls over Zoom. In fact, we made a purchasing decision for some new assembly equipment by seeing the demo on Zoom. So yeah, I definitely think more sales will be done electronically.
- I think our sales model is a little bit different for our specific business, but I would say that in the construction industry, there is a lot of relationship-based purchasing. People know who they like to buy from and that type of thing. So, I don't think we're going to get away from the in-person anytime soon. The Zoom calls are very good now because most everybody is comfortable with the medium. They're a very good replacement for quickly touching base or clarifying something. And I think Zoom calls will replace the quick touch bases, but the trade shows, we have those in our industry. I don't think they're going to go away.

One of the surprises during the focus groups of last year's poll was the rapid rise in the urgency around cybersecurity. Has anyone had any experiences that might add to that urgency?

- We brought our IT in-house over the last year. The service providers out there are getting worse and worse as the labor shortage hits everybody. It came to the point where we couldn't wait days and weeks for a simple IT answer. So, we cost-justified bringing IT in-house. It's been a huge boon for all our employees to just get service immediately.
- We've been fortunate enough to not fall for any of the phishing scams or any of that. We do have one person internally who coordinates all of that.
- We've pulled in a few different vendors to streamline our processes a little bit. And we did bring in an individual to help with process efficiency and look at lean manufacturing.
- I think people are recognizing that a lot of us have been doing things a certain way for a long time, and I'll speak on behalf of the college, we didn't think about it as a vulnerability before. Now you're seeing it through a different lens. Our cybersecurity graduates would go work for IT companies where now they're working more and more for manufacturers.