

-- Speaker 0 00:00:04 Make It Right. The manufacturing podcast, welcome to the make-up ride podcast. I'm Janet Eastman. And this week on the show, it's part two of our conversation with Justin Stephens of Kaitech Automation. We've been discussing the value of automation to your factory floor. And this week we'll look at the redeployment of re-skilling of employees. But first, Justin's going to talk about the ROI

Speaker 1 00:00:30 You look for under two years return on investment. So like we've got a palletizer we're just working on, that's got a eight month ROI period. Okay. So within eight months there's \$300,000 investment's going to pay for itself.

Speaker 2 00:00:50 And what about the health? Yeah. That's like, that's, that's a great return on your investment, right. I'm also curious too, because you're talking about palletizing and, and the lifting of some things that could be quite heavy for people. So what about the health and safety gains of automation? Like Kevin, you may have seen this in places too, right? Like there's huge boxes. People are lifting and doing it with their backs. There must be a health and safety and like a workers' comp or something that's going on with this as well.

Speaker 1 00:01:20 Ergonomics was a huge part of any sort of factory work. And whether that's loading rolls and rolls of material onto a production line, whether it's handling the finished product, like you said, whether it's stretching over the, to do things or, um, you know, we had, uh, Peter Gibbons on the, on the call, you know, a few months ago. And he was talking about how still in some factories, people are having to lean over and hit things with, you know, with broom handles and stuff. And, and, you know, so many silly things go on in factories where they ought not to be done that way. And, and so obviously one of the things I've always said is I want everybody going home with all their fingers and toes, right. And the re the reason I mentioned that is hand injuries are the number one cause of injuries or the number one result of injuries and, uh, in, in any manufacturing environment. And so, um, you know, if you're, if you're seeing people at a working and they've got digits missing, then clearly the type of work that they're doing is, is, uh, is not suitable for them to be doing it in a way that they're doing it. And certainly lifting I, or heavy lifting, moving machinery in and out stuff. That's exactly where we want to be able to have robotics and automation in place, and really add to the quality of the work that the quality of the workplace that people are working in.

Speaker 2 00:02:41 <inaudible>. So, Justin, did you have something to add there?

Speaker 1 00:02:47 I was just going to say a hundred percent agree. There's there are actually very dangerous jobs in manufacturing, planes, like that can really harm the, that are fairly simple to automate because of how repetitive it is. And so, like the health and safety aspect, um, health and safety managers typically love us. Once, once we're in, I'm working on that project with them, they can really see, okay, this makes a ton of sense, but why did we wait so long to bring something like this in right? Because safety is our number one concern, especially with robots. So every robotic system has an entire safety system built around it because to be candid robots, it's a machine and it can move fast and carry a lot of weight. It hits the head. You will know you got hit in the head. So we have a vast safety networks and systems. We put around all these robotics so that one people don't get hurt, but two, it takes that risk of the job away from them.

Speaker 2 00:04:09 Is there also, um, when you go into, into a factory and they're thinking about the automation strategy, are they also thinking, and this is a question to both of you really, because we talked about re-skilling those workers that were doing those monotonous and mundane jobs. If they're not the ones that are busting just to do it for that day. Right. But is there also, um, is it necessary to have the training strategy going hand in hand with that automation strategy? So those people that were doing that work get moved into something and get skilled up by the time that robot's ready to go, you're both nodding. So Kevin go to you.

Speaker 1 00:04:47 Yeah. So we always, we always talk about having a master plan that covers each of those different sectio --

-- ns of the business, right? And one big part of that is obviously the people. So you've got the processes, you've got the machinery and you've got the people, and we want to make sure that those plans are going hand in hand with each other. So as you see, um, it's rare that somebody goes from a fully manual factory to a fully automated factory. You're going to go through steps of semi-automation where, uh, where the, the automation or the machinery is helping you do things. So a perfect example, um, that I saw back in the day was where your people used to be palletizing and they'd have to put, uh, they'd have to put the box on the bottom layer, and then they'd have to stretch a little bit more, put it on the middle end, and they'd have to stretch up higher and put it on the top layer.

Speaker 1 00:05:40 And very separately, if you can just adjust the height of where you're stacking, right? So you dig a bit of a hole in the floor and the pallet can sing down as you're putting each layer on. It just takes one level of complexity out of the way, right? And so there's simple semiautomatic solutions like that, that you can go for first prove that that works proof, that it's helping people. And then you've moved to the more advanced systems. But as you go through those stages, you've got your technology platforms that are changing, you know, as you move more and more towards industry 4.0, or, you know, smart factories, I mean, you've got your training plan that goes along with that. And really what you're doing is you're, you're looking at your most capable people and saying, how do we help them have the most fulfilling time at work? And the way you do that is that you keep engaging this rather than, than the manual side of it. And gradually people's skill sets. And the quality of work is just, is increasing through

Speaker 2 00:06:45 Well. And that goes, that goes back to what you have always said, Kevin, if you get people who are at work, enjoying their job, they are totally focused on the success of the company.

Speaker 1 00:06:56 Yes. And rather than looking at today's work, that they start to build in time into their schedule to be able to look at what's coming, what's coming in the future. And that is really enjoyable work that's project work. That's how do I look at what's coming, prepare for it and get even, even more ready for it so that when it comes in, it's a success rather than fighting all the problems with a new project as it comes in, and whether that's an automation or semi-automation project that's coming in, or whether it's a new product that you're, you're working on, you want your people focused on the higher level activities and the ones that are coming for the future.

Speaker 2 00:07:35 Justin, did you, have you ever seen a company when they're getting their automation strategy together that they are also putting into, into play their trading strategy for those workers that are moving to something new?

Speaker 1 00:07:46 Yeah, so we actually, uh, one of our partners here locally has an entire robot training studio. So they've got robots set up and we'll bring clients in and we'll put 'em through a training program and it takes about a week really understanding robotics and how it works. And we always, uh, our goal is to have one expert at each client's company. So they truly know, alright, this is they're the go-to right. And then we, when we're doing the fat and going through all right, this is where it is. We, we do it typically on, at our house, right on our site for us so that they can see it before we go put it all in. We bring them up and they spend three or two, three, four days with us going through and really learning it on our site. And then when we go and implement it, we do that again, because here's the biggest

Speaker 3 00:08:56 Problem with learning is people think they have been learned. Right. And learning, hearing something once doesn't necessarily mean anything. Yeah. I've heard that before. Great. Do you apply it? That's what matters do you actually know what it means? So we try to do some repre repetition throughout our process so that people are not only learning it, but they're understanding it and they can go and take that and implement it on the backend. I think the education of the workforce is huge. Right. And it's constantly ongoing and it's a battle between, um, production, getting the things done and up leveling up skilling --

-- the employees to get more and more things done. Right. So that,

Speaker 1 00:09:57 Yeah, the other part for me then is that success, the success for you is success for them. Because if the project that you're working on is successful, the chances are that company is going to grow because that's one of the measures of success. And they're going to see you as part of that success. They're going to want to come back to you in order to be able to make more success. And so this idea I mentioned before around trust, you know, how do we build that? And I guess the part of that is what we start on a small project. We show you that it really adds value. We show you that we're committed to your success. And then we start to increase the size of the project. That's kind of the way you're working. Right.

Speaker 3 00:10:40 A hundred percent of weird. We love doing little conveyor projects. Not because we like conveyor projects. Not, not that I don't like compare. Right. I like, so right now we're working on, uh, we've been working on this project for about 18 or eight months, nine months, somewhere in there. And it has ballooned from, uh, one little line to now we're doing an entire packaging line, it's it? It will end up being like 15, \$16 million. The ROI on it is like a year and a half. Wow. Like that's three for you. Right. That's crazy. So like, as we're going through, and here's another thing, uh, robots are just computers, right. And it's just technology. And as technology advances, it becomes more common and cheaper. So right now you can remember back when Microsoft put in their first computer, which held like a fraction of a fraction of a fraction of what's in my pocket right now.

Speaker 3 00:12:04 Right? Like technology has come a long way. So now robotics is getting to that point as well, where, like you mentioned, we could dig a hole, um, adjust the layers for the pallet. Right. Which is a great solution. If it's only 20, \$30,000 more to put in a full robotic, automated solution, doesn't make sense to take the baby step. Right. And so it's things like that you gotta be thinking about to, when it comes to automation is how far has technology come to make this affordable and easy to get into your plan? Does that make sense? Yep.

Speaker 2 00:12:50 Oh, totally. So, uh, we're pretty much out of time, gentlemen. So I wanted to give Justin a chance to give some key takeaways. So if people are looking at, you know, some of theirs, their manufacturing processes and their PA packaging processes, what are some of the things they should be looking at when they're considering automation?

Speaker 3 00:13:09 I love it. So, uh, first thing I would look for is headcount. Where do you have a lot of people working on different projects? Is it case packing? Is it a primary packaging? Is it palletizing like, look at those different areas. That would be a good place to start. Typically, if there's a lot of people there's going to be a high ROI or short ROI period. Right. Second thing I would look for, how are you moving your product from station to station? Right? So if let's say you're doing case primary packaging and you put them all in the box and then you pick the box up and move it over to this other place where you put them in another box and it's all manual. Conveyors is an amazing place to start. And conveyors are overlooked a lot because it's like, Oh, it's a conveyor.

Speaker 3 00:14:12 Whatever, if your conveyors go down, you know, your conveyors are down, right? Like it's simple, but it is the most important piece of the puzzle. You've got to have that continual flow. The other thing to be aware of is, is there a place that you're getting a bunch of, uh, surges, right? A time when a product comes in and now you're stuck here and you've got to catch up. There's a book out there called the goal by Elijah gold brat, I believe, or girls steam. Um, if you're in manufacturing, you need to read that book. It is incredibly impactful, but it's all about the theory of constraints. And so look for those theory of that theory of constraints, because if you could put something in place that can help alleviate that constraint, the great thing is now you have a new constraint. It's a whole nother problem.

Speaker 3 00:15:20 So you just got to continually be looking at all right. How, how do I, um, I don't want to say break, but break my system. Like if this all went down, what's going --

-- to happen. And that's the other thing you need to be looking at in automation. What happens if it doesn't go work for a shift, right? Is your entire plant offline? If this one system is down, if so, we need to make sure we have a work around, right. We can manually bring people in. That's fine, but it's not designed to manually bring people in. You could quickly get into a scenario where you're like, Oh my God, this is not good. Not good at all. So you've got to, you've got to be thinking about all of those things. And that's one of the reasons people bring a company like us into the equation.

Speaker 3 00:16:24 We have an engineering team. We have a ton of experience in a lot of different packaging areas. We are going to look at your line completely different than you do. And so having that new set of eyes at the very least, we can be like, I know you think this is your low hanging fruit, but it's not really it's over here. And we could do this project. We could have it in, in three weeks and you could be saving a boatload of money and four months. Right. Whatever it is, but go out and bring in experts. I don't care if it's us or someone else. There are people out there that know what they're doing. They can look at your system way better than you can. And it pays dividends to have someone on your team who does this. Full-time because you don't right. If you're managing a plant, if you're the maintenance engineer or engineering manager or something like that, you have so many projects going on, you cannot be the expert in everything.

Speaker 2 00:17:38 That's right. We talked about, we talked about this a couple of weeks ago, Kevin, right. We talked about, I think it was Shane whence was on the show. And he said that he was standing there watching some factory line. And the, the CEO came in and spoke to him and he says, hang on. And he's just watching the factory floor. And he goes, there's your problem right there. And the CEO has been looking at the same thing for months and months and months. Didn't see it. Cause he didn't know what he was looking for. Right. You guys know what you're looking for?

Speaker 1 00:18:07 Oh, you can't see what you're looking for. And the other thing is you just get used to it. You know, you're there every day. It's just the way it's been done for a long time. And bringing that new set of eyes is completely different. And I'm actually going to still want to Justin's quotes here and Hey, for someone who does this full time, because you don't, I just, I, I, that, that is a really great way of putting it. And um, if you, if you can buy that expertise, short term, buy the expertise and get the advantage. Why would you not do that? It's a, that's a great way of putting it, Justin.

Speaker 3 00:18:40 Yeah. So I'll leave you with a story just real quick. Okay. In the military, when they're shooting the cannons, I had a friend of mine went through bootcamp, right. And their training. And I don't know how to do everything. And so they train them, you go up, you load the cannon, you get it all ready. And then you walk 10 feet back. And then there's this strange thing you used to pull. Now it's like a button. You push the button, but fire the camera or Canon. And so my friend was like, this doesn't make sense. Why are we doing this? So he starts asking and he starts going up the food chain and everybody keeps saying, that's how it's done. Like, why are you questioning it? We've always done it this way. So he starts going back and studying and looking through things. And the further he goes back, he finally finds it back in the civil war. They had to go back about 10 yards and hold the horses in order to fire the cannon. So now they just keep doing it. Cause that's how they always got trained. Even though we have metal horses. Right. So just because you've done something one way for a long time, doesn't mean you shouldn't change what you're doing.

Speaker 2 00:20:18 And that just goes and shows what that whole hold your horses statement is all about. Go back, hold your horses, man.

Speaker 3 00:20:26 Huh?

Speaker 2 00:20:29 That's that is, uh, I have never heard that story before Justin. Thanks for sharing that. But it's right. You know, we do stuff for hundreds of years or tens of years or whatever, just because it's always been done that way. And nobody's actually said, yeah, but why, and this is a guy in bootcamp, that's asking that quest --

-- ion, which is your frontline worker, right? Kevin. Yeah,

Speaker 1 00:20:49 Exactly. And it's the new set of eyes. It's the person who's inquisitive. It's the person. And you know, we've always talked about one of the key traits of leadership is keeping your ears open and having those discussions with people. And, uh, that's why, because they're the ones who have the golden nuggets. Yeah.

Speaker 2 00:21:08 Gentlemen, it's always so fun to talk to the two of you. Thank you so much for being on the show again. We'll see you again. I hope Justin, uh, and good luck out there with, uh, with the automation. I think the robots are really fun to watch and really cool. The videos on the website by the way are very good. So thank you. Thanks gentlemen. Justin Stephens is director of marketing at Kaitech Automation and Kevin Snook is a manufacturing leadership advisor. He's all through also the author of the best-selling book, Make It Right - Five steps to align your manufacturing business from the front line to the bottom line. And I think Kevin, if I'm not very much mistaken, we're coming up on a fourth anniversary for the release of your book. Is that right?

Speaker 1 00:21:47 Sounds about right. It's gone quick. Yeah.

Speaker 2 00:21:49 Sometime in, I think it's March or April. So we're fast approaching that. So yeah. Congratulations on that. You can find, make it right on Twitter and LinkedIn and listen on iTunes, Google play, Stitcher, Spotify and YouTube. I'm Janet Eastman. Thanks for joining us for this week's edition of the, make it right podcast.

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