-- Speaker 0   00:00:04   Make It Right. The manufacturing podcast manufacturing is about making stuff. It generally happens in factories, materials come in as one thing, and they go out as something completely different, no matter what you're making materials, get transformed into something else during a manufacturing process. And that's kind of cool when you think about it. I'm Janet Eastman and this week I'll make it right. Our guest is a manufacturing executive. Who's a mechanical engineer with an MBA and a master's certificate in supply chain management. He's worked in South Africa, Belgium and the U S in seven different manufacturing plants in automotive and fast-moving consumer goods sectors. And like my colleague, Kevin Snook, he is passionate about manufacturing. So we are really pleased to have Lionel Moss as our guest on make it right. Welcome to the show Lionel. Good to see you. Speaker 1   00:00:59   Thank you, Janet. Thank you. Thank you for having me.

Speaker 0   00:01:02   Oh, it's our pleasure. So you actually, when we first initially talked, I got this sense from you that you actually take a different approach to viewing and establishing a manufacturing company's purpose. So I'd like your, just how you see manufacturing and why you look at manufacturing in that way and a company's purpose.

Speaker 1   00:01:26   Yeah. Well, thank you for the question. Um, you know, janitor, uh, you know, mentioned, um, um, I love manufacturing, of course, you know, I have a passion for manufacturing enough, have a vast experience, having different roles in manufacturing. And over, over the years, I've learned that, uh, we don't always necessarily get the mission across to our organization, such that it can back their growth and also their professional growth. So to make it a win-win, uh, in, in, uh, defining a purpose or a mission statement for a manufacturing operation, I think it's important that we help our employees understand, uh, the nature of the process. We have ways in which we transform the product from raw material to finished product. Uh, as you mentioned, I think it's critically important that every process step the nature of it is clarified to an extent such that an individual can make a connect to it.

Speaker 1   00:02:30   And one, an example of that, for example, you know, in an assembly process typically, uh, one would think we are the big or the large cost drivers. It would be within the waste of materials as we batch or as we process. So hence, you know, uh, understanding the competencies associated with that such as process control or good quality controls. One would better align the organization with the nature of the business. And for me, um, that's one example, the same thing in a continuous process, which we can talk about some more, uh, but ultimately bringing that out in the purpose statement, helping managers, engineers, leaders, uh, translate that, uh, let's call it corporate mission statement as such to something that's workable, uh, something that in actual fact people can connect easy or easier. Um, I think this is a little, little, uh, lack, uh, what attracts people to manufacturing, uh, you know, uh, if I think of so many statements about, you know, delivering excellence in quality as a mission statement, those are good statements.

Speaker 1   00:03:43   Ultimately that's the net outcome, but being the leader in folks, sample process and product platform technologies and enhance, or thereby delivering, you know, uh, excellence and quality for me makes a little more, uh, business sense and it helps people to connect to it somehow. Um, and I think that that's an important start. The nature of what we do is important for people to know, um, so that, that natural fact can feel associated with it, or it's a path they want to go down and develop their career further, you know? And so that's for me basically is where I would, uh, would love to, to influence or drive the, the difference between just a statement that sets out the above statement and something people can do something with, with, with lean manufacturing.

Speaker 0   00:04:36   Do you have, um, an example that you can share with us where you went into a company and they had a mission statement, and then you talk to the people and you says, this is really what we do.

Speaker 1   00:04:46   Yeah, absolutely. So absolutely everywhere I've worked in, in, in, in numerous factories, uh, from the outset, uh --

-- , I look at the mission statement, um, shared it with the organization, at least talked with leadership and, you know, as we sort of decipher the content of it, that the dialogue starts, and I've seen that in Europe, I've seen that in South Africa, I've seen it in the us. Um, my, I do this kind of health check at different levels in the organization. And it's so obvious that when we talk about what we do, um, for example, if innovation is in the statement or, uh, delivering, you know, high quality products, uh, we're getting to, so what actually, you know, how do we get to that end product of that, that, that quality we start getting into the core competencies required to deliver against that nature of that process or that business we're getting into how we should be organized, what the communication structure should look like.

Speaker 1   00:05:51   Uh, and we start getting into mind of how we are established, but most importantly, what I've seen is that we have managers and leaders with a let's call it a maintenance background, a strong maintenance background, for example, which is it's perfectly okay. And they are within a, let's say a batching process where they lead an organization. It it's of course, a big plus, ideally we'd like the, the, the inking or the capability of someone with that's quality oriented or process control or in that, in that environment. So, you know, uh, reorganizing some is, is always a good thing to align leadership, score competencies and skill with the nature of what the organization needs, so they can be more effective and then designing the organization, such that those skills also, you know, present across shifts. This is very, very important. And I've seen in Europe, for example, within two years, we increased productivity by 30%, I've seen double digit growth in the us as well, just by the mere fact that we reorganize and align people to, uh, base mess the technologies we employ now.

Speaker 1   00:07:11   Um, I will say, uh, one thing I also see everywhere, uh, present is our managers and leaders are somewhat, um, are, shall I put it stretched the, the breadth of the job scope at times, doesn't allow them to give enough attention to detail within a certain, uh, um, G uh, you know, process where we're folks sample things evolve over time, um, and their coaching and their leadership is required to, uh, spend sufficient time with the organization and help the organization grow. You know, if, if, if we don't see those small wins at all levels in the organization, it, it becomes less motivational for the organization. So, as I can tell you, in Europe, for example, where we had seven product lines, supplying batteries, uh, across Western Europe, Eastern Europe, Asia parts of Africa, um, I can assure you, it was a high process, uh, you know, high, continuous process, you know, high volume, low variety process.

Speaker 1   00:08:18   It was a batching process, pretty complex, but the value stream managers were really stretched across multiple processes. So reorganizing that, uh, sort of focus was pivotal for that turn around. I mean, 30% productivity improvement over two years was pretty substantial and it was no capital investment. It was just the focus on, um, having that support infrastructure over 24 hours. I mean, if you think of a con it's a where you have sub processes connected through conveyance and different technologies, and there are numerous technologies within the line at, in running at let's say 600 or thousand units a minute, um, or seven, you can imagine that there are core skills required within the shift for certain drug patients. My, you know, where you apply a label on that same line, but then, you know, in the next shift, you, you, you, you would have the same challenge.

Speaker 1   00:09:21   So it's, it's, it's important to make sure that within that department, you have a skill that can support a subject matter expert that can support that labeling process and float the deadlines. Should there be a problem to be solved, um, the same go for leadership, the frontline leadership, the departmental leadership, and then, you know, uh, over 24 seven, that's ultimately how we arrive to the ideal design. Now I can go into the process technology extensively with you as well, um, to set people up for success. Problem solving happens at all levels and across all functions, and no one should ever underestimate the order of magnitude, uh, in solving problems. U --

-- m, and what's required in view of support systems. So support functions, or non-core play a pivotal role in solving problems. We look at problems differently as managers, engineers, directors, VPs, and so forth. Then what the frontline teams do, and they understanding and interpretation of how to solve a problem, uh, may be different.

Speaker 1   00:10:31   So how do we take someone that's fairly new to the organization, feel confident that they would want to stay with the business, feel they have a career path with that business and feel that I can actually make a difference. Of course, they can see it in data results. So we all have roles in a daily drumbeat or standard work process where we can guide and coach the frontline organization, how to address this basic problem with it's a breakdown. So we categorize whether it's a problem that has, you know, variable, uh, drivers or causes, or whether it's, uh, a breakdown weights, just a symbol. Why, why or five, why approach, um, how to think about solving a problem. Sometimes two engineers and managers may become, you know, uh, sort of the, the norm, but we don't always convey that effectively. So do we need to design the organization such to match up with the process that we also need to look at the right capability and how we as leaders should behave out in the organization to enable the organization to be successful?

Speaker 1   00:11:44   How do we solve problems at the front line? You know, how do we help an organization that have not been exposed to certain in practice, uh, actually have a good understanding and feel they can make a career out of it. You know, um, we evolve technologies from being pretty manual, ultimately to highly automated. We go from inline quality control checks to having inline vision systems. I mean, that's quite a leap, that's a step change in how, uh, we look at producing or transforming products. Um, and what about people, you know, how do we bring them along? How do they feel valued? And they feel they can be successful. So for me, it starts with getting that purpose, right? Uh, what is the true nature of your business? How do you transform product people and process into finished goods altogether to ensure? So when, when, how do you pace that effort over time so that, you know, it's something truly transformational as a package and the customers are delighted first and second moment of throughs or realized, um, by doing the right thing.

Speaker 1   00:13:00   Um, and I've, I've not seen it any different than seeing that file. Um, it's, it's a delicate balance. Um, and we have to be patient with, you know, with this journey, we have to pace the work. Um, and sometimes we have to do things, you know, that's a bit of a stretch. All of us, I think many of, many of us for certain have had that moment where your, you know, you get a call from the CFO or CEO or note or an email and say, you know, 10% more or whatever the case may be. So, you know, how prepared are we are? How do we translate that back to the, the organization? Um, and it's important to be proactive in that regard. So if we understand, if we take some time to understand the nature of our process, I believe we can better connect that the competencies to eat, and we can better strategize as to how we're going to go about, um, delivering results. And for me, it's the key. Um, when we do that, we actually see opportunities that would, we would not commit for the next 12 months. Let's say, if we do a budget year, we might have it in the babble to, to explore, to improve, uh, to verify and to commit for the fall. So really it's important to stay that step ahead of, of, of what's expected and required, uh, to drive results and deliver sustainable, you know, outcome.

Speaker 2   00:14:35   So you've covered an awful lot in there, and that's how to run a manufacturing business pretty much in a nutshell, right. It's good. I wanted to pick up on a couple of points there. One of them was around this mission statement, the organizational vision direction. I call it a compelling business direction. Um, a lot of times when I see companies trying to work through that, that they get very much tied up in corporate speed, you know, like they, they feel like everything has to be in that. Like, we've gotta be the best quality. We've gotta be the best customer service we've got, have really good costs. We've got to take care of all of our employees and we've got to be good to the --

-- environment and sustainable. And, you know, it's like, I can't miss any of these things out. Cause they're all so important. And of course they are all important, but when you're crafting a direction for a specific company, how do you boil that down to something that's actually meaningful rather than just repetitive of what everybody's trying to say? Yeah.

Speaker 1   00:15:35   Very, very good point. And I see exactly the same, uh, Kevin. Um, so, um, getting in and understanding the results spending a lot of time with, with the organization is very helpful people, people would hear you out and they would, you know, uh, provide that support. And I would get you get that buy-in instantaneously by, uh, listening to people a lot in the organization as to what they do day in, day out and getting to know people, you know, um, across functions. Um, and in most important, I spent a lot of time with results, trying to understand drivers, you know, uh, uh, hidden drivers and ultimately at the first appointments, which is normally within six to eight weeks with, with an organization it's important to make certain, to connect certain dots with leadership team, extended leadership and also the organization. So folks can actually understand that we see the results we do and where we put the effort and yes, the most important thing, even sometimes we put so much effort around what doesn't, um, I think it doesn't matter, but that shouldn't be the top priority.

Speaker 1   00:16:50   Uh, if you think of 80 20 principles, you look at them, you know, which are the high margin products and where do we really can make a step change to get people somewhat motivated? Um, we have to understand that product mix, uh, what's hurting, um, you know, and it's not just where we are actually, uh, um, produce or manufacture. It's really a lot to do with some of the supply chain aspects as well. How we schedule changeovers extended runs versus extensive, you know, short, short runs, whatever the impact might be. So there are so many non-core functions that are pivotal to this, this process. So, you know, once we have that for me in the, in looking, knowing how we really operate and what would make a successful matching that up with this, uh, to your point, this elaborate, uh, sort of mission statement. That's very generic.

Speaker 1   00:17:48   Um, I can ask so many people out there, uh, in, in the different organizations where I've worked as well, that, you know, what does the mission statement tell you all our purpose statement and it's, um, if they know it it's yes, something like that or this and the other, it's not specific enough. We have to be deliberate. We have to be specific. We have to call it out. You know, um, this is a, we transform raw materials into finished goods. Uh, we, uh, we lead in with its platform, uh, process and product platform management, uh, standardization, or whether it's like a continuous process where we have high volume, low variety, and with the, you know, uptime and first time, right product. So what does it mean? I need a, uh, process control expertise when we actually can take you from solving a basic problem, using the five why's through design of experiments, you're gonna, we're gonna evolve your capability. You, you have an opportunity to become, you know, a bolder Korea that's highly technical and operational or whatever the case may be. We have to connect that to, to the individual. And I would rather keep it as simple as that, uh, you know,

Speaker 2   00:19:12   They talked about, um, leaders being stretched, and I see this in so many places, but I almost see, or not even leaders, everybody being stretched, but I, I see that a lot as the, the fault of the leadership team, right? So if people are overly stretched, one thing you can do, and you talked about reorganizing, so that you've got the right people in the right places, and they've got to patch into the work that they do. But I think the other one is just simply sending better priorities. And it always seems to be a challenge that I go in places. What are people going to say no to, uh, because that's really what priority setting and focus is all about. And I, I love the fact that you mentioned the word focus as well, because, you know, we can't do anything unless we're really well-focused on it. Do you have a specific method for going into a company and finding the right priorities? I know you talked a lot about looking at results a --

-- nd trying to figure out the key drivers is that like the main, the main way that you would identify the main priorities.

Speaker 1   00:20:15   Yeah. Kevin. So, so most certainly, um, if, if I see if you look at the losses within going into a manufacturing concern or a plant, and I know we, we, we haven't, we do a lot of, you know, innovation on site and we launched a lot of trials and in Asia there's, which, you know, within the continuous process where we actually, you know, let's say full or assemble at a high rate. So again, high volume flowing through. So the last thing we want is downtime. And also the last thing you want of course, is, you know, not getting it first time. Right? So bringing in the extensive trials, that system, and that process has to be flawless having that organization as part of the R the organization, for example, in R and D would be to some extent, the STEM, depending where that organization resides and how that connects with, with a cohort and some of the engineering non-core functions and how they execute within operations and, and w what the startup leadership looks like in that process.

Speaker 1   00:21:18   That's all pivotal, you know, uh, for success there. Um, but I will say that the approach, the historical traditional approach of management by objective, so understanding our losses, we prioritize, and I make sure we prioritize the right ones, not just for delivering the short-term financial objectives and targets, which are expected, but also looking at the outer years. So what capability do we need to both this year and why, and, uh, making that very, um, known to the entire organization, not just by saying we are going to do, you know, basic autonomous maintenance, basic process control development, we can leverage leverage SPC, you know, within operators in this manner. Um, we're going to implement a rough cut capacity planning process or an SNOP, uh, system that looks a little admit that works in this manner to deliver those results. But also we have to tell the organization and with managers and engineers is these are the objectives we're going to be focusing on to be deliberate in delivering that capability as much what we know that results will come.

Speaker 1   00:22:37   It's imperative to put a lot of emphasis on capability building, um, and, and ownership of these systems. Um, most functions find it very difficult to understand that they own a system that cuts horizontal the across the organization. If you think of inventory management, that does it resides with the supply chain organization. But however, you know, everyone has a hand on handle on, on that deliverable. So roles and responsibility, that little bit of catch ball activity remains pivotal in the beginning of, of, of the year. Uh, there, your objective that you set for the next of months includes capability for the next three years. That journey has to be clear, and that journey has to be revisited numerous times with leadership as you know, that repetition and, and, and, and confirmation is perfect. We, I cannot emphasize that enough is, um, there's not a moment of coaching that I, that I do not spend some minutes on just talking a little about, you know, what do we see, you know, out of water ignition system?

Speaker 1   00:23:51   You know, we talk, we have phenomenal, uh, you know, systems in place that provides leadership and managers tools to recognize others. Now, what are we looking for when we recognize others? Are we matching all of this with the work needed, necessary to deliver the next 12 months, plus the work needed, necessary to deliver the next three years in capability? You know, if we just talk at results for year one, year two, I would say, that's okay. But for year one, you know, we should feel confident we're going to deliver year one, because we have a three-year plan for in view of capability for year two, we are going to feel very confident, highly confident that we're going to be in a good place because we've been building the right capability, disconnecting that those two fundamental aspects of transforming, you know, not just product and process, but also people is, is what makes it happen. Um,

Speaker 2   00:24:54   So I love the fact that each time that we've spoken, you've talked about people and it's about, and we talk about manufacturing, or I know you like to call it transformation, right. Transplant, forming products. Um, but in order to do that, you n --

-- eed to help the people transform. Also, they're, they're becoming new people. You're, you're the person who, who becomes the person who can make the product better. Right. So there's that whole level of capability building. And there's this idea that the dream can't be bigger than the team, right. We have to continually build the team in order to be able to reach a new dream. And, um, how do you then, what, what, what are some practical examples of how you would build team capability?

Speaker 1   00:25:43   Okay. Um, so here's an example. So just getting into a manufacturing concern, and I've got this maintenance organization, let's say as an example, and we know continuous process one more time where lions could run a hundred units a minute and higher up to maybe a thousand for that matter. Um, many businesses think of having a subject matter expert that just is a coach for the different, you know, for the organization across multiple lines. It's very helpful. However, how do you take a highly diverse organization where we still have a high number of touches and, you know, think of the past year with a higher turnover in general, um, how do we accelerate scalable? How do we do that? We have to think about taking some of our core maintenance skill sets and have that within operations. So really reorganizing year, for example, we created, uh, um, we've got reliability, maintenance, mechanics, and maintenance, mechanics, process, maintenance, maintenance mechanics.

Speaker 1   00:26:47   I moved into operations. So across shifts, that is where my liability maintenance mechanics. We invest in their external learning. Like they transfer knowledge to the process, mechanics and hangs to the, to, to that, uh, equipment technicians and operators. Uh, that's a simple, uh, sort of a career path as well, but also, I, I, I, I sort of deliberate process to transfer knowledge and now how now it's important to create cause he doesn't stop there, you know, without communication given as, you know, nothing's going to happen. So at the line level across shifts, we need that window of that handshake, that communication window, that board, where we can talk short into a control, if we want to. However, what is the one thing the lime team is going to focus on today? So we created these line activity boards, but line and together with the process mechanic and the line lead, uh, with the operators, they would talk about shift to shift and over, but I would also talk about the specific, uh, the highest loss driver highest stops for that prior shift and what will be the plan for today where they then align on at least two shifts align on what the focus would be the line team, where the process mechanics, mice resolve and come up with with an activity for the day, that'll make the results better for the next 24 hours.

Speaker 1   00:28:15   Um, from that forum, uh, the frontline manager would bring that to another, uh, visual management, what we call green area or productive, uh, workspace, which is really just, you know, PDCA and byline. And then honestly, what happens days, the manager of the department with support functions, quality supply, plant chain planning, uh, and so forth would be present and liability maintenance then would be present to understand whether the problems require, you know, they support from coming off the, the previous shift. And if they are multiple lines requiring support, they would prioritize where the focus would would be. Um, and that's how the priorities are set for that day, for that shift based upon what the customer needs are and available resources that we have present that day. So that's a simple design tweak, uh, that gives that help. Scalable within operations helps the clarification of the nature of the no problem, and then get the problem prioritized in, in, in the next level meeting.

Speaker 1   00:29:24   Or I'd like to, I don't call it meetings by the way. I also call it work sessions because these aren't readings, these are truly part of the way we transform people. So it's not a meeting. I get a lot of meetings meetings at this. Maybe we have meetings, but th these are work workstations and meetings we can reduce, but these reconnect improve. So that's my philosophy there. Now we'll tell you this much. Um, once this was put in place, um, I observed the next thing, of course, um, you know, you get my labor went down and my label is a problem on the line. It gets to the next roll u --

-- p work session, uh, with the original workplace discussion, with all the support functions and, and watch our, we get my library is an issue I have labeled the jams so you can tell the problem statement is not refined.

Speaker 1   00:30:15   Um, so then, then we start with problem solving training, basic, uh, steps, how to think about what's transpired, you know, uh, are you at base condition, are your basic standards in place? So a simple checklist, ultimately this refines problem statement, which then flow to the next level workstation where comfortably the, is able to say, well, I need a quality expert today to support this problem solving. We're going to do a, and we establish these visual boards, big issue car was really efficient on big blocks. And then for the top two or three possible causes, we have the five whys and a new standard proposed standard. So these boards are, we'll do the lines and leadership flows float to the problem solving area. We've been doing that now for a couple of years, uh, year, uh, same with indoor cell. So a lot of this has been extremely helpful at the front end.

Speaker 1   00:31:18   Uh, we learn immediately the communication gaps, you, you, you leadership can go and attend and coach these stations at the line and or in the department. And then we, we decide, you know, what are we looking for when we observe these interactions? Um, and it's, it's been phenomenal. You know, I, I think of our safety results. That's either improved by 50% over the last 18 months is how, how does this happen? Uh, within that review process, we have a quality trigger, scifi triggers and third line, uh, it, the organization to change the triggers they want to look at is because what does the line and the process tell them, what are they learning about their process technology and or the product handling the waste stream and everything else. It might be different for certain lines. So making it that to getting folks to be autonomous to that extent is, is impactful.

Speaker 1   00:32:15   Now, I will say all of this has to be complimented. And as you know, with, with other award recognition system that, you know, helps the organization learn, but also grow. We want to see promotions when to see people flow through, want to see people get recognized, you know, with a discussion, uh, with each star or star of the month where they it's, whatever might be, you know, uh, we have in place. So we are very deliberate in, in recognizing people for their contribution and by that, but the day isn't done, unless we actually have a site review or site workshops and as well, it's about 15 minutes long. And within network process, what we do is we get, uh, an update of feedback from the different leaders as to what we see with regards to the health of the organization. And also we assign different drugs that painting, what, what the outcome is. We float to work really as leadership, um, where we can coach and support, um, the organization at line level and or in the departments.

Speaker 3   00:33:22   That's manufacturing, executive Lionel Moss, who has successfully transformed a number of plants. He has a unique approach where he starts by dissecting a manufacturing company's purpose, and then aligning that purpose and the individuals to team goals that transform the success of the company. We'll have part two of our conversation next week with Lionel Moss on episode 154 of Make It Right. I hope you'll join us.

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