



## Podcast Transcript | *The Fix*

### Season 3, Episode 1

**Date:** March 8, 2023

**Guests:** Ethan Karp, Ph.D. - President and CEO, MAGNET: The Manufacturing Advocacy and Growth Network

**Run Time:** 26:29

**Questions or Feedback:** [thefix@oatey.com](mailto:thefix@oatey.com)

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**[00:00:06] Katherine:** Welcome to *The Fix*, the podcast made for the trades, where we sit down with inspiring individuals across the trades to discuss their unique take on the

industry, including career paths, job site stories, overcoming challenges, and everything in between. I'm your host, Katherine, a marketer here at Oatey with my co-host and friend Doug, one of Oatey's resident experts in all things trades. *The Fix* is more than a podcast. It's a community, a community built to support trade's people and inspire the next generation of essential pros. Let's start the conversation. Season three, Doug. It is finally here.

**[00:00:48] Doug:** I am pumped, Katherine.

**[00:00:50] Katherine:** Can you believe it? I think the best is yet to come. It's going to be an awesome season.

**[00:00:54] Doug:** I tell you, I was trying to figure out on the way into work this morning how to explain my emotions. I'm going to need about 40 seconds here if you got that for me.

**[00:01:01] Katherine:** [chuckles] Take the floor.

**[00:01:02] Doug:** Season one and two, just great results.

**[00:01:05] Katherine:** Yes.

**[00:01:05] Doug:** Our listeners, it's growing all the time. The feedback was positive. They like the fact that we're giving them opportunities to learn how to get into the trades, maybe other possible routes once they get there. Now we're into season three. Today is like B12 double-dose warming.

**[00:01:25] Katherine:** [laughs] Absolutely.

**[00:01:26] Doug:** Today's guest, I don't even know how to describe him.

**[00:01:30] Katherine:** [laughs]

**[00:01:30] Doug:** At this point in time, this is an individual who leads many people at different tiers. He has developed a way to train and support to help them get to higher levels, which is what we've been talking about in season

**[00:01:47] Katherine:** Absolutely.

**[00:01:47] Doug:** -one and two. I'm going to put my listening ears on here and step back.

**[00:01:51] Katherine:** Oh, you know what? That's a great introduction so let's get right into it. Today we have president and CEO of Magnet, Dr. Ethan Karp. Welcome.

**[00:01:59] Ethan Karp:** Thanks. Glad to be here.

**[00:02:00] Katherine:** Absolutely. Dr. Karp has helped hundreds and manufacturing companies grow through technology, innovation, and talent. This recent adventure that you've been taking on with Magnet has been quite remarkable. Before we get into the magnet story, I want to talk a little bit about your background. Can you walk us through what you have done through your schooling and then to get you to this point so that people get to know you a little bit better?

**[00:02:26] Ethan:** Absolutely. It's a weird background.

**[00:02:29] Katherine:** [laughs] We all have them.

**[00:02:31] Ethan:** I grew up in a rural town in Pennsylvania. Manufacturing in the local university town called Clarion, that's what was there. Went to Miami of Ohio, then onto Harvard, but I wanted to cure cancer. That was what I did. I did physics.

**[00:02:47] Katherine:** Amazing.

**[00:02:47] Ethan:** I did a PhD in chemical biology. It was science every single day.

**[00:02:51] Katherine:** [laughs]

**[00:02:52] Ethan:** Then at some point, I realized you don't just get to wake up in the morning and just cure cancer. There's a lot of luck involved, so I'm like, "What about

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this business thing? Maybe the world can be better through making business and helping people's livelihoods and those sorts of things." Went to McKinsey after Harvard and was there for a number of years before being recruited to come to Magnet. Magnet is a non-profit whose mission is through some things that are businesslike, some things that aren't businesslike, but to grow the economy and to grow manufacturing jobs, which I've learned are the lifeblood of our entire nation's economy but especially here in Northeast Ohio.

**[00:03:29] Katherine:** Absolutely.

**[00:03:30] Ethan:** Literally, one in every two jobs depends on manufacturing. People don't know that. We can't fill the jobs. This is where the meat is. This is where we can make a difference in people's lives, so that's brought me here. That was about a decade ago.

**[00:03:43] Katherine:** That is quite amazing. Let's get into Magnet and so we can tell our guests a little bit about what it is and why obviously Oatey has an interest in this and why other manufacturers should have an interest in it. Can you let the audience know what is it and what do you do?

**[00:03:57] Ethan:** Magnet, we're non-profit, are mission-driven, and we want the economy to thrive because of our manufacturers making the stuff that runs the world and having people through trades, through manufacturing careers come in and truly change their lives with the great salaries that are offered doing things that make everybody's world better. I said one in two jobs around here-

**[00:04:20] Katherine:** That's remarkable.

**[00:04:22] Ethan:** -depends on it. That means if we didn't have our manufacturers, most of whom are pretty small, if we didn't have those manufacturers and we didn't have those people in the trades going and actually building things, half of our economy would be gone. Half of the pizza parlors, half of the banks. That's why this is so important. Magnet does two things. We, half of us, roll up our sleeves, we actually go into small manufacturers, and we help them. That could be their next new piece of automated equipment, that could be their sales plan, that could be streamlining their operations.

The other half of what we do is on the workforce front. How do you actually fill the gaps because we know not enough people are going into these careers? How do we fill those gaps, whether they're awareness gaps like people just don't know about the career, or whether they're training gaps, and we got to bring some training providers together, or whether they're barriers that people face? We know that, for example, in our cities, there's far fewer people participating in the workforce in general-

**[00:05:20] Katherine:** Correct.

**[00:05:20] Ethan:** -than there are in the suburbs. How do you help those individuals overcome whatever is preventing them from getting into the labor force? That's what the other half of the organization works on.

**[00:05:29] Katherine:** That's really cool. It's a great way to approach it on both sides of the equation. Can you talk a little bit more about then how do manufacturers work with Magnet to then assess where do they need support from your organization?

**[00:05:44] Ethan:** We are actually part of a national network. There are organizations that are all a little different, but we exist everywhere. It's called the Manufacturing Extension Partnership. Every state in Puerto Rico has some version of us. Ours actually is connected to the state a little bit. Private organization, so everything's confidential, but when a company is interested, they literally talk to one of our manufacturing experts. It's a conversation where they're not just to-- Yes, services are paid for, but they're subsidized, they're not meant to make us money. We're non-profit. They're meant to be what is going to make your business the best.

It's a really interesting organization because we can truly look out there and say, "You don't need our help, that's fine. Maybe you do tomorrow." We can look at you and say, "Yes, that'd be a great project to do, but you don't need it. We would love to do it, but you don't need it. What's in your best interest from a company perspective?" That leads us down all these pathways. Somebody says, "You know what? I'm just going gangbusters. I don't have enough capacity." "All right, can we operationally make it better? Can we make some suggestions on new technologies you need?" Everybody though says they can't find people.

Unfortunately, that is the one thing that we can't one-on-one say, "We've got you. We know exactly what we need to do." We know a lot of things you need to do in culture to attract people and these sorts of things and make yourself keep your people, but we don't have that silver bullet because it's way too complicated, and it requires things like *The Fix*. It requires people like Doug going out there and speaking about this. It requires bringing people together to actually solve these huge problems in workforce to get more people in. If it's in workforce, we got some initiatives where you can join, and I'll talk about those later, and if it's one-on-one, we just go from where you need to go in your journey.

**[00:07:31] Katherine:** Yes, that's wonderful. Where does Magnet receive most of their funding from? Is it from businesses and people donating? Is it from events? Is it from the state? How does that work as well?

**[00:07:41] Ethan:** We are not a membership organization. We're not a chamber. We work with all those entities because they all know people. The biggest portion is actually from federal government and states, followed by the individual companies working with us themselves.

**[00:07:55] Katherine:** Sure.

**[00:07:55] Ethan:** Followed by philanthropy to fund projects like we're building an awareness campaign for people to get into manufacturing, a local philanthropy might do that.

**[00:08:04] Katherine:** Yes, that's wonderful. I think that there's so much opportunity for local manufacturers to partner with. Then I want to talk a little bit about the trades. How if someone is interested in getting into the manufacturing trade, where does Magnet fit into that mix?

**[00:08:19] Ethan:** We're trying to plug the gaps. It depends where you're coming from. For years, we worked with career tech schools. Now, career tech schools don't need connections to manufacturers. They've got lines out the door.

**[00:08:30] Katherine:** Sure.

**[00:08:30] Ethan:** I know you've had some on this program talking about what they're doing, but doesn't matter if they give the best quality education in the world, you can fill every single brick-and-mortar facility right now, and still not scratch the surface of the thousands of open jobs here in Northeast Ohio alone. That won't be the solution. If you're a high school student not in a career tech school, we have facilitated some short programs. Once you graduate, you can jump right in four weeks, get some training, get some soft skills training, be interviewed by organizations like Oatey right before you even leave out of that four weeks.

We have a few schools where we're actually doing German-style apprenticeship, bringing in folks to actually work in companies while they're still in high school. When they graduate, they get a job offer. That's at the high school level. At the adult level, take that four-week training, but maybe it's done in your rec center, maybe it's done at our headquarters, maybe it's just us telling you, "Here's how you should go to the local community college, and what degrees you can get in into it." Maybe it's helping you figure out if you've got, say, a criminal record, like which companies would want to hire you then, how would you work with it, what should you do, who do you talk to. That's the problem with workforce, it's so many different reasons-

**[00:09:49] Katherine:** Absolutely.

**[00:09:50] Ethan:** -that somebody might not get there. We're trying to bring together all the organizations and people that know, for example, how to work with people with criminal backgrounds. The universities, how do you bring them together so that it makes it easy so if somebody says I'm interested, we have a pathway for them?

**[00:10:06] Katherine:** Yes, I think that's wonderful.

**[00:10:07] Doug:** So do I. Ethan, I just listened to you and you just bring an excitement to the conversation. You're that person, right? My question to you is, in the trades, for example, plumbing, a lot of guys will have, and ladies also, they'll have this thought process in their head, "Hey, I'm going to be a plumber. I'm going to

stick my hand in poop all day. I don't really want to do that for the rest of my life. I better go work with computers somewhere."

Now, we've also distinguished that there's some folks that go into long educational journeys and stuff that they're just not made for that. My question to you is, how do you bring the excitement, how do you bring the opportunities to those folks that are considering manufacturing, but they have the stigma in their head that says, "Push the button, make the widget, stack the widget. Push the button, make the widget, stack the widget."?

**[00:11:01] Ethan:** Two things, and I've learned this over the last decade. It's an unpopular opinion but true, marketing campaigns I don't think can work because the amount of money to change that stigma is like Coke-level advertising you'd need to do.

**[00:11:17] Katherine:** Sure.

**[00:11:18] Ethan:** Two things do work. It's manufacturing, it's the trades. Seeing is believing, seeing, touching, feeling. If we can get people into a plant. We've just created a whole new building. It's actually a satellite of our Science Center here. It has an experiential learning. You actually work on automated equipment. You actually make a cookie cutter. There's simulations, there's people telling their story. It's hands-on. You get to actually see our prototyping facility where we make new products for companies and startups. That seeing is believing, they will feel that. That's one, we know that getting people to actually see what you do and seeing how high-tech some of those environments actually are-

**[00:11:55] Katherine:** Absolutely.

**[00:11:56] Ethan:** -is number one. The other thing is trust and it's trust from your peers. I can't say enough. If I could convince one person to go into manufacturing and they have family and friends and they're in a school district that maybe never even thinks about manufacturing, thinks about the trades, they can convince their friends because their friends will believe them.

**[00:12:14] Katherine:** Right.

**[00:12:14] Ethan:** Their friends will believe them 10 times more than they'll believe me. Even if I say, "Here's a job, here's how well it pays. All you need to do is this four weeks." Likely, they may not believe me, but they will believe a family or friend. We've got to make use of those individuals from communities that do not have a lot of people going into manufacturing to be the ambassadors to really talk it up, really engage their friends and family. For those companies in the audience, this is no different than your best source of employees is giving referral bonuses and getting your existing employees to-

**[00:12:44] Doug:** Absolutely.



**[00:12:44] Ethan:** -bring them in. It's the same thing here and we have to do a lot more of that because once they've seen and felt it, they've got to have somebody telling them, "Yes, it's a real good thing."

**[00:12:54] Katherine:** Yes, that's such a great point. I love the fact of touching on the experience because I will tell you, whenever we bring contractors events like with Habitat Humanity or Girl Scouts and they take a tour of our manufacturing, it is by far the best part because they go and go, "Wow, I had no idea." I'm like, "Wait, that makes this and that's a component and everyone does that together." It's really one of the most impactful things why we believe in having this facility and getting people here because it makes a difference, and it totally puts in this value of understanding and appreciating the product even that much more.

**[00:13:32] Ethan:** Katherine, I want to add to that too. You work a lot with the manufacturing team, your team does, and we've had career days-

**[00:13:39] Katherine:** Yes, absolutely.

**[00:13:40] Ethan:** -where we'll bring individuals in, we'll invite them in, and we're going to show them Oatey University, we're going to show them the DC, we're going to show them the manufacturing plant so they can see that there's multi-layers-

**[00:13:50] Katherine:** Absolutely.

**[00:13:51] Ethan:** -to this career path.

**[00:13:52] Katherine:** Yes. It gives them great exposure to it. It's one of the great reasons I think with Oatey that corporate headquarters is here, manufacturing is here, a distribution center is here, a training center is here, so you get the ability to touch on all those different touchpoints. Then the last one is trust. It made me think our first point and our purpose is build trust. We talk a lot about that. That it's not only building trust with our end users, our customers, our associates, but also our community. It's really important for us to continue to build that trust with people about that it is a great place to work.

Trades have a lot to offer, whether it's in manufacturing or plumbing or doing here as we've talked about on *The Fix*. I thought those were really great points and appreciate that insight. Can you talk to me a little bit about anything regionally or nationally that would really be a game changer? I know you talked about that every state has representation, but how does that partnership look across the state? Because we do have listeners that not only are here in the Northeast Ohio, but also across the country. How do they get involved? How do they learn a little bit more?

**[00:14:59] Ethan:** Look up your local MEP. That's the acronym Manufacturing Extension Partnership. See what they're up to. That's an easy thing. If we think about though what the country needs, what manufacturers need, we've spent a lot of time in this question.

**[00:15:12] Katherine:** Sure.

**[00:15:14] Ethan:** The vision, our vision, but really it's for Northeast Ohio but really it's for the country. It makes no difference. Manufacturers and trades, we're all in the same boat no matter where we are. There are four things we need to do to, I would say, reclaim the title of leading the world in manufacturing. Those four things are very difficult, but I do think achievable. Number one, it's this talent. It's what we're talking about. Our companies need to think about getting talent from different places, and what do they need to do if they're not searching for the same put the ad in the newspaper and getting the same people?

What do you need to do if you're going into a city or you're going into a rural area that's different inside your company or partnering with others.

**[00:16:05] Katherine:** Yes, absolutely.

**[00:16:05] Ethan:** Oatey, like I said, partners with us. All those things I was saying about removing barriers, Oatey is at the front with us every single day trying to figure out how do we make all of this work better in the community. That's number one. We can't just keep on expecting the same results by doing the same things. The second thing is, and by the way, that's also diversity, by its nature, at least here locally, manufacturing is 84% white, 70% male.

That means, because that does not match our community, there's a lot of people not employed that could be. What does it take to figure out how to get more of those individuals in? The second bucket is technology transformation. There is a wave of technologies out there at every single level-

**[00:16:50] Katherine:** Absolutely.

**[00:16:51] Ethan:** -and it's different. Manufacturing has always been about technology improvement. That is always what it's been, but the technologies of today are not obvious. It's not like taking one machine and making it 10 times faster, 2 times faster, and you're just upgrading what you're investing in. It's robots that sit next to you and take 30%. Collaborative robots, 30% of the work you used to do, that boring job, now it makes your job better. How do you integrate removing 30% of somebody's job? How do you do that? How do you put sensors on all your equipment so you know information about what's going on real-time?

**[00:17:25] Katherine:** Real-time. Yes.

**[00:17:26] Ethan:** Those innovations, there's tons of buzzwords.

**[00:17:30] Katherine:** [laughs]

**[00:17:31] Ethan:** Industry of things, industrial internet of things, industry 4.0, industry 5.0. I don't care what you call it. There's a bunch of technologies which requires investment and that needs to be going on in all of our companies starting



small, growing big, whatever it looks like. The third category is innovation. Too many, especially of our small companies, have jettisoned you the dip in COVID, every single recession. Manufacturing's hit hard. Manufacturer, we have grit. There's grit in there, but every single time you dip, often what the first thing to go is the engineering capability, the new product innovation.

You can only coast on a product for so long. You're going to be replaced and hopefully, you're replaced with somebody who's a neighbor and not somebody from another country. Lastly, it's leadership. You guys taking the opportunity to talk about this in the world, that's leading in talent, that's leading in helping bring visibility to something. Talent. There's also cultural leadership. You talked about the value of trust. You talk about the next generation coming into our companies. It's a very different cultural atmosphere. I read about this a lot.

How companies think about how they treat their individuals, values-based, all those sorts of things we know in all the news, that's super important. Even more so for an industry that has that reputation that it isn't good, we need to show we can be the leaders in that. That's leadership. Transformation. You got you invest money. You got to invest the money to get the technology. You got to invest the money in the innovation and not be afraid to partner, look for others.

Frankly, then lastly, there's as communities, we can do a lot better. I'm one organization of many. We can do a lot better with just coming together and saying, "What can't we do singularly that we can do together?" Workforce, great example of it. Doing those four things I think will, again, have us be the leaders. Not to deceive any of our audience to think that-- Sure, China might be number one in terms of output of manufacturing, America is still by far number two above any other country you might think. People are like, "Oh, no, Mexico for sure. Oh, no, Japan. Germany." No, we still-

**[00:19:34] Katherine:** [laughs]

**[00:19:34] Ethan:** -make more stuff than anybody else except China here. You can see geopolitically, that's rebalancing too so there is something out there to be that technologically advanced center of the world, and I think we're going to see it in our lifetimes.

**[00:19:49] Katherine:** Yes, I hope so.

**[00:19:50] Doug:** I have a question. If I was in the trades and I wanted to become a plumber or electrician HVAC contractor, I have organizations where they're all across the nation. Say I have a life event and I have to relocate. Now, everybody I have the opportunity to meet when they get hired at Oatey, I always tell them it's the last place you should ever want to work. That's how passionate I am about Oatey.

My question to you is, do you have those networking capabilities to where if I had a manufacturing job here in Cleveland, I could reach out to you and say, "Hey, you know what? I got to get to Texas. I have a life event." Do you have those types of

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connections that that person can come back to you, and then you help them connect with those companies?

**[00:20:36] Ethan:** It's not our core thing that we do, but we're connected everywhere. Yes, we'd have an organization there. People that have experience in the trades, they're like gold.

**[00:20:47] Katherine:** [laughs]

**[00:20:47] Ethan:** They're like gold to anybody. I would even question why they would need my connection because they could just show up and just wave their hand in the sky and say, "I'm here," and there'd be 10 people wanting them to join them. Yes, we could get them to companies. Everybody wants to know who are the good companies.

**[00:21:03] Katherine:** Yes, sure.

**[00:21:04] Ethan:** We could definitely get them to somebody to say, "You should check out these three."

**[00:21:07] Katherine:** Yes.

**[00:21:08] Doug:** Okay. All right. [crosstalk]

**[00:21:09] Katherine:** It's very similar to what we talked about even with the trades, with plumbing. Especially during the pandemic, the list to get on with a plumber during that time frame for any type of support or work was extremely long. You could go wherever you needed to if you wanted to do that.

**[00:21:25] Doug:** Yes. With the manufacturing, that's why I ask you the question, things may be great here in Ohio, and that's why they chose to come here to work, but then those life events might make you move to Texas. What do you do? Do you start looking on the internet? Do you start looking in the paper? I don't even know if they do paper anymore. I do paper.

**[00:21:44] Katherine:** [laughs]

**[00:21:45] Doug:** Anyhow, having an organization that can give you those connections to help things easier I think is fantastic.

**[00:21:52] Ethan:** I think that the transferability of just the skill anywhere in the country is incredible. I don't think people think of that because I don't think people are often thinking, "Hey, I'm just going to go move," but if you did have to, if I look at our national network, oh my gosh, this is the number one problem. Not for me, not here in Northeast. It's everywhere. Any manufacturer everywhere is having this issue of not having enough people. Same in the trades. You can go anywhere and do that. Your point of college, our local community colleges have degrees in every one of

these fields for almost nothing. I'm a big fan of, fine, if college isn't for you, that's fine, but I don't need to make that choice.

This is debt-free college. You just go to the company, they'll pay for it, or you'll pay nothing. You can get the degree on the side, and then you can have the degree, and you can do whatever you want with the degree. If that means engineering, great. Frankly, let's be honest, if you decide 10 years from now you don't want to do this anymore, you don't want to go out and not have a college degree. You have a college degree, so you can have everything and not have to go into debt. You're not going to hear me sometime say, "Yes, please go get a liberal arts degree," but-

**[00:22:57] Katherine:** [laughs]

**[00:22:59] Ethan:** -there's a lot of opportunities just to do this. I think that's the message we should be telling people because that's unique about America, we care about lifelong learning. We talk about education so much.

**[00:23:09] Katherine:** Absolutely.

**[00:23:10] Ethan:** On the dark side, that means people don't see these trades as viable opportunities. On the good side, it means all those technologies I was talking about, there's a bunch of people that are like, "Oh, yes, I could go back to school. I'm happy to take a class because I've been told I need to always be learning."

**[00:23:24] Katherine:** Sure.

**[00:23:25] Ethan:** That's a really cool competitive advantage for our company, even compared to Germany that has such a robust apprenticeship program in places like that.

**[00:23:33] Katherine:** Absolutely. As we look to close out our conversation today, one of the things that we always talk about is what your hopes and dreams and future for where you see this going and the impact in which trades and manufacturing are going to make.

I know you talked about that a little bit about those four pillars in which really you think that we can reclaim and hope to see it during your lifetime. Can you leave us with any last thoughts on where you really see things shifting and where you really want to see things go in the next 10, 20 years?

**[00:24:08] Ethan:** You have the strategy. Those four pillars, if that makes sense. Threaded through all of those is a pride. There's a pride that every single person who's in manufacturing, in the trades today has of their industry. Hopefully, their families have it too because they're being supported by it. That's something that I want to get out to everyone.

I want everyone to see somebody in the trade, somebody in manufacturing, and have that same pride because they realize that they're supporting them through the

economy. They're supporting what they use and make every day. They're doing something that is truly noble and we're not revering the software engineer. I don't care, you can revere them too. Whatever.

**[00:24:45] Katherine:** Sure, yes.

**[00:24:45] Ethan:** You're not the tech mogul. We're looking and saying, "No, you're the people actually making the stuff. By the way, you're using tech too. That's smart, that's complicated, that's hard. You're not just going in and brute forcing things." That dignity, that respect that we all have of each other and understand. I hope that that pride is something that gets lifted up for the entire country again.

**[00:25:06] Katherine:** Yes. You know what? That's a great thought, and I think that that's something that we can definitely carry through as we go into season three. I really appreciate your insights and sharing this with everyone. I think that we all have the ability to make a really big impact here. As Oatey, we look forward to partnering with Magnet even more. I'm trying to tell the story in how we can continue to grow because we all, all of us, whether we are associates here at Oatey or we're at Magnet, or we're other locations, other manufacturers here in Cleveland, we all need to be a part of this journey. Thank you for your time today.

**[00:25:38] Ethan:** My pleasure.

**[00:25:39] Doug:** Thank you.

[music]

**[00:25:43] Katherine:** Thanks for joining us on this episode of *The Fix*. Be sure to follow us on your favorite podcast platform so you don't miss our next conversation dropping every Wednesday. If you have feedback about the show or a topic you'd like to see covered, send us an email at [thefix@oatey.com](mailto:thefix@oatey.com), or give us a shout-out on social media. We would love to connect with you. Don't forget, you can get your daily fix by visiting [oatey.com](http://oatey.com), and we'll catch you next time.

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**[00:26:29] [END OF AUDIO]**