

# Ep.3.41 - Ingrid Tighe

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## SPEAKERS

Ed Clemente, Announcer, Ingrid Tighe

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- A** Announcer 00:01  
Welcome to The Michigan Opportunity, an economic development podcast featuring candid conversations with business leaders across Michigan. You'll hear firsthand accounts from Michigan business leaders and innovators about how the state is driving job growth and business investment, supporting a thriving entrepreneurial ecosystem, building vibrant communities and helping to attract and retain one of the most diverse and significant workforces in the nation.
- E** Ed Clemente 00:29  
Hello, I'm Ed Clemente, your host, and today we're fortunate to have Ingrid Tighe. She's the Michigan Manufacturing Technology Center President. Welcome to the show, Ingrid.
- I** Ingrid Tighe 00:38  
Hi, thank you for having me.
- E** Ed Clemente 00:40  
Oh, are you kidding me? After reading over your bio. I mean, I knew you a little bit ahead of time. But you have a really fascinating background too. And the Michigan Manufacturing Technology Center, or the MMTC as you might refer to it, has a really interesting sort of vision and mission as well. So why don't we sort of start there with what the Michigan Manufacturing Technology Center is?
- I** Ingrid Tighe 01:07  
Yes, so the Michigan Manufacturing Technology Center is a statewide organization. We work

with our small- and medium-sized manufacturers that are located throughout the entire state to include the U.P. And we work with manufacturing companies to help them improve their business and operations. And we do this through direct consulting, and in-class instruction in areas such as lean manufacturing, quality management, leadership training, Six Sigma, industry 4.0, cybersecurity, environmental standards, and even food services, which a lot of people are surprised to hear. What's interesting about our organization that a lot of people are not familiar with, is that we are actually one of 51 centers around the entire United States. So if you take a step back, something that people are not aware of. So if you look at the federal level, you know, we have all these different federal agencies. Under the Department of Commerce, there are several groups. So, many people know the Small Business Administration. There's a group in there called NIST, the National Institute of Standards and Technology. And they have a national mission and initiative to help our small- and medium-sized manufacturers throughout the country grow and thrive. How do we keep manufacturing strong in the US, and so they created what we call MEP centers. That's Michigan Extension Partnerships, or excuse me, Manufacturing Extension Partnership Centers, and so we're part of something called the MEP network. And so every state has something like us. And they have a similar mission. And we go out and we work on helping our manufacturers grow and thrive.

E

Ed Clemente 02:46

So you also have, is there just the one office in Plymouth? Or, you said you work through the whole state, right?

I

Ingrid Tighe 02:52

Yeah, we're statewide. So we're headquartered in Plymouth. And then we also have regional offices. So we have a regional office in Saginaw, at Saginaw Valley State University. We also have an office in Grand Rapids, and they're housed over with The Right Place, which you all are very familiar with. We have an office up in Traverse City. And we also have a team that covers the U.P.

E

Ed Clemente 03:14

And so obviously, these are all kind of cutting edge, because you're trying to help with the transfer of sort of digitization and other things to all these companies who are trying to compete globally and all those things [Right.] You have certain challenges, like what's like one of the most common things most people want your help for.

I

Ingrid Tighe 03:37

So a lot of the work that we end up doing is in lean manufacturing. So you know, operational improvements, some people are familiar with Six Sigma. So you've got green belt, yellow belt, black belt, those are different levels that you can get, that's again, helping improve the efficiency. Another big area for us is quality. So for instance, manufacturers have certain standards and certifications they have to meet so we can go in and work with companies in that area. And a third really big area for us is leadership training. We know that workforce is in

high demand right now, across the nation, and especially in Michigan, we can't find enough talent to fill all these open jobs. So a lot of companies are turning internally to their existing talent and their existing employees and looking at how can we upskill our folks and bring them to the next level. So we do a lot of things with supervisory skills and leadership and other areas to help train our existing talent.

E

Ed Clemente 04:32

And maybe this is a naive question, but like, how does Michigan rank as a manufacturing state? I always think, you know, we're really good because the automotive but where are we? Is there like a ranking of states for who does the most manufacturing in the country.

I

Ingrid Tighe 04:49

We are one of the top manufacturing states. We have over 12,000 manufacturers in our state, which I think a lot of people are surprised to hear. So I think it's somewhere in the ballpark of 12,500. If you look at how many of those fall into what we call the small and medium size, about 95% of those fall into that area, so it's a huge part of the backbone of our manufacturing economy. And that's why it's so vital for us to work with this segment and this industry to help Michigan thrive. One of the things that we know nationally is that, you know, a major part of our GDP comes from manufacturing, I think it's roughly around 13% of the US GDP comes from the manufacturing industry. And so that translates especially into the Midwest and especially into Michigan.

E

Ed Clemente 05:42

Yeah, and I would imagine, you know, we've had a lot of different people from business associations, we've actually had John Walsh on who you probably work with at the Michigan Manufacturers Association. What is your definition? Sort of what is small? What is medium? Because I know it's different numbers for different people. But what are you basing it off of, number employees?

I

Ingrid Tighe 06:07

Number of employees? Yeah, so we look at like one to 500. Our sweet spot, though, I would say is 25 to 250 employees, that's where probably the preponderance of our work focuses.

E

Ed Clemente 06:19

Yeah, I mean, I used to be, you probably remember, I was a chamber of commerce president down river, but that was most of our members were in that sweet spot, because either they're like a tier two or tier three, or automotive or OEM, you know, related. Also, you said you're in the national organization, do you compete with the other states?

I Ingrid Tighe 06:46

Just the opposite. Collaborate. [Okay.] Collaborate. Yeah, yeah, we do not compete, every state is charged with having one of us or a center. And so every state knows, there could be internal competition, when I say that, because you're getting federal funding, some of our money comes from federal dollars, every 10 years, you have to compete for that federal contract to be in place. So every now and then in certain states, you'll see competition from a couple different entities, but no, so in terms of competing with other states, we do not, we actually collaborate a lot. I'm really excited and fortunate to be part of the national leadership team. So what they have is something called the National Leadership Team. It's comprised of 10 directors from across the US, we represent small states, big states, some of us come from entities that are housed in a university system, some are housed in a state government system and us, we're a nonprofit. And so we meet every month. And then we also get together in person twice a year. And we work with the federal government group out of NIST, they talk about initiatives and priorities that are coming out of the White House, things that are happening in manufacturing. And they use us as like an executive committee, so to speak, to give them direction and to be a sounding board on our strategy moving forward. So we work together, it's actually a really great network too, because I can call up my counterpart in North Carolina or Texas or New Hampshire and say, Hey, what is it that you're doing? I heard you've got a really strong program in cybersecurity, you can get lessons learned, people share very willingly. So actually, it's an amazing network. People are extremely supportive and collaborative. And it's so much fun. It's really great to share all the innovative ideas across the US.

A Announcer 08:37

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E Ed Clemente 08:53

And because you've mentioned universities a couple of times now, but higher education. And I know obviously Michigan has a lot of engineering programs. But is that like, are you working with tech transfer too sometimes where someone might get an idea and then they want to partner with the university to make something is that in your is that not as big with you guys?

I Ingrid Tighe 09:13

That is not so much in our wheelhouse. So what we'll do is we'll work with our partners. So Centrepolis has a really good idea. [Oh yeah.] Centrepolis is over with Lawrence Tech University. So they're a good example of, if someone's got an idea, they'd like to prototype it, they'd like to start scaling and starting a business, they'll often go there, then when once they get to stage two and a larger company, then that's more likely when we'll start working with them. But we have great relationships with SBDC, with SBA, Centrepolis, those types of folks. So if the business need of a company is not quite what we do, we refer back and forth.



**E****Ed Clemente 09:49**

And, I mean, now I have to talk a little bit about your background, because it's so fascinating, but you come from a military background. And I know in our prep call we also talked about used to work here at the MEDC as well, right?

**I****Ingrid Tighe 10:07**

Yep. Yep. Yeah. So I always say I have a background or let me take a step back. You know, some people will say that they've gone up a career ladder, I like to say that I've been on monkey bars jumping from one to another. So when I graduated from college, I had an ROTC scholarship that paid for me to go to my undergrad. And so then I was in the military as an officer in the US Army, I served for almost seven years in communications, had a great experience. I was deployed over to Kosovo, Macedonia as part of NATO peacekeeping operations. And then, years later, I was sent into combat in Baghdad, Iraq shortly after the war kicked off in Iraq in 2004 for a year. So I learned a tremendous amount about leadership, and government and really enjoyed my experience. And then when I got out, I ended up going into real estate. And I really enjoyed that. But I missed the public service component, while I was working in the private sector. So I ended up going back to University of Michigan, I got my Master's in Public Administration. And I was able to use the GI Bill to finance that. So it was pretty great opportunity and ended up then getting a job with the state. So I worked for the State of Michigan, I first did workforce development, I was working with veterans, and helping them transition into civilian careers, working on policy and statewide initiatives that would help veterans in our state, and then that transitioned me over into the business development area working for the MEDC to work with companies on helping them grow and expand and connect them to resources. So yeah, it's been a great experience in that area. And yeah, that ultimately led me to leading the Oakland County Economic Development Department for a while, which is the largest county in terms of GDP, Oakland County is over 20% of the state's GDP. So that was a really great experience, to learn how those businesses are thriving, and what some best practices are. And that led me then to leading the MMTC as the president, which is another economic development organization. So I've had a great career. It's been probably non-traditional, according to what others think. But I say, you know, I've had a really wonderful experience, I've had so much fun, I love serving others, I love being able to make an impact on businesses and help them grow and thrive, which in turn helps people have good successful jobs, and which helps our state become a beautiful and successful state. So I really enjoy the mission.

**E****Ed Clemente 10:29**

And first of all, thank you for your service. [You're welcome.] And I think I told you, I was in the legislature, when you were probably stationed there because I remember from my district, we had quite a few veterans or active deployment, there quite a bit even. I think we even had quite a few reserves over there too at that time.

**I****Ingrid Tighe 13:07**

Yep. A lot of reservists, a lot of National Guard.

E

Ed Clemente 13:09

Yeah. Yeah. So I used to interact with quite a few of them in that position. But one other thing too even I think it's interesting also that you didn't grow up in Michigan. I always enjoy people that are not natives that come to Michigan. So you grew up in Colorado, I think you said.

I

Ingrid Tighe 13:25

Yes. Yes. People joke with me that I went the opposite direction of a lot of folks we see leave Michigan, unfortunately to do to go to Colorado right when we're trying to get people here. But yeah, I grew up in Denver, Colorado. My parents and my family are still there, wonderful place. But I wanted to go out of state when I was applying to colleges, I wanted to just see something new, spread my wings and fly. So I ended up getting my Army ROTC scholarship, and I used it at Vanderbilt in Nashville, Tennessee. So got to experience the South, which was amazing, beautiful area really love Nashville. And then, like I mentioned before, I jumped into military after that. But I always tell people, I'm a really good poster child, and so is my husband, for getting people to Michigan, I don't think a lot of people realize what a great place this is to live. And when my husband and I were first evaluating the job opportunity to move to the state, I was hesitant. It was in 2010. It was during the recession. I think Michigan had been listed on Time Magazine or Newsweek, one of those is one of the most dangerous cities. Detroit had a really bad rap at the time. And I said, Oh, this is not a good idea. But my husband said, Let's check it out, let's check it out. And we ended up moving here. I love it. I love the quality of life. The people are very friendly and down to earth. There's a lot of really great opportunities. I love all the lakes and the beauty of the state. So I am one of those people that I think you know is a great example of if we get the word out about all the opportunities and all the great things that are here in Michigan, we can start to get more people to consider moving here and locating here.

E

Ed Clemente 13:45

Was your husband in the service too?

I

Ingrid Tighe 14:21

He was. We actually met in the army, my husband's originally from Boston, and then grew up the latter half of his life in Texas. And he and I were both stationed over in Germany together. And that's how we met.

E

Ed Clemente 15:22

I just find it almost more interesting when people have lived somewhere else. Because, you know, Midwest people tend to stay in the Midwest. And so unless they go to like Denver, Chicago, LA, you know, wherever they go, New York, but I find it more interesting when I see

the reverse, like your story. I think that like you just said, it's more captivating to know why people find the state attractive, because it's almost like you're converted to the state versus being immersed in it, right?

**I** Ingrid Tighe 15:53

Yeah. You know, this is gonna sound maybe, I don't know if it's silly, but just a perspective I had. Colorado is a newer state. So for instance, the city I grew up in outside Denver's only, I think 50-some years old. And you look at some of the cities that are in Metro Detroit that are 200-plus years old. And what's interesting about that, and what I love about Michigan and some of the other Midwest areas, is all of the really cool downtown's that around the state. You've got, you know, Royal Oak and Ferndale and Birmingham and Northville, and Wyandotte you've all these really cool core downtown's that developed a couple centuries ago, and you don't have that as much in Colorado. And so that's one of the little unique things that I love being in Michigan for is I love being able to go town to town to do different things, and to see the different vibes and cultures of each of those different locations and all within 5, 10, 15, 20 minute drives of each other.

**E** Ed Clemente 16:49

I mean, that's a really good point, too, because I think even when you go anywhere, even around the state, you'll find places that have downtown's that you never would have expected. Even places, you know, we think the U.P. is pretty old, a lot of the city's up there too, because of the mining industry and settled by the French, you know, so there is a lot of unique history in the state, even from Native American perspective too and how much they're still engaged with a lot of the, you know, we've had quite a few different tribal economic development groups. And you know, they always like to talk about their history too, in the state. And it's very fortunate how many people are trying to help make Michigan better like yourself? Is there any other partners or stakeholders? I know you mentioned, the MEDC, but anyone else you guys work with closely?

**I** Ingrid Tighe 17:40

Yeah, we work very closely with Automation Alley. Automation Alley is obviously a knowledge center and a think tank for manufacturing. So they're really helpful and telling us about what's coming around the bend. They're looking at what's happening in the industry, and they're making us aware of the new things that we should be working on, like, you know, in this what we call industry 4.0 or the technology innovation that's taking place manufacturing. You mentioned John Walsh earlier. The Michigan Manufacturing Association is another big partner. They are an association that is an advocate, they do policy for manufacturers. So the three of us partner very well together, because one's doing policy, one's doing think tank, and we're the technical boots on the ground, roll up your sleeves and help the manufacturers. So those are some big ones. And then of course, MEDC. The MEDC is a big partner of ours, we apply and have received funding through the MEDC and the MSF Board for our mission. So those are some of the major ones that we work with. You know, I'd be remiss if I didn't mention also a lot of the regional economic development groups, those are also huge partners.

E

Ed Clemente 18:47

Well, obviously, yeah. Because you mentioned The Right Place, because you're actually located in there, and I'm sure you work with Marty Ferrante up in the U.P. and etc. around the state. Yeah, and also, just so you know, previous guests, we had on word Tom Kelly, and Cynthia Hutchinson, too. [Yes. Yep.] So we've kind of, I think completed your entire network probably. So, any other trends? I know, you've mentioned quite a few. But any other last minute trends you think that are on the rise and that people should be looking at?

I

Ingrid Tighe 19:21

Yeah, I'd say there's three major themes, three major pillars that we're very focused on. Number one is what they call industry 4.0. I mentioned that earlier. And that's the transformation of our industry into technology. And we're seeing the integration and adoption of automation and robotics and manufacturing. And so that's a very big thing. So a lot of our work also revolves around helping our manufacturers understand what the technology is, how can it help them, what kind of software is available, to help give them visibility on their operations. So that's one of the major things industry 4.0 can also help us with our second pillar. And that's our workforce development. How do we train our existing manufacturing workforce? How do we bring in new talent into the industry? And how do we fill some of those gaps. So for instance, using a cobot, that's a robot that's at a station, right next to a person that helps augment the work, that can help solve for the shortage in workers, you have some jobs that we call dirty, dangerous and dull. Those are the jobs that people don't want to do. And so companies are having a hard time filling those positions. So if we are using robots and technology to help fill the gaps, where we're having some shortages, we can help a company be more efficient. And then we can upskill the current workers, they have to do more interesting and complicated things. And then the third area that we're also very involved in is supply chain, we're seeing some real issues from the pandemic. And they're still in place right now, where we have a shortage of some types of supplies. So a lot of people are also not aware that we do supply chain matchmaking in our organization, we are able to help a company, they come to us and the company needs some help either trying to find a better performing supplier, or they've got a new product idea. And they need someone to help build a prototype, for instance, or other kind of activity, we can help them with matchmaking, we have a database. We also work with the Pure Michigan Business Connect team, we help them with those services. So we help with the supplier scouting and the matchmaking. And at a national level, we're also trying to help make those connections so that we can improve our supply chain at a national level to hopefully onshore more of our technology and our manufacturing, and also solve for what some of our greater issues are such as chip shortage as we're well aware, pharmaceutical issues. We know a lot of pharmaceuticals are made over in China, etc. So we're hoping that some of these longer term big issues can be solved through some of the work that we're doing at the state level and also at the national level.

E

Ed Clemente 22:02

Yeah, the more and more I pay attention to like geopolitics, supply chain is going to be the bigger and bigger challenge, I think, for a lot of things. And it'll be an interesting future. We've actually had an expert on about reshoring, you know, how a lot of companies are looking at different things and how migrating, at least come back in this hemisphere to do things. So the

last kind of question, because you already answered the one about your favorite things to do in Michigan. But, any advice you would give the young Ingrid in high school because you seem like you took an unorthodox path, anything else you would recommend?

**I** Ingrid Tighe 22:41

I would tell myself and I would just tell anybody else who's either a young teenager, or just even anybody in life, but I would say be open to opportunity. I often will tell people that if you went back and talked to the 16-year-old Ingrid and said, Ingrid, you're going to be a soldier, and you're gonna work in manufacturing, eventually, one day, I would have laughed, I would have said, Yeah, right. But the one thing I was when I was 16, 17, 18 was I was always open to good advice from people like my parents and other people who said, Ingrid, just give it a chance. Try it. Have the conversation, go try the job. See, if you like it, don't say no, until you really understand. And I ended up loving the military, I got great experience. I met wonderful people, I traveled all over the world. That experience led to opportunities afterwards. I think that the military actually is a really great experience for people in manufacturing. I think if especially if you're a woman, you're kind of used to being one of the few women in a room and manufacturing, right now tends to be a little more male dominated. So it's normal for me, I feel very comfortable in that environment. And maybe that's because of that military background. I also just think that there's a hierarchy in the military that similar to manufacturing that a lot of people would be comfortable with. So I also as a veteran would encourage other veterans to really think about manufacturing as a great industry to go into after serving. So anyway, so that would be my my advice is be willing to try anything. If you don't like it, you can always go on to the next opportunity.

**E** Ed Clemente 24:17

Yeah, and you've got experience even from doing veterans and business with the MEDC, too. So, you sort of know that bridge already. Well, anyway, we're out of time. But I want to thank again, Ingrid Tighe. She's president of the Michigan Manufacturing and Technology Center. And Ingrid, you're a joy to talk to and you did a great job and we really appreciate the good work you're doing.

**I** Ingrid Tighe 24:38

Thank you, Ed. It was such an honor to be on your show and I look forward to working with you all in the future.

**E** Ed Clemente 24:43

To make sure you join us next week we're going to talk about clean hydrogen hub in the Midwest.

**A** Announcer 24:50

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