

Ep.2.39 - Lindsey Rem

Mon, Oct 17, 2022 3:32PM 22:03

SUMMARY KEYWORDS

building, michigan, construction, barton, absolutely, field, state, company, job, capture, project, floors, people, university, technology, buildings, schedule, new technologies, flypaper, photos

SPEAKERS

Announcer, Ed Clemente, Lindsey Rem

- 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 your host, Ed Clemente and we're fortunate today to have Lindsey Rem. She is with Barton Malow, Vice President of Business Transformation. And we're dying to know what that means, but welcome to the show, Lindsey.
- L** Lindsey Rem 00:41
Thank you. I'm dying to know what it means too, are we gonna learn?
- E** Ed Clemente 00:46
It's like, whenever you get a job description, and all other tasks assigned, it's like, what does it really mean? What's really in there? But let's, let's start out first, if you run into somebody, I've never heard of Barton Malow, what do you tell them the organization does first, before we kind of break down what you do?
- L** Lindsey Rem 01:05
Yeah, I usually tell them that I work for a company that builds amazing things, just really

complex buildings, and you know, sometimes not buildings. So hospitals and schools and stadiums and energy plants and solar fields, and wind farms, and all of that. And we manage the construction of that work. But then we also do some of that work. So we we install our own concrete and erect structural steel and things like that.

E Ed Clemente 01:35

And also, you, but you're not an architectural firm at all, or are you? [No, we are not.] And you do no design either, right?

L Lindsey Rem 01:44

We do design management, I would say so you know, there's different contractual types where sometimes we will manage the design that, you know, the architects, the engineers, and then obviously take that into construction. That's on a certain subset of our work.

E Ed Clemente 02:01

Yeah, just so you know, what the field you're in, most people have no idea kind of. Well, it's it's a very, you know, I think that's I don't know if that's the way constructions always been historically, but it definitely is more segmented, it seems like as to what you do. And I don't know if that's how, because I had lunch with someone the other day from Ghafari and Associates and they said they work with you all the time. [Yes] And so I'm like, oh, so they don't do architecture. So I kind of figured out that one. But so you do all these unique programs, so it seems like if you're the Vice President of Business Transformation, that could be anything. And does that mean, you're like a futurist for the company or are you looking for new opportunities or what?

L Lindsey Rem 02:48

Absolutely, yeah. And mostly I'm focused on new technologies and new business models. We talk about, you know, wanting to maintain our relevance for another 100 years, because we're a 98 year old company based here in Michigan. And so we know that we need to be exploring new technologies. And that could be robotics, that can be actual software that can be all sorts of things, and then also new ways of just fundamentally new ways of delivering work. And so that's what myself and my team, we explore those opportunities.

E Ed Clemente 03:20

Without, I know, you can't always mention who your clients are, but maybe you can. But can you give some anecdotes of some like what you've done, like you've mentioned a whole bunch right there in the beginning, but you've done wind turbine fields you said or.

L Lindsey Rem 03:33

L Lindsey Rem 03:33

Yeah, absolutely. Up north. Yeah. In the thumb area of putting a lot of different wind turbines and farms up there. We've done a major stadium in the city of Detroit, that was recently completed. You know, working for, you know, the automotive companies, we're a Detroit-based company, we have a long history of working for the automotive companies that are based here in Michigan. And then you name the school district, and we've worked in it, you've named the, you know, the higher ed university system, and we've, worked in it, so, yeah, all throughout the state.

E Ed Clemente 04:11

Well, when my Michigan State buddies told me I was going to be interviewing you, they go, oh, they just did the stadium, you know, like, and that was a big deal for Michigan State people. So, what, and you guys really are not just based in Michigan, right? You do, even though you're headquartered here, and a lot of your projects are here, but you also have a big footprint too, don't you?

L Lindsey Rem 04:34

Yeah. We work in a total of 10 states, all pretty much east of the Mississippi. So you know, states like we're in Tennessee and Florida and Baltimore. Baltimore is not a state, Maryland, Pennsylvania, you know, and whatnot. Yeah. So we're pretty diverse.

E Ed Clemente 04:53

They think their state. Yeah. But ya know, yeah. So, you also can you break down For me, some of the technologies you were just talking about just so like, is it like, 3D? Like, you know, how Industry 4.0 is digitizing or things like, is that the kinds of things you're doing?

L Lindsey Rem 05:13

Yeah, absolutely. So construction, like every industry has been going through a digital transformation, such an overused word, you know, an overused term, but you know, we use it anyway, right? Trying to digitize the work that we do, rethink our processes, so that we can best apply technology and kind of supercharge our work. So BIM is a huge one. So building information modelling, for folks that don't know what that is, so we use building information modeling or 3D models, to plan our work so that we can build the building virtually before we go out into the field to build it. So we can, we can show the schedule, so we can tie a schedule to that model and show how it's going to be built. So customers can see that, all of our trade partners, everybody can kind of see how it's gonna be built, we can tie costs to that model, we can do a number of things with the model to really eliminate a lot of the risk and the uncertainty from the project. That's probably, that's a huge area of focus. And then other areas of focus really, in reality capture. So a lot of technology, you know, using drones to fly over, you know, some of our sites, and we can, we can capture, you know, how we're moving earth. So, you know, for our civil work, you know, we can just capture progress in general of things that are going on. We use 360 photos to capture projects so our customers from far away can do

walkthroughs of buildings, you know, and it's almost like they're in the building without having to physically be there. That was particularly helpful obviously, during COVID. We use laser scanning to scan existing conditions so that we make sure that new construction is going to marry up with what's there already. So a lot of work in that kind of reality capture space. And that's exploding into things like being able to, you know, to capture productivity, find issues in the field without a person's eyes having to be on them. The computer will be able to identify those issues for us, kind of automatically, that's where we're moving towards.

E

Ed Clemente 07:19

So is that being done through sort of like, I don't want to say algorithms, but is it? Oh, it is algorithms.

L

Lindsey Rem 07:26

I mean, it's certainly software is basically algorithms and right, yeah, AI and machine learning. So as, for instance, one tool that we just recently piloted on a job, you're able to take 360 photos, do a I'll do a walkthrough, and it compares it to get to your estimate to your you know where you're supposed to be, and it knows that you have X percentage of metal studs installed, and so much of your drywall installed and so much of the finishing work installed. It can tell you that because it's learned to recognize through photos that that work is in place. It's pretty, pretty fascinating

E

Ed Clemente 08:03

So it's not even a human looking at the photos, well, deep learning is looking at it. [Yeah] And then saying, okay, for us to stay on schedule, we've got to work on this. So it starts even making recommendations.

L

Lindsey Rem 08:17

That's where it's getting to. Yeah, to the predictive side. Yeah. The, the predictive, prescriptive side, I should say, where it's prescribing actions. Yeah, it's, it's pretty exciting.

E

Ed Clemente 08:28

And I don't know what it was like before, but like, how, how has it leapfrogged for you guys? I mean, I don't know if you can describe it, but maybe that is hard. But like, like, how much more difficult was it before to do these things? And now it's just seems like it's easier to do. Like did you have to do everything with one person walking around every day to make sure this beam was in the right spot?

L

Lindsey Rem 08:52

Absolutely, absolutely. Yes. I mean, it's it's pure manpower, right? It's like anything where you can introduce technology to kind of limit the amount of that wasteful work of just walking around to say, okay, yeah, this thing is in place. Yep, this thing is in place. And instead, they can spend their time on much more value-add activities, like planning the next area of work, or, you know, figuring out how to resolve an issue that's come up, and not just walking around capturing data.

A

Announcer 09:25

You're listening to The Michigan Opportunity, featuring candid conversations with Michigan business leaders on what makes Michigan a leading state to live, work and play. Listen to more episodes at michiganbusiness.org/podcast.

E

Ed Clemente 09:41

I know you already told me what you got your degree and from one of the best universities in the Midwest, University of Chicago, which is one of the great beautiful, I know I told you, it looks like Hogwarts when I've been there before, and you played soccer there. So what kind of got you on this path? This wasn't a path I'm sure you anticipated, right?

L

Lindsey Rem 10:01

No, not not even remotely. I, I graduated with a degree of Law Letters in Society from University of Chicago and had no idea what to do with it. And I worked at a think tank for free in DC for, you know, six months that was not sustainable. And then came back to Michigan was going to go to Wayne State to get my Master's in History. And now as kind of a side job or as a, you know, a job that didn't take a lot, I started working at Barton Malow, essentially, as a secretary, you know? Doing mailings and things on a job site at Lawrence Tech University, they were building their Architectural and Engineering building. And I just fell in love, I fell in love with construction, and worked with an amazing team that said, well, if you want to learn, we'll teach you. So I learned on the job and worked in the field for about 10 years, you know, building buildings to get to do the renovation of the Cathedral Most Blessed Sacrament downtown, which was a highlight now, especially with my history, my love of history. And then ended up coming into the office to implement a major software system, and never got back quite out into the field just kept implementing technology, and kind of where you know where I am today.

E

Ed Clemente 11:15

Where you know, you know, when you get love at first sight like that, you know, it's, it's even better when it's something you never even knew is going to be potentially in your horizon. [Yes] It's even more captivating in a weird way. And you know, the other thing, too, the reason why I know, it's not what you majored in originally, but why I think that's important is because part of the purpose of the podcast is for other people to listen to this, or for parents to listen to this in case their kids seem either unorthodox, or maybe not what they want them to do or whatever.

Because, I mean, this is actually tying in to one of your other questions, so you can answer it now. But, you know, what would you give your 17 year old self advice? Because I think that's really critical to show that the paths are more zigzag than straight usually.

L

Lindsey Rem 12:05

Absolutely. I say that to all sorts of folks that come in new, you know, come in, maybe right out of college, or some other path that they came in that, yeah, don't look for that straight line, you'll miss all the good stuff, if you look for the straight line. But what would I say to myself, I definitely would say be curious and never stop learning and just looking for those opportunities. I think my last, you know, four, like four out of my last five jobs didn't exist before I had them at Barton Mallow. So just by looking for opportunities, being open to new things, you can just create a wonderful path. And I would say definitely, I would love to have said to myself, learn about all the jobs available in this enormous field. In the AEC, we call it the AEC, the architectural engineering construction space. It's a \$10 trillion a year global industry. And there are I mean, the number of jobs in this industry are, it's just immense. And they're they're varied. You know, from heavy technology roles, all the way to, you know, holding the hammer in the field. I would really have liked to have had my eyes open to just what the opportunities were.

E

Ed Clemente 13:20

Yeah, and I would imagine just from talking to my friend, I mentioned, at Ghafari, that they're busier than ever. And obviously, there's tight labor markets, but I also think, because of all the, exactly what you're doing, the rapid sort of deployment of new technologies, is actually people changing their minds, like maybe even the projects they weren't going to do to maybe to do it differently, right? [Yeah] So is that a challenge sometimes when someone thinks they want to do something, then you guys, well, we could do it this way instead. Is that like a conversation you guys have, like early on with the companies or your potential clients?

L

Lindsey Rem 13:55

With our customers, absolutely. You know, we're always trying to inject kind of innovative thinking, and a way to, you know, do things in a better, faster, cheaper, higher quality, you know, just deliver better value to our customers. So we're constantly yeah, coming to the table and saying, I know, you thought maybe this would be the best way, but maybe we could do more prefabrication, we could do more of this work off site and bring it you know, on site so we could expedite the schedule. Or we could limit the disruption to your, you know, to your campus, or things like that. So yeah, we love to get up front and work, that's why we worked closely with Ghafari is because we're trying to get involved very early on in the project, while we're thinking through design, so we can make changes there that would then allow us to build that much better.

E

Ed Clemente 14:45

I would even imagine COVID might have impacted like, especially with campuses and colleges, like how they want to design stuff given the reality of like, are we going to have more virtual

like how they want to design stuff given the reality of like, are we going to have more virtual students or we're going to have this you know, I imagine you got to be thinking about that too, is what's the best financial solution too for your clients?

L Lindsey Rem 15:03

Yeah, absolutely.

E Ed Clemente 15:04

Yeah, it's interesting too, when I talk to my friends at universities, how they're all struggling kind of with this. But you also got a couple other interesting things and I don't know, I didn't mention this to you in our pre called, but like FlyPaper and Alltrade. What are those?

L Lindsey Rem 15:22

So we have, you know, again, a very innovative company, a very innovative CEO always, thinking you know, thinking big and fly paper in particular is an interesting story. So, an engineer, a project engineer, one of our job sites, started coding, and then off hours to make some of the work that he was doing easier. He was doing BIM coordination, coordinating it without getting into the details of that thing is, it's a terrible process. It's just very time consuming a lot of clicks on the computer. So he built a solution to automate a lot of that work and came and said, hey, I think this is something and our CEO, Ryan Maybeck said, yeah, I think this is somethin. And so we formed a small company with him to you know, to deliver that to the marketplace. It's called FlyPaper, Sherlock and it's used in like, 17 countries by a number of, you know, a lot of a lot of companies. And, and we continue to develop software with with that small company. And then Alltrade is our sister company that's based in Canada that does a lot of solar work in particular.

E Ed Clemente 16:35

Yeah, and I know we talked a little bit about a lot of your sustainability you do. And I'm sure that's a field that's just going to keep growing forever, I imagine, even internally with like the types of materials you even are using in buildings, right? And how it might be thermally more advantageous to say, oh, we should be combining it with this or something like that. And FlyPaper, you own the intellectual property for it then, sounds like [Yeah] Oh wow, that's great. That's great. And that was patented here in Michigan?

L Lindsey Rem 17:06

Yes, I don't know, you know what, I don't, oh, we do have a patent for one of their products.

E Ed Clemente 17:11

Yeah, that's all right. But at least you have, you guys sort of came up with it and somehow got

it to market. That's good. And then we should also mention your other unique building right on Grand River downtown Detroit. Why don't you explain that what it is?

L

Lindsey Rem 17:24

So you're talking about the Exchange Building? Yeah, yes, it's awesome, that's Lift Build. So it's another one of our companies, that, you know, worked, actually Ghafari design that one and we're building it. It is a fundamentally different way to build a high rise building. So that's a multifamily building, condos and apartments, and you build the floors at a ground level and then they are raised up into place. So you know, the roof was built at ground level, and then its raised up, and then each subsequent floor after that it just raised up in and clicks into place. It looks really funny when you drive down there right now, because there's just you know, whatever, six or seven floors hanging out in space, and that is a really big play. It's a big part of Barton Malow's transformation play to really fundamentally change the industry and rethink how we do construction. So by doing things at the ground level, we get a lot of repeatability, which is something we don't get a lot in construction, and so we can learn and then you know, expedite the schedule on those. We can make things much more safe, you think we don't have cranes and lifts people you know, putting facade on or you know, the skin of the building 16 stories in the air. So we're, we're saving, you know, there's a lot of safety benefits and quality benefits and the people that are doing the interior finishes, so from a schedule perspective, they can be working on the floors that have been lifted, putting in all the interior finishes while we're still building, you know, the floors below. So there's just a lot of efficiencies there as well. So just a lot of a lot of great learnings that are coming out of that and we hope to build many more.

E

Ed Clemente 19:08

Yeah, you should drive by there if you're ever downtown. It looks very different right now and I'm sure it'll look like a regular building eventually but for right now, it's unique. You know, I never would have thought this was as crazy too, because not too long ago they built a new bridge across I think I-94. I don't think it's your project, but they built it all on the ground and then they lifted it over the expressway, which I didn't think that was possible, but they did it. So I think you're absolutely right like a lot of these folks are now really looking at construction very differently. And obviously the United States is a good place to do a lot of this stuff, test it, beta test it at least. So anyway, we're down to the final question. So you've got kids, right? [I do, three] So, three, that's a lot. And so um, what do you guys like to do? Like where's, either your favorite spot in Michigan or what either event you like to take? You know, what do you like best about state?

L

Lindsey Rem 20:10

Oh, it's hands down. Big Bear Lake up in Johannesburg.

E

Ed Clemente 20:16

That's right by my cabin. [Is it really?] There's Big Bear and Little Bear.

L Lindsey Rem 20:19

Yeah, we're on Big Bear Lake, yeah, we're on Eighth Street you know right off, of what is it Meridian Line road there. That is that is our favorite, that is our favorite place. Absolutely hands down.

E Ed Clemente 20:30

Yeah, that pizza is great there at the corner, Vienna corners. [Yes, that's our that's our favorite.] Yeah, no. And I know Jo-Burg pretty well, too. But yeah, we're only like up in the Pigeon River Forest, so we're not far and my buddy's and Big Bear Lake too. So that's just a beautiful area. There's a little state campground there too. It's nice. Oh, yeah. Michigan's a great state. [Michigan is a great state.] Yeah. And so, our podcast producer, Otie is saying he's very familiar with all these places. Recommending pubs for us now. Paul's Pub, I've been there many times for fish. So anyway, so now, we're just gonna say, I want to say our guest again, I appreciate you taking time Lindsey to do all of this today again. Our guest was Lindsey Rem, she's Barton Mallow, Vice President of Business Transformation and you can see she's transforming a lot. Thanks again, Lindsey for doing this today, you were great.

L Lindsey Rem 21:01

Thank you for having me. This was awesome.

E Ed Clemente 21:30

It was a lot fun, thanks for doing it. Join us next week where our guest is Amy O'Leary. She's the Executive Director for SEMCOG, also known as Southeast Michigan Council of Governments and the President of the Metropolitan Affairs Coalition, also known as MAC.

A Announcer 21:47

The Michigan Opportunity is brought to you by the Michigan Economic Development Corporation. Join us and make your mark where it matters. Visit michiganbusiness.org/radio to put your plans in motion.