

Ramona Schindelheim, WorkingNation editor-in-chief:

You're listening to Work In Progress. I'm Ramona Schindelheim, editor-in-chief of WorkingNation. Work in Progress explores the rapidly changing workplace through conversations with innovators, educators and decision makers, people with solutions to today's workforce challenges. Workers who are vision impaired face many hurdles in the workplace from reading information on screens, to finding their way around the office. And not every company is accommodating. One person I met at the Consumer Electronics Show in Las Vegas last month has firsthand experience with these challenges. His name is Mike May, and his title is Chief Evangelist at GoodMaps. It's a company with a tech solution for helping the visually impaired navigate their workspaces. Mike explains.

Mike May, GoodMaps chief evangelist:

We take the outdoor navigation that everybody's used to turn-by-turn navigation with GPS indoors. We do outdoors, but for most people, you lose your route and your directions once you go inside. So we map places like this, big convention center, hotels, universities, hospitals, rail stations so that you can set a destination to your gate, or to your restaurant indoors and get turn-by-turn directions.

Ramona Schindelheim, WorkingNation editor-in-chief:

We could have used you about an hour ago.

Mike May, GoodMaps chief evangelist:

I know. Yeah, no.

Ramona Schindelheim, WorkingNation editor-in-chief:

This convention hall is [inaudible 00:01:29].

Mike May, GoodMaps chief evangelist:

It's tricky.

Ramona Schindelheim, WorkingNation editor-in-chief:

So are you mostly for people who are low vision or blind, or do you do this for all, everyone?

Mike May, GoodMaps chief evangelist:

Well, the key for real accessibility is that it's useful to everybody from an economic standpoint. If you have a multipurpose application, or device that everybody uses, then the economies of scale will drive that price down. So indoor navigation is paid for by the venue and they need to be able to look at how does that serve all of their customers, all of their staff, all disabilities.

And what about asset tracking? What about helping their staff know where products are? So you have stores like Home Depot and Target that all have detailed indoor navigation, and that really is primarily used by their staff. But we focusing more on end users and making sure that blind people have an accessible interface to use this navigation.

Ramona Schindelheim, WorkingNation editor-in-chief:

So this is an accessibility, but it's also an efficiency and an economic usage for GoodMaps?

Mike May, GoodMaps chief evangelist:

It really is. And in terms of blind people, the better you get around, the better you engage in life and in a career. And so if you go to a company these days and they have hoteling, or open desks, or whatever, how do you find your desk when it may not be in the same place every day? What if you go to see a client and you want to get to somebody's office without having to have sighted assistance? So we're providing independence and really the opportunity for career advancement and keeping a very precious job and doing it well by having the navigation component part of that equation.

Ramona Schindelheim, WorkingNation editor-in-chief:

There's a new phrase that people are using now, DEIA and the A the accessibility part. So that does increase the number of people in the workforce and their opportunities. Correct?

Mike May, GoodMaps chief evangelist:

Yeah. I think, unfortunately, when you're trying to serve so many diverse groups, it's inevitable that somebody's going to get left out. And even within disability communities, people in wheelchairs or people who are deaf, people who are blind, we don't have all the same needs and solutions. So it is hard to find accessibility across the spectrum. But in terms of navigation, I think we can do that pretty successfully, once we've mapped the indoor of a building, then it really applies to everybody with certain tweaks so that everybody can use it. For example, if you're in a wheelchair, you want to know where are the ramps and the elevators. You want to have a step free mode and we provide that.

Ramona Schindelheim, WorkingNation editor-in-chief:

So tell me how your technology works. How do you map these venues?

Mike May, GoodMaps chief evangelist:

Well, we have a LIDAR scanner, which we can walk around with, and it shoots out laser beams that bounce off of all the surfaces and objects in that facility and records the location of all of those bits and pieces into a map of that building of that indoors. Then I come back with my phone camera and I turn it on, run the app, and that camera picks up my environment, compares it against that 3D cloud image and says, "Aha, you're here. Here's where you need to go to make your turns and to get to your destination," just based on that camera. There's no hardware required to install in that building. It's just the LIDAR maps.

Ramona Schindelheim, WorkingNation editor-in-chief:

So like in this hall, north hall, you're in the 8369 booth. Are you mapping all the booths, or are you mapping parts of the venue?

Mike May, GoodMaps chief evangelist:

We have not mapped the entire facility. We're working on a demo of the area that we're in. These booths get put up last minute. As of this morning, people are still putting things together. So it's not practical to map an entire exhibit like this. What we can map are the things that don't move. The doorways and the hallways, and the escalators, and elevators, and meeting rooms. Those can all be mapped because they're stationary.

Ramona Schindelheim, WorkingNation editor-in-chief:

How big of a company are you? Do you have a lot of employees?

Mike May, GoodMaps chief evangelist:

We are three years old. We have about 30 employees.

Ramona Schindelheim, WorkingNation editor-in-chief:

And they travel around the country doing this mapping?

Mike May, GoodMaps chief evangelist:

It's a combination of people who are engineers and marketing, and also the mapping people, the people who process the maps, cartographers. We have a VP of commercial who's based in Europe. We have a lot of train stations that have been mapped in England, so we're focusing on English-speaking countries right now. But this is obviously something that can cover the world.

Ramona Schindelheim, WorkingNation editor-in-chief:

You've done this for three years, what is your background in terms of career? What's your career been like?

Mike May, GoodMaps chief evangelist:

Well, I like to say my career in navigation began when I was three years old and I went blind and all of a sudden I had no access to print signs, which is how sighted people navigated. Now everybody has digital information in GPS, and so we want to make sure that that's accessible, because that's necessary in order for me to know what's around me, what my options are, how to get from here to how to be independent. So I've spent most of my career working on accessible navigation, starting with my own accessible GPS company called Sendero Group, and now joining GoodMaps to work on adding that indoor piece.

Ramona Schindelheim, WorkingNation editor-in-chief:

So you went blind when you were three years old. Was it an accident, or was it a disease, or did genetic or?

Mike May, GoodMaps chief evangelist:

I went blind from a chemical explosion and I had a stem cell transplant in 2000. It gave me a little bit of vision. So I went from totally blind to being able to see a colorful shirt you have, and I think probably the stripes from your badge and dark hair. And when you move your head, I can see motion, but I don't see, I can't read print or determine steps. I have no depth perception. So I have a little bit of vision, which can be dangerous.

Ramona Schindelheim, WorkingNation editor-in-chief:

That's a remarkable thing. Technology, science, being able to give you back your vision after a couple of years.

Mike May, GoodMaps chief evangelist:

It is. It was very rare. Still is a rare occurrence that people can be blind most of their life and get some vision back. And of course I still have my seeing eye dog, Johnny Golden Retriever down here on the floor. Not impressed with what we're talking about, sleeping away.

Ramona Schindelheim, WorkingNation editor-in-chief:

That's amazing though at three that you had a chemical accident.

Mike May, GoodMaps chief evangelist:

Just freak, freak accident. We lived in a mining town in New Mexico. I got ahold of some calcium carbide. If you put water in that powder, it turns into a gas, which I did is because I wanted to use the jar it was in. I was next to a pile of burning garbage. The spark hit that plume and I blew me up.

Ramona Schindelheim, WorkingNation editor-in-chief:

That's incredible. Well, I'm glad to see that didn't hold you back though. Didn't stop you I making a fabulous career.

Mike May, GoodMaps chief evangelist:

It's been a challenge, but there are so many tools and techniques that can help a blind person be an effective part of the working community. There's 70% unemployment among blind people, so I'm one of the 30% who has a good viable job.

Ramona Schindelheim, WorkingNation editor-in-chief:

That was a big part of the conversation that we had at Disability:IN, which is that accessibility and how technology can help, which is exactly what you're doing with GoodMaps. So do you see other tools out there that can be very helpful for people with a disability, other seen or unseen disability?

Mike May, GoodMaps chief evangelist:

Well, I've talked about how getting to and from a job and navigating within that job is important, but there's a huge component about the tools that are available in a job. And there's so many pieces of software these days that are marginally accessible. So I could be sitting at my desk and only get 10% of the information that's on the screen. And a lot of these big companies have software that's not fully accessible. And so I may get through the hurdle of getting hired for a job, but then I can't manage the payroll software, or the sales software, or something like Salesforce, which takes a lot of training. Even though these companies are making efforts to make this stuff accessible, that tends to be the most significant barrier once somebody does get hired.

Ramona Schindelheim, WorkingNation editor-in-chief:

Yeah, that's what some of what we had been talking about and we just added a guy named Josh Christiansen to our board this summer, and I met him at Disability:IN. And the idea that there are a lot of people out there, so once you get into the job, the companies still need to be helping.

Mike May, GoodMaps chief evangelist:

Yeah, and that's a two-edged sword, because if companies feel like, "Well, you can't perform your job," they're not going to hire you, and they don't say, "I'm not going to hire you because you're blind," or "you're disabled." They're just going to say you're not qualified. But in their heads, they're thinking,

"How's this blind person going to deal with this visual screen information?" So they'd just rather move on to hire somebody else where they don't have to think about those challenges.

Ramona Schindelheim, WorkingNation editor-in-chief:

And luckily I feel after going to that conference, at least companies are making a pledge to try to move forward it.

Mike May, GoodMaps chief evangelist:

It's encouraging with something like Disability:IN, and there's a hundred companies that are all stepping up to say, "Yeah, we're trying." There's a long way to go to get less than that 70% unemployment.

Ramona Schindelheim, WorkingNation editor-in-chief:

And I always like to give my interviewee the last word. Is there something that you would like to share that I didn't ask you about? Something that you think is important that we discuss?

Mike May, GoodMaps chief evangelist:

Technology's a big part of getting a job, and getting to a job, and maintaining that job and performing, but there's also about attitudes. And that's something that's going to be an ongoing process for everybody to understand that we're all individuals, not all blind people operate the same way. So it's a matter of not having these preconceived notions about what a person can or cannot do, because we're all different and we probably don't do things the way that we might perceive if we don't get to know somebody well.

Ramona Schindelheim, WorkingNation editor-in-chief:

That was Mike May, chief evangelist at GoodMaps, a pedestrian indoor navigation company. I met him at the Consumer Electronics Show, CES, last month. I'm Ramona Schindelheim, editor-in-chief of WorkingNation. Thanks for listening.