Vardhan Mehta on Transforming Material Selection Through Al-Powered Design | Transcript

Welcome to Green Building Matters, the original and most popular podcast focused on the green building movement. Your host is Charlie Cichetti, one of the most credentialed experts in the green building industry and one of the few to be honored as a LEED Fellow. Each week, Charlie welcomes a green building professional from around the globe to share their war stories, career advice, and unique insight into how sustainability is shaping the built environment. So settle in, grab a fresh cup of coffee, and get ready to find out why Green Building matters. Hey, everybody. Welcome to the next episode of the Green Building Matters podcast. Once a week, I've got the easy job. I get to interview just amazing people all over the world that have a green building career or something associated with just the sustainability movement.

00:48

Charlie

That's been good to me, and I know it's been good to our podcast guest today. So I've got Vardon with us. How are you doing today, sir?

00:54 Vardhan I am doing wonderful. How are you?

00:56

Charlie

Life is good. Here we are a little earlier into this new year. Sure, there's changing environments, but what is still within our control, especially around sustainability. I know we're going to talk about that. In a little bit, we'll get to Ace Lab, we'll get to your entrepreneurial career, but. And even that architecture background. Take us back, though. Where did you grow up and where did you go to school? Let's get that foundation first.

01:20

Vardhan

I grew up in a small town in India. My dad's an architect, uncle's an engineer. So I was obsessed with this practice, profession, and industry from a very early age. I used to go walk the job sites with my dad on Sunday mornings, would spend time with him in his office looking at plans, the models, and so on after school, since I was like 8 or 9 years old. Eventually, I told him I'd like to become an architect myself and came to New York for architecture school at Pratt Institute. After that, I worked at a top 10 firm in the city that designed projects for the State department, which were U.S. Embassies around the world and institutional buildings for MIT and Yale. And for better or worse, most of that time in practice. I entered the firm I was with at a weird time when there are too many folks on the design side. They didn't have as many people on the technical side or at least like to bridge that gap. So as a junior architect, I just got really involved with specifications, materials, manufacturers, reps. And this was in 2016, and I felt like there was a gap there between architects, designers, owners on one side of the industry, manufacturers, suppliers, reps on the other side. And so that eventually led me to ASA.

02:36

Charlie

I love that. We'll do a deep dive on materials and just the great tools that are out there, architects these days. Because a little bit of my current career is with a tech startup, and we're helping build an AI tool for architects and developers. A lot of firms today, it sounds like it wasn't there eight years ago, have more technologists within the firm, but they didn't at that time. We're going to have to unpack that more. It sounds like a little bit after that, though, you went to Harvard and got your master's architecture. Tell us why you did that.

Vardhan

I was starting my grad school, I was thinking about what was my biggest epiphany from my experience in practice up until then. And for me, that was. And to your point, just now, I felt like technology or the design tools had made leaps in the past, like two, three decades. Went from hand drafting to 2D CAD to Revit. And I felt like what I'd experienced on the specification side, material research, materials management, that we do at an architecture design firm that was still stuck way back in the past. And so as I was starting my grad school between Harvard and MIT, there were a lot of entrepreneurial opportunities for students to explore new ideas. And I happened to meet a team of architects, or a few architects there who eventually became my team, my founding team at ASlab. We don't experience this frustration firsthand in practice across the US, Europe and Asia. And the frustration was that, first of all, there's way too many tools architects need to rely on, and they're already piecemeal. You've got one tool for sustainability, one for certifications, one for technical SPECs, one for CAD, BIM and so on. And then you don't have all the pieces of information, all the pieces to the puzzle in one place. You can't really make a decision. You can't really make a new material decision. Second was that when architects, it's hard for them to do that. Or if you have to go to hundreds of manufacturers, websites in order to gather all the information you need in one place. Usually the default reaction to that from architects or designers is to go with what we know.

04:47

Vardhan

That's not the only factor why we do that. But we recycle specs industry all the time. About 80 to 90% of the products that go into A product, those get beaded from what the firm has done or used in the past as their firm standards. My third reaction was that I truly felt the need for a tool that did not just bombard architects or designers with information, but gave them answers when they needed the most. And that answer would be to help them optimize on a product selection for something they've used in the

past. Optimize that based on the cost, the sustainability, the availability, the design options, durability, any criteria that's truly important to the architect on that project. And so that eventually led to Acelab, which is it's a.

05:32

Vardhan

It's a platform for an architecture firm or design firm to manage all the material decision making that they've done in the past, in the present and the future.

05:41

Charlie

I can't wait to learn more about it. I like to just still unpack that background that did get you to this point. I like to ask mentors, sometimes to mentor someone, we read their material, we see them from afar on stage. Sometimes it's someone that we meet with, we have lunch and they challenge us or they open the door. Have you had any mentors along the way?

06:03

Vardhan

So many mentors. But I think I'd like to go back again. Early in my growth, I think the biggest mentor for me was actually the spec writer who then became a friend and then an advisor and case. And that's very uncommon, I think, for an architect to have that kind of relationship with an independent spec writer. He and I got along just like right from the beginning for two reasons. One, I was a junior architect and I was completely disillusioned with what we do in architecture school, like in the studio, which is the fancy drawings, renderings, and the models. And then the reality of the profession, which is of course working with real people, a lot of back and forth and data information to make decisions as honors.

Vardhan

And I realized that like me, the growth on the technical side relied very heavily on people like Aaron Pine, who was the mentor, I think the leading spec writer in all of Northeast Works at most of the firms in the city or the tri state area. And I saw him as a shortcut to all the wisdom that he learned as a spec writer over like four decades. And his dad was also a spec writer, so he came from that background. And I think the more I talked to him, it also enlightened me that there's a big gap in our industry. I felt it very strongly, but what my friends wanted to do after architecture school, and that gambled the design and the technical side. The reality is 9 out of 10 people in architecture school or design school right now want to go to the design side of practice. But at the same time, there's a big need for folks that are very well adept on the technical aspect of the profession. Adam really helped me to accelerate my learning. He acted like a director. I ripple anytime. I had a question. Why is this detail drawn this way? What do we need on this spec? What's wrong with this spec? Like, why I shouldn't recycle something from the past when I actually try to do something myself became the Yoda for me, so to speak, in that regard.

08:21 Charlie I love that.

08:22 Vardhan I love that.

08:23

Charlie

Thanks for giving a shout out there. Important that those that have influenced us, encouraged us, sometimes they might not even realize that big of an impact they had. One more look back and then we'll get to the

present day. As you're looking back, what are some of your proudest achievements?

08:38

Vardhan

I think my proudest achievement, which can be sometimes very hard in an industry where there's so much to learn, so much to wrap your head around. My strongest achievement, the biggest achievement that I'm really proud of has been having gone through this experience and building the confidence myself that while I'm an architect and I may not be a technical in, like, in background, in terms of being a software developer, having gone to business school, having the confidence in myself that I've understood a pain point very deeply through my own experience. And it's important enough for me that I want to dedicate my entire time in grad school and however long after that to solve that problem. I think that took me a long time to develop that just internally, because I feel like as an industry or people in the industry, it's easy to get, like, you go into one lane and it's easy to stay in that lane. But when you're trying to expand out of that for your own growth, for your own sort of, like, reasons, values that are important to you, it's super easy for us to doubt ourselves. And sometimes if you just take that leap of faith, I do feel like it really pays back. So for me, I do take that. I don't take that for granted.

09:53

Charlie

Thanks for sharing, man. Let's get to the present day New York, Acelabs. Tell us a little more about the company where you're at, where you're going and a day in the life of.

10:04

Vardhan

Again, we started Acelab as a team of architects and grad students, full time grad students. And we did a few of these competitions as students,

which we happened to win. We were very fortunate due to that. We started to get a lot of interest from investors, venture capital investors, angels from the industry that saw the promise of something that could be really big. But again, we're just a team of students trying to figure this out through a fun academic project. And then eventually I met Dave Lamont, who is now our chairman. Dave has a very interesting background. He was formerly the CEO of Revit, of course led this industry wide transformation from 2D CAD to 3D BIM. And he saw a lot of similarities and what we're exploring with Acelab. Acelab is today a single source of truth for any architecture firm, for any design firm, to manage and optimize all the decision making that happens around the materials and the products that go into a product. And it has three pieces. One is the form library. We're helping architecture firms to digitize all the products or the materials that they've used in the past by having a record of that in the moment and to use that as a way to make the decisions whenever they start a new project. Second is, I think I experienced this very much firsthand that as a junior architect you just don't have enough relationships. You don't have a Rolodex of hundreds of product reps to call on. They don't really know you all that well.

11:41

Vardhan

Regardless of being a junior architect or not, it's still impossible to know these like the product reps or manufacturers since there's thousands of them just in the US and hundreds of thousands of products that they represent. And you need to wrap your head around as an architect. We build a portal in the platform for an architect or a designer to be able to reach out to any manufacturer, that local rep as a subject matter expert, directly through the platform, as opposed to having a preexisting relationship with them or having to trace down their emails or phone numbers. And then we realized that there's a big need to automate the documentation that an architecture firm needs to take on like the specs, the schedules, and integration of materials into their BIM files. And so that's the third part of Acelab. And the foundation of all of this is we researched, I think for the past, like three and a half years, we've built a team of 50 architects, and we're using AI to scrape through all the mess that exists online, all the building materials, all the options available with them, sustainability metrics and so on. We've brought all of that in one place so that anytime an architect needs to compare and needs to find a superior alternative substitute value engineer, it's easy for them to do that based on structured data. At this point, I'm very proud to say that we've done this exercise successfully, over 8,000 manufacturers. Effectively every single manufacturer of interior and exterior products available in the US which equates to about 125,000 products in total. We have done the work to compare or to bring together all the data points and to organize that information so that it's like one central language that the industry can use between architects and manufacturers and how we connect with each.

13:37

Charlie

That's a lot of data, a lot of manufacturers, and educates us a little bit. When I got out of Georgia Tech, I worked in estimating. I was doing scroll wheel takeoffs, putting it in timberline estimating, and I had to read the specs and I had to get the subcontractor bids and make sure they were not throwing a different product at us. When it comes to the manufacturers, why are they so giving of the information? IThey're more likely to get purchased. Talk through why the manufacturers are so giving of their EPDs and their information.

14:09

Vardhan

Manufacturers have to make this information available to architects so that it's easy for architects to digest. You need information for the technical data from a manufacturer. You need information about sustainability metrics, all the catalogs, all the design options available from them. There's a lot of data just for every manufacturer that an architect needs to digest anytime they're evaluating them. The problem happened in this industry about 30 years ago. Before that, there was a suite of books called Suites. Suites was a catalog. Every architecture firm engineer had it in their office. It used to be the encyclopedias of every single manufacturer, all the products, all that information in books organized by the CSI master format. And then the Internet happened, and then every manufacturer had their own website and they were organizing information their own way. And anytime an architect needed to evaluate them, architects were going to hundreds of manufactured websites, playing phone tag with reps to get answer, and had to manually to combine this information into a table, into Any form of an output to share with the others, either inside the firm or the other stakeholders, like the owners and the contractors. For now, for the manufacturers, it's actually really important to make the architect's life easy. Because if you do that, an architect trusts you, then they will act as a champion for your products and your brand with the others on the project.

15:38

Vardhan

If the architect has even an ounce of doubt that you may not be the product that they're looking for on a project, or they don't really trust you as a brand, or they don't trust your data, they feel like information is hard to find. Your reps are not well educated or technical enough. That's usually bigger than a flat for architects. We help manufacturers on the other side of the platform with all the activity from architects using the platform, building their own library, searching for products. We help manufacturers on the other side to get in front of the right architects at the right time and support the right architects through their reps in the platform so that they're not they don't miss out on those opportunities.

16:22

Charlie

I love that it's about data share and no one's going to lose business by holding some of that close. Rising tide lifts all boats. I think JFK said that best. This is the Green Building Matters podcast. You hinted at some sustainability earlier. How does Acelabs really help make projects a little bit more sustainable?

16:45

Vardhan

Yeah, that's a great point. I think for me. To answer that, I'm actually going to go back to the need for a common language in our industry. Charlie, you are probably among a very small subset of folks in the industry that speak the language of sustainability. And that's not to say that as an industry, we don't want to do that. There's just a lot to unpack there. There's so many labels and there's new ones every single day. To understand the metrics, truly understand the metrics, it requires a lot of education. I think the challenge for architects right now is that's not really. We're not incentivized to gain that education based on how the average architecture firm works. That's not a billable hour for any architect to truly become an expert on sustainability. At the same time, it's a big opportunity. If you could build through technology, make this data readily available so that you can show the, hey, here's the product you've always used, which has a pretty not great environmental profile. But for the same cost LEED times, all the design options you need. Here's another product that might help you to optimize on 6500. It may have a lower rating for carbon. It might have an EPD HPD available. The supply chain may be more transparent. If you could do that, it's a lot easier for the architect to make a decision and to offer the superior alternative. What we've done with Acelab is we realized that there's probably dozens of labels, certification programs that architects may or may not understand.

18:28

Vardhan

And so we're using AI to harness all of that data, to scrape through it, all these documents available across the certification programs and show the architect and answer in the context of a product search. When they need that education in like a bite sized format, they can use Acelab to like to filter through and optimize from what they've used in the past to what may be a more superior, sustainable alternative to that product.

18:56

Charlie

I have a big LEED background. I know LEED kind of pushed it early on, but it was simple. Where did this come from? Within a 500 mile radius? Is their recycled content LEED version 4 recycled content several years ago. What are they doing at the manufacturing facility, the supply chain. But now there's even more pressure on embodied carbon. Are you starting to see that pop up a lot more too?

19:19

Vardhan

Actually one of the big things our research team realizes the gap in the industry is there's a barrier of entry for an architect to really dive in. Even if all the documents are available from every manufacturer about their sustainability metrics, somebody still has to go through that. You still have to read through hundreds of EPDs to understand the carbon implications and so on as an industry. We have the AIA 2030 pledge. There's other programs just like that which architecture firms are interested to abide by. But the barrier of entry is really how much you need to know. Not just one individual in the firm, but then across the firm. Everybody needs to have the right tool set to be able to digest that information and to get answers when they need it. One really interesting thing we're doing now, our team went through every single one of these 8,000 manufacturers. The product level we have built up through our own algorithms and AI, we have a range of the carbon that an architect can easily and instantly add to the comparison table. You may know the carbon implications and maybe you've read you can use one for a flooring manufacturer. But you want to see for these other three names that you found on Acelab or somewhere else, how do those go against each other?

20:45

Vardhan

Those manufacturers in and automatically you will see a of the carabiners all over at least like, so that as a direction you have something to to fall back on, which does not require you to sift through hundreds of these EPD, HPDs or the other reports that might be available for sustainability evaluation.

21:06

Charlie

I can't wait to get into the tool more. Everybody is listening? Make sure you go check out all this great work that we've got going on here at Acelabs. Let's talk about the future. I'm going to tweak it a little. Usually I ask about how green buildings are going to evolve, but how about technology? How about AI? You're a great tech platform here that supports how we're really designing and building our buildings. But is that going to help a company like yours? What's your thoughts on AI sharing of data and anything else you could sprinkle in with sustainability?

21:38

Vardhan

I think to answer that we actually need to, we need to broaden the question to what we're all experiencing as humans. I feel like for the first time since the inception of the Internet, the expectations with search are rapidly changing. Until now, our expectation was not just as an architect or a professional in the AEC industry, but just as a human. Our expectation was Google, like a search engine or an Amazon where you have endless pages, filters and so on. But now with AI, search is more a dialogue, it's a conversation. The problem with AI at the moment is the hallucinations which are based on if you start with the wrong data, if you don't train the AI on the right data, there's a very low likelihood that it'll actually be meaningfully helpful to an architect. We've all, as industry professionals, we've had those experiences where we went on ChatGPT or Claude Gemini, you name it, and we're asking it to generate a spec sheet or asking it to find X data for a product or for a building to do some of the calculations. Answers we can just tell just by looking at it for two seconds it's wrong again. The reason for that is there's nobody that has really tailored these very general AI models LLMs to the use cases that we need in the industry. I feel like the future is twofold with technology. As we talk about sustainability or with green buildings. One is that there will be these highly specific applications of AI like we're doing for material research optimization.

23:22

Vardhan

I'm sure there's others who are doing something really similar to calculate or to do the energy modeling on a project or to calculate the cost numbers and so on. I think these highly specific applications, when we use AI as the tool to enable that, can be really effective. And each of these things really requires a solution in itself. But the second trend I see is, and it's already happening in our industry right now, where there's just too much technology. And for any architecture firm there's a cost to pay. And that's not the dollars to subscribe to that technology. The cost to pay is can we afford to have half a dozen tools in our tool set to do only a fraction of our job or only for a fraction of our deliverables? And the answer is no.

24:12

Vardhan

I do feel like the future with technology is an operating system. It's an end to end workflow solution. Ridiculous of it being for design, for 3D modeling, for developing your drawings, your specs, but instead of for each of these things to rely on having footers and different tools and commerce, it needs to be like one finish.

Charlie

Too much technology. I'm excited about everything you said because I still want to have a hand in the sustainability movement, but I'm spending a lot of time on technology too. I want to get together and compare notes. Some of my co-founders at Schema were on the original team at Revit, including the original product manager, Marty. We just have to hang out, see what comes out of it, man. Let's get to know you a little bit more here. Kind of a rapid fire part of the interview. I'm enjoying it very much. What would you say is your specialty or gift?

25:07

Vardhan

I thought about that a lot when you sent over the question. I think my true specialty is somebody who's doing something that they're not formally trained for is to identify really smart individuals, get them very excited about the mission with ASV and then to get out of there. I feel like if you do the first half of that, but not the second half, that's a recipe for disaster. If you are able to find the A players in any type and it's not just for tech startups, it's also relevant. I feel like in an architecture firm, in an agency, anything. But you have to get out of it.

25:43

Charlie

I've been fortunate to go. Our green building has about 60 team members and we actually sold those to a large strategy and I can't agree with you more. You hear it for those listening, you hear, you read it in the business books and stuff. But you need enough self awareness. Not everybody has that right to just television and then you're right, get out of the way and just trust your team because when you're always in the way or it feels like micromanaging, it comes off as you don't trust them to do that job. And we just can't have that. Thank you for that. I love that man. That's good stuff.

26:19

Vardhan

To add to that, Charlie, I do feel like for people in our industry that's a lot easier to appreciate than let's an MBA or you know, like a software developer in that we just deal with so many different stakeholders and so it's easy to know your strengths, your like your superpowers and also know the stuff that you're not great at. To your point, if you had the self awareness you're doing yourself, you're doing like a good thing for yourself just to find people who bring that superpower, that value to your team so that you can all be successful together.

26:58

Charlie

That's really good. Thanks for doubling back on that, man. Hey, do you have any good habits, routines, rituals that help you stay on point?

27:07

Vardhan

I'm using a lot of these small AI tools just to take off the mental weight of remembering when to follow up, like with help with writing and so on. But I feel like what's more important, just like now speaking as a founder and somebody from the industry, is when you're building a company, I feel like there's so many audacious goals that sometimes you can lose track of the small wins and it could be the smallest of wins, but especially like when you are in leadership management, it may not be that impactful to the company objectively. But I feel like for the people who are on a team, those things if they were the ones to lead, it can be really important for that.

27:56

Vardhan

So just taking a moment to celebrate those small wins while still having that one start in front of you as a company, as a team. I do feel like that's been a good habit just because with startups there's hundred things on any given day battling for your attention and it can be easy to just like be a taskmaster and just to go for attacking every single one of them, not celebrate what you've actually done Very recently.

28:23

Charlie

Now a lot of your team is in New York. Are you remote and if all over. Our team's remote, literally all over the world. How do you slow down enough to try to celebrate? Maybe as a team that's not all in the same place. Any tips on that?

28:36

Vardhan

We're the same where we started during the pandemic. We were remote first and like that was just for us, like the primary way of working. We didn't go from an office to a remote, then hybrid and so on. I think one thing that's been really helpful for our team is we do like monthly happy hours. We don't do it at happy hour time, us time because again to your point, we've got groups in Europe, Africa, India, lateral. Which is the time. And it's more just like for us to like all the people that want to show up and talk to each other. Our team is also growing very fast. At this point we're about, there's 85 of us literally across the world.

29:21

Vardhan

I think one of the things we've tried doing in the past is we find these like virtual games and so on for team building. There's virtual escape rooms, there are strategy games where you have to work together with people to solve a puzzle or something like that. And so we used that as a way to get a software developer with a sales guy, with somebody from marketing, somebody from the product team. And then that's also an opportunity for them to know to know more about each other, their interests and so on.

Charlie

Thanks for sharing those best practices with our remote teams. It's important. And then if you get that rare chance to meet in person, then it's like, okay, I actually know this person a little bit already.

30:09

Vardhan

I have another one, a really good one. For the fast growing teams, I feel like the biggest challenge is you can get re isolated in your function. Your team members can easily get isolated into their lane and what they do in the company and with remote work it can be difficult. I know initially when we were just starting to form the team, we were doing this on a monthly basis where we would go around the room and just do like two truths and a lie. Everybody would make up two truths and a lie. And that was like a really good way just for people to learn more about folks that come from a totally different background from a place that they might not have been to.

30:52

Charlie

Oh, that's a fun one. I haven't done that in a while. And you're right. Just to see how people can storytelling. You find those really interesting facts. It's like, no way. I love it. Let's all do more of that. Thanks for that. Best practice as we get to know each other more. I'm a fan of the bucket list, but not everybody has a bucket list, some say adventure travel, maybe write a book. I don't know. What are a couple things on your bucket list?

31:16

Vardhan

My wife and I, we just had our son four months ago, and my bucket list is I know you and I talked about this briefly before the recording, but we both love traveling, and I think that's very important to us as a family value. I want to keep that going. I see there are some. Some fun things in your background with pins and on like a world map. We're the same way. And I

feel like that's a great thing to not lose sight of when you know you're having some big changes in your life with kids and so on. Because if you lose that, like, that's something truly special that you really celebrate with. So that's one of them. The second thing is I'm really excited about launching.

32:00

Vardhan

That has been a big project, just because it's one of those things where while we're learning more, AI is evolving so rapidly. Like you might have read about, there was a new model that got released last week called Deep Seat and totally obliterated \$2 trillion worth of value. And that's very scary because you and I are on the consumer side over here. We are the interface layer between the people who build these really ginormous models and us building applications for a very specific use case. But this is such a rapidly evolving field that it's really required us as a team to be winning. So for me, that's a bucket list for them to truly launch, successfully launch in about two months, coming soon.

32:54

Charlie

Yeah, that was huge news. And it makes you think as you're leading a company, and I am too, it's like, wow. You try to stay a few chess moves ahead, but there's always something. Well, best of luck as you launch AI on your side. Let's talk about parenthood for a minute. I'm just feeling. Feeling compelled today. You've prompted that with me to our listeners. Some of you may have kids, some of you may not. My boys are 16, 13 and 11. As we record this podcast, you're a new dad four plus months in and you know, you asked me a good question. Just any advice there? And I think when you're a very little child, it lets them crawl around, sure, baby proof the house, but just, it's okay. They're sure they're a little delicate, but just let them explore and it's okay. Don't just hover over. That's one. I think the other one we kind of talked about is you hit on it again. Just go to that

dinner. You might not go to the white tablecloth dinner and bring the little one with you and have the little high chair, but just go out and then you nail the travel. Behind me, you can't see it. Podcast listeners, I've got a big calendar with all the trips for the year and then I've got a map with some magnet pins. Where have I been in the world? And I'm fortunate to get out. We took our whole family to Japan last year. I think later on you want to make sure you raise really good kids.

34:14

Charlie

And I tell others how do you know? When others say, gosh, your kids are so well mannered when they're not in your house but they're elsewhere, it means you're doing something right. They might act a little different in your house because they know how to push our buttons and take a little advantage of it sometimes. But when others, when they're just out in the world say, gosh, they're so well mannered, that means you're doing something right. A leading indicator you're raising good kids. The other one though is when you travel somewhere and your kids realize, hey, this is the menu, I'm in another place. I don't get to customize this order. And if they can acclimate to like, okay, this is what we got.

34:51

Charlie

I think you're doing something right as a parent and of course push them to get outside more and move around and play with the neighbor kids and stuff like that. There's some parenting tips of the day.

35:01

Vardhan

Those are great. I saw this thing on Instagram last week. It was like a dad who posted, I'm taking my kids around the world so they can try chicken nuggets and french fries all over the place. I was like, well, that's not the kid's problem. The kid will ask for that because like that's their frame of

reference. But like, you as a parent, like if you want them to grow, you can also just help to break that feedback to like. That's not really on the kid.

35:31

Charlie

You're right. That's on the parent. It was on my bucket list to take my boys to Omakase in Japan and you know, the chef's choice, we just had some of the best sushi ever. And luckily my boys really appreciated that. It was good, man. I like to ask my podcast guests, is there a book you'd recommend? If not a book, maybe a documentary or podcast. Just kind of a pro tip. Hey, I got something out of this.

35:54

Vardhan

One of my investors, just as you were starting to make a slab, a real thing, I asked him, like, what do you like, what's something that helped you? And he was, he's incredibly accomplished. He was profound. E Ink. If you have ever used the Kindle or any of these things which use E Ink, he's the founder of that form. And so he had a very similar background to me. He was a mechanical engineer and he just happened to run into this idea and he started a company. The book he recommended to me, it's a pretty obscure one, but I think it is. So damn. It's called Selling the Wheel. And so it's almost like satire style writing.

36:35

Vardhan

It's like one of the authors is really a sales expert, and then the other one is from the marketing world. But for anybody that's like tinkering with an idea, working on innovative technology, or like a business model, it's really interesting. And like the premise of the book is the guy that invented the wheel. But like nobody had a frame of reference for like one. This came against what it took, like for the people he encountered, how he had to. How he had to like learn to talk about the wheel, how he developed a team to sell the reel, to market the reel. And it's all fictional, but it's also very believable and it's hilarious. It's like a very short read like a light read, maybe on like an hour long like a plane ride, probably get through the whole thing. But it is so fun and it just makes you take any of these big problems that we're dealing with on a day to day basis and just zoom out and think, the guy who invented the wheel, it had to be one guy. And I came up with this idea. It was like trying to figure out through trials and tribulation how to get everybody to understand how important this thing is.

37:46

Charlie

Oh, man, I love that. I'm going to get that. You need some humor too, in the storytelling, so thank you. We'll put a link to the podcast show notes to that book. Thank you. As we start to wind down, just a couple more final questions as you look back on your career. Is there anything you wish you'd have known earlier?

38:05

Vardhan

Make it a rule. And actually I did know this earlier, but I had the benefit of having a great mentor. Not Aaron, it was somebody from the business world, like later on after Acelab or as we started Acelab. But make it a rule to only work with people, either on your team as a customer, as users of the thing you're building, or the clients, and so on. To work with people you truly like and trust. For anybody that you're hiring, adding to your team, evaluating, make it a rule that they need to be all three of the following things. They need to be hard working, they need to be smart, and they need to have high integrity. And if any of the things you have a doubt about, it's probably not going to work out. And that's been like my golden rule with our team has grown the people that we brought onto a slab and so on.

39:02 Charlie Oh, man, that's good stuff. So much wisdom here. Last question. You got me fired up, but let's say someone is listening, they're maybe making a career change or maybe they're newer to this green movement, or maybe this technology movement. Here you are with your architecture background and your master's architecture and you really befriended that spec rider and look at how it helped you now. It's amazing. As you're navigating a career, let's say someone's jumping in right now, maybe at a startup that helps in this built environment or maybe the green movement. Any words of encouragement? Someone jumping into the work you're doing?

39:40

Vardhan

Reach out to people to get feedback, you'd be surprised how I truly feel like most people in the world are good people and most people want to help others. And so if you just reach out to people and say, like, hey, I'm trying to learn more about X or I'm tinkering with this idea which might do X. And I think based on your profile or what somebody else told me or whoever introduced us that you are an expert in this field and I would really like your feedback. Most of the time you will be surprised by how many people are very happy to do that for you. To go back to Aaron, I knew him as a junior architect at the firm he usually would only work with. And he would generally spend time, even when he was at our office, with the principals, owners of things. One day, as I was starting to think about Acelab, I just reached out to him. I was like, hey, Aaron, would you mind, like, if you have some time, if you're going to be in the city next week, let's just meet for an hour like for happy hour or something. Not only did he give me very insightful feedback, which helped me to find Acelab, also bought me beers. And I think for him it was very depressing that there was a junior cadet who did just reach out to him to see if he could help them with Joel or xyz, like something just like a tangible benefit. They reached out to him to learn from him. And I feel like people really want to give back as they become, as they get to that level where they have so much to give and so much of the wisdom, expertise, and they do want to help others. Reach out to people

and you'd be surprised how many of them that you might think in your head, oh, my God, they're so successful. They're so impressive. Why the hell would they want to talk to me? They want to talk to you. Just reach out to them.

41:32

Charlie

Do it. Don't wait. What an amazing interview. I love your background. I hope we can collaborate more. I just want to say thank you for being on the podcast. Everybody is listening make sure you connect on LinkedIn. Check out all the good work Acelabs is doing, and it's a tool you probably should be using right now. Vardhan, thank you so much for being on the podcast today.

41:51 Vardhan Of course. So happy to be here.

41:54

Charlie

Thank you for listening to this episode of the Green Building matters podcast@gbes.com, our mission is to advance the Green Building movement through best in class education and encouragement. Remember, you can go to gbes.com podcast for any notes and links that we mentioned in today's episode and you can actually see the other episodes that have already been recorded with our amazing guests. Please tell your friends about this podcast, tell your colleagues, and if you really enjoyed it, leave a positive review on itunes. Thank you so much and we'll see you on next week's episode.