Episode 8 – Sustainable Futures: Working Toward a Greener Tomorrow

Jad Sobh (00:13) Welcome back to Groundbreaking, where consulting meets innovation. My name is Jad Sobh

Peter Nabhan (00:18) and I'm Peter Nabhan

Jad Sobh (00:20)

If you're tuning in for the first time, Peter and I work for ECS Group of Companies, a nationwide engineering consulting firm. On this episode, we will explore the future of sustainability throughout the stages of construction and how to excite young engineers with sustainability. Joining us to share their expertise are Austin Wallace and Richie Stever.

Peter Nabhan (00:39)

I'm going to introduce you Austin. Austin Wallace is the sustainability senior specialist for the American Society of Healthcare Engineering, ASHE, which is part of the American Hospital Association, in Chicago. In his role, he supports initiatives in environmental sustainability, energy efficiency, and advocacy with a focus on the healthcare sector.

Austin Wallace (00:41) Awesome.

Peter Nabhan (01:04)

Austin also has experience in the nonprofit sector. So prior to joining ASHE, he was a vice chairman for an environmental organization focused on climate action and advancing sustainable future. Austin holds a bachelor's of art degree in sustainability and political science and a master's in art and sustainable development. Austin is also graduate certificate in leadership and public management.

and a certified facility professional, SFP. He's passionate about the intersection of public health, sustainability, and environmental wellbeing.

Happy to have you here today with us. Thank you.

Austin Wallace (01:41) I'm to be here.

Thank you guys.

Jad Sobh (01:43)

And I'll get Richie. Richie Stever is the Vice President of Real Estate and Construction at the University of Maryland Medical System, UMMS, managing operations across 12 hospitals, including real estate, construction, and property management and sustainability initiatives. He holds a master's in healthcare administration and is a senior member of the American Society for Healthcare Engineers, ASHE. Richie has received the Facility Executive of the Year Award.

and recognition from Building Operating Management Magazine. Richie, thanks for joining us today.

Richie Stever (02:14) Thank you guys.

Peter Nabhan (02:15)

Absolutely. Thanks again both for joining us today. obviously we hear sustainability being thrown out in a lot of conversation. And what we want to do or what we're hoping to do today is to make sure that our listeners or the general public can understand how sustainability impacts the operation and how sustainability can also affect people in our industry, which is the architecture, engineering, construction industry.

or AEC industry. So I want to start, I was hoping to get a good definition from you, that how do you understand or how do you define sustainability in what we call the built environment? Obviously, most of our podcast is going to be a conversation. So I was hoping to see if you can share some of that with us, please.

Richie Stever (03:02) Austin, you want to go first? Alright.

Austin Wallace (03:04) You betcha. Yeah. Let me

pull up Miriam Webster. Nah, I'm just kidding. You know, I think just going back to my days when I was studying sustainability and it was very clear pretty often how many definitions there are when it comes to sustainability. I mean, I think if you Google it, you can get 103 or 106 individual definitions. And the one that I typically revert back to the most is from the Brundtland report back

in 1987

meeting the needs of the present without compromising the ability of future generations to do the same. That is probably the most

blanket level that think covers the most industries. I'm writing an article right now for Health Care Facilities Management Magazine about how to integrate sustainability with project management. And one of those topics, it's clear that...

There's different applications in every one of these sustainable initiatives. Commercial real estate thinks of sustainability differently the way a small grassroots organization would. And that carries over even into healthcare when we look at different departments. How are facilities using their resources effectively and efficiently compared to our nursing staff and our clinicians and our anesthetic gases and our EVS teams?

each group a little bit differently. think that's really the fun part of sustainability is uncovering what it means to you and your teams. So to answer that question is there's a lot of definitions and I guess it's up to your own interpretation but that bare-bones framework is using your resources effectively and efficiently.

Peter Nabhan (04:41)

That's an excellent way to put it, Austin. I like how you talked about, you know, not sacrificing the needs of a future generation. And that gives a very good, like broad level. That's why I want to tie it back to Richie as Richie for you as a practitioner and leader in your field for the system up in Maryland. How has sustainability been adopted and how has it shifted over the years?

throughout your entire real estate life cycle.

Richie Stever (05:08)

Yeah, great question Peter. So, very similar to the way it's been adopted at your own home, right? So, while I manage 12 million square feet total, what I try to do is simplify all of that into a single dwelling, and namely my house, especially when I'm talking to people who are not familiar with the work that we do, and try to grasp.

how we're managing our buildings. So, you know, when I think about sustainability, the term sustainability, I think about how are we managing waste, meaning trash? How are we managing energy? How are we buying energy? Are we polluting the environment with the products that we're using, like natural gas and other things? Are we being fiscally responsible, right? So you can make decisions that...

that benefit one way and hurt financially. So again, I try to simplify it down to the home. And as you can imagine, the home environment has changed since we were all younger. The way that we build houses are different, the way we operate our HVAC equipment as an example. So many of us have programmable thermostats versus the old thermostats.

We're setting and forgetting it and we're just keeping a steady temperature.

incandescent light bulbs for a long time and we've since switched to LEDs. We weren't segregating our trash. We were just throwing everything into one bin and the bin goes out to the curb and who knows where it goes. Now we're segregating at our own house, all with the benefit of improving the environment so that it's here to stay for generations to come as Austin pointed out. I'm concerned.

grandkids yet, but I am concerned about them. I'm sure it's coming soon. But I am concerned about them when they get here and then their offspring, what the environment looks like for them. So certainly trying to do our part, both at the residential level and at the commercial level and even industrial level to help improve the environment. Make it better than it was.

Peter Nabhan (07:14)

which is a big, I Richie, appreciate you sharing that. That's a good way to simplify how people can understand it. And a big shift from maybe 20, 30 years ago where it was like just build, build, build. And let's see how much we can sprawl out as a, how much we can develop as a species. And now we're more mindful of this is going to be something that can impact generations in the future.

And I think now to your point, a lot of people are just implementing a process in their whole even land acquisition. When they look at acquisition, they try to develop a site that maybe was an infill as opposed to a greenfield. When we do construction, there's product selection. And obviously on your side with the operation as well, you've taken on some steps. And I was hoping maybe you can share a little bit about that. Like how

What are some of key things you focus on to be more sustainable with your land acquisition or your real estate acquisition? And then some on the construction side and maybe an operation. then Austin, I'd love to hear your thoughts as well.

Richie Stever (08:18)

Yes, so on the land acquisition side, we have opportunity in all areas just in acquisition. you know, we're not making any more land. it's either develop on previously undeveloped land, such as farmland.

Which then has its own challenges with bringing utilities out to those sites. Sometimes it could be from some distance. And then the other end of the spectrum is building on top of something that was already there. And so many of times we're talking about a brownfield site. The worst type of site is where there were hazardous materials formerly on the site, such as a gas station or some kind of milling plant or

a steel plant as a matter of course. And so naturally what we want to do is clean up the environment the best we can so that whatever was in the ground does not have negative impacts to the future occupants, particularly for building on old space or on old site. And then this whole concept of sustainability with renew, reuse, and recycle. So we're doing the same thing with land, right?

Why overlook a piece of property that formerly had a gas station on it when with a couple measures? We can make it safe For the next people so so that's how we look at land there, so I'm going to say no land Is off limits because there are ways to address each type of land No matter what it presents as you're doing your due diligence, but then as we begin constructing. Let's say vertically You the type of concrete

that we use, does it have fly ash in it? That's a recycled product that we can use while maintaining the structural requirements. Then what does the building envelope look like? How insulated is the exterior building? Austin's in Chicago, I'm in Maryland. He's building a little different than I am, but we're both worried about the heat and the cold just the same, right? So keep the heat in where we need it in and out where we need it out and same thing with the cold.

we're really concerned about the building envelope, the walls, the floor, and the ceiling. As matter of fact, I'm building a 412,000 square foot warehouse right now.

It's an industrial park and I was really concerned about insulating the slab. So the first 15 feet from the edge of the building in, we insulated the ground so that the cold wouldn't permeate through the concrete. And so these are the things we're thinking about as we're the building, not just the walls and the roof, but what does the foundation look like? So really exciting point in time as we're

relates to building construction and building opportunities to improve the environment. And so I'm really glad you guys asked me to join this podcast and talk about these wonderful things.

Peter Nabhan (11:03)

No, of course, we appreciate you being on and just sharing your experience. And I know you're someone who has implemented a large sustainability program from basically nothing to full functionality. And that's, I think that's very admirable. So appreciate you sharing your experience with us.

Richie Stever (11:19) Absolutely.

Peter Nabhan (11:20)

And then for you Austin, just to tie back to you maybe deal with like macro, you work with systems across the nations. You probably guys do probably consulting for systems in California all the way up to New York and down to Florida. So you see a lot of variability. How have you seen some of these practices actually come into play and come into fruition?

Austin Wallace (11:41)

You know, it's interesting to see everybody's take on it. And every organization does it a little bit differently, you know, just with regards to how much staff and personnel and how much time and how much resources they have to dedicate to looking at.

potential opportunities, new products, how to incorporate that and tie it in with stakeholders and get staff engagement. I was actually at a conference last year out in DC and we were talking about building Envelope and a really cool technology that I have known about but I hadn't seen it used in that application before was using thermal imaging on drones and they would fly it.

around a building that they were concerned had thermal leaks. And I mean, we think of flying drones around, you know, in our free time, it's a fun pastime, but you know, having real world applications like that to be able to identify savings in your buildings was such a eye-opening experience for me. was like, there's so much more that we can be doing or discovering and, you know, seeing folks

across the country really get behind tackling inefficiencies and locating that savings, especially in healthcare, because that savings goes a long way on the back end and reinvesting it back into patient care. It's such a really neat thing to see folks do.

Jad Sobh (13:04)

interesting that you bring up savings there Austin because that's one of the things that it seems to be talked about fairly often is sustainability is expensive. Is that true and how do we kind of sort through the fact and fiction when it comes to what is the cost of sustainability?

Austin Wallace (13:23) Yeah.

feel like a lot of folks see sustainability as a plus on their price tag of a new asset or on a building upgrade. And while that may be true in upfront costs, having a greener alternative or a sustainable boiler or chiller to be installed, I think it really recoups that savings in the long-term cost of management for that asset or for that building.

that you might be spending a little bit more on up front.

we're going be spending that same amount probably more if you were to go with the unsustainable, ungreen option just based on maintenance costs and getting folks in to your space and just think about how many times you have to take that asset out of commission to do this. So it's not saving time, it's saving money and all that. It's really hard to calculate that but there are some life cycle cost analysis of tools out there and that is one way that we've seen folks really sell that idea that sustainability doesn't have to be expensive and it really makes financial sense when you look at it the long-term cost because a lot of these systems and lot of these assets have boilers and chillers that will be there for 60 years.

Jad Sobh (14:32) Richie, do you have any, what are your thoughts on that?

Richie Stever (14:33) Yeah. Yeah.

jump all over that one so I totally agree with Austin. You know there's this stigma about sustainability cost of more money. Sometimes you find it upfront in the capital expense. Sometimes you don't, right? But we do know for sure in the life cycle cost analysis that there's certainly a lot of reductions. Back to the residential for a moment.

So I bought a new house, or new to me, about three years ago. And I called the utility company to find out what the average utility bill on this house, due to my due diligence, of course, right? And they told me a number, and I almost fell out of my chair. I'm like, that's how much somebody's paying to run this house. And I looked at my significant other, I told her, I'm like, we're not gonna pay that.

And she's like, well, what do you mean? I was like, I see opportunities already in this property. So as an example, the kitchen refrigerator, the freezer section was negative 5 degrees below zero. And so I made it positive 5 degrees. So still frozen, right? I turned up the refrigerator from

they had at 32 degrees, I put it on 40 degrees. I added the programmable thermostats. I set the timing so that it adjusts for when we're not there.

The filters were dirty, I changed the filters. The coils were dirty on the air conditioning units, I cleaned those. The house came with a hot tub. They had the hot tub run in 24 hours a day. According to the literature, it only needs to run twice a day for filtration or to maintain temperature. I changed all the light bulbs from incandescents and fluorescents to LEDs. That was a little bit expensive to do that, but one-time cost.

What else did I do? I an old freezer, just a backup freezer that looked like it from 1980. I'm sure it was not ENERGY STAR certified, so I actually got rid of that one completely, didn't need it. And the moral of the story is I've reduced my energy cost for that house by 50 % with a little bit of time investment and a little bit of capital investment.

Now on top of that, a year ago I added solar panels to the property and so now 70 % of my power I'm generating on the roof. I wanted to hold the solar panels aside on the conversation because most people, that's where they go first. But as you can see, I didn't go to the solar panels first. I made the building and the, I keep,

residential to commercial, I'd keep changing that in my head. So I made the house as efficient as I could.

And then that told me how much solar panel I needed. And then I purchased solar panels based on the most efficient building that I had. Other things we talked about, envelope, do the doors seal properly? I added some weather stripping. Do all the windows close properly? Are they the appropriate windows? Yes, they were all double pane windows, which was good. I don't know if they're argon filled or not, to be honest with you, but.

I do know I have a good envelope so the bones were there. So again, it doesn't have to cost a lot upfront to make significant changes. Now, move that into the commercial realm and into the healthcare field. As we're building buildings, we can make selections that are environmentally friendly and don't cost a lot of money. As an example, if we're thinking about carbon emissions and the use of steam and natural gas,

Do we have to put in steam humidification? No, we don't.

we can put in adiabatic humidification which is cold water, not hot water, or not steam. And you're getting the same performance without using natural gas in your system. It takes a little bit of adjustment to the air handler to add that type of technology, but it's thinking about things a little bit differently than you had in the past. And that goes for building owners as well as engineers. We can't design the way we used to

design. just doesn't work. We have to consider new products, consider new practices like Austin talked about using the drone, using spray foam versus regular insulation, other things like that to make our buildings that much more energy efficient. Again, starting with the bones and then doing the add-ons later.

Peter Nabhan (19:06) Thank

Austin Wallace (19:11)

Your experience with your home reminds me a lot of growing up with two brothers and my mom's always yelling, shut the door, we're not trying to cool the whole neighborhood. simple mindset shift and the older I get, I see those utility bills, it's starting to resonate and I'm getting it now.

Peter Nabhan (19:11) Yeah.

Exactly.

Jad Sobh (19:19) yeah.

Richie Stever (19:28) You know what the problem is Austin?

People don't operate in their work environment the same way they operate in their home environment. So how many times do we walk out of a room and leave the light on in the conference room or in the bathroom? Whereas at home, mom and dad sitting on our shoulders saying, better turn that light off, boy.

Austin Wallace (19:35) Very true.

Peter Nabhan (19:46)

Exactly it definitely needs a more of an ownership type piece and just continuing to build those small habits like yeah, this is basically like your home and Sometimes make it easy for them to build the habits like my light is automatic when I walk out the room You know if there's no movement detected Shuts off and it sounds like you know what you're describing is kind of a twofold misconception of

sustainability being expensive. First one is people just think very short term. It's going to cost me X plus and how am I going to recoup that? Number one, nobody's looking at any type of return on investment. And then what you mentioned, Richie, the second piece of it is like, it's going to be a little bit more work, but that work is something I can recoup almost immediately. And that's where the misinfo, like a lot of the disinformation is coming from.

Austin Wallace (20:37)

You know, and to help overcome some of that, I I grew up hearing the term, many hands make light work. And that holds true even today in this realm of sustainability. You if you can share that load of being sustainable and having that mindset and going into a room and looking for something as simple as lights being left on. And it really does take a village. we've seen some incredible examples of organizations

really instilled that organizational mindset through the use of their green teams. All it takes is one person to be conscientious and sometimes you have to be a little bit pushy, but it ends up working out well and it saves folks time, it saves folks money, and it's really, really cool to see.

Jad Sobh (21:20)

So this brings up an interesting point, right? So we've talked about, there's that might be that little bit of that upfront cost that's associated with doing this. So let's play out a little scenario here. You're going up the chain to try to gain support from the executives where you're at on this new project that's gonna require some of this. do you route that conversation? How do you pitch that to them that this is something that we need to do?

for the long-term benefits. Is it just as simple as that? Do you have to put a little bit more into it? What does that look like?

Richie Stever (21:54)

and I'll take this first. as you can imagine, on my position that happens a lot, right? As Vice President of Real Estate and Construction, I have to either make that decision or take it up to a higher level for a decision, especially if a lot of capital is involved. So my first stab at it is to look at what does the code say? What are you required to do?

Here in Maryland, we have a green building code. So we have to follow the green building code. So how do we do that? And if what the design team is presenting that doesn't meet the green building code, that's the easy one, right?

Then also reading, then my next step is to look at tea leaves. So there's a lot of potential new legislation coming through at various state levels. Maryland's pretty progressive, so we are seeing those type of legislation out there, pieces of legislation that cause us to consider our carbon emissions as an example. So how are we building to what they're about to approve or what they've approved just

recently. And so that's how I start there. And then if there's really outside of the box thinking and the codes or legislation don't really apply.

then that's when I start doing life cycle cost analysis and doing comparisons. If we go this route, the traditional route, or we go to a little bit fancier route, what does that look like from a first cost, and then what does that look like from a life cycle cost, and then present it that way. So I'll give you an example. We're using some geothermal on a new construction project. And doing our due diligence, again,

we're trying to figure out what is there a first-cost increase moving to geothermal. So we know geothermal we have to put in a lot of wells and that means a lot of pipe and a lot of drilling. What is that expense?

And then consider what don't you need to install if you go to geothermal. So if we put in geothermal, do we need cooling towers anymore to release the heat? Probably not because we're dropping the heat in the earth, right? Do we need a gas line anymore to the building? Probably not because we're not heating water with gas anymore. We're using the earth's heat to do that. If we were putting the cooling towers in, where will we put it? Are there structures?

reductions that we can take like all the steel and all the footers etc. What about generators and redundant power? Because we're now redundant through the earth do we need more generation like combined heat and power unit as an example? So we do the the pluses and minuses on both sides because there's some negatives on this side traditional and there's some positives. Certainly I'm talking about financial right? Not environmental.

We already know the environmental. But talking about financial, what does it look like comparison to comparison? Comparing each section? And we're finding that there's no additional first costs by going with a geothermal package as compared to a traditional package. As a matter of fact, the geothermal package is much simpler to operate. So it makes it easier long term on the staff.

And then you layer on all the energy savings on top of that and the environmental reductions on top of that. And then the question becomes, why aren't we doing it? Right?

Peter Nabhan (25:19) It does be.

Austin Wallace (25:20) You know, I think moving into,

if I could tag on there, you know, I think when you're approaching your executive leadership with new project ideas, one of the things that I've talked to folks that have experienced it pretty intimately, one of the things that they've said is the most beneficial for them is going in,

with terms and explaining in terms that you know will resonate with them. In the engineering realm, I'm not an engineer by trade, and so this really hits home for me is everyone talks in kilowatt hours, BTUs, everything, and I'm like, I have no idea what this means. If I can conceptualize it and hold it in my hand, what is that? And our chief financial officers, our chief executive officers, our entire

executive leadership suite, they juggle a lot of things. so coming and approaching that conversation in terms that they can grasp and understand and just pick up and run with, they've experienced a lot more beneficial conversations when it comes to new projects. And Richie, I know that's definitely something that I wanted to get your perspective on. Is that something that you have thought about or gone into meetings like that?

Richie Stever (26:25) yeah,

Austin, you actually ...

it's imperative that you speak the audience's language. CFO wants to know in healthcare, how does this affect patient days? How does this affect our capital budget? How does this affect our operating budget? Those are the things that they really care about. If I told them it saves two million KBTU, they're like, okay, what the hell is that? But if I say this will save us \$10,000 a month,

perpetually then their ears are perked up and they understood what I said back to Austin's, nailed it on the head. We can't use engineering terms to talk to lay people. have to, no pun intended, but we have to dumb it down, right? And we have to make it digestible for those that we're speaking to, especially those that we're seeking approval from.

Peter Nabhan (27:17)

Yeah, you make a very solid points there. Sounds like that combination of it's a new practice. So maybe some of the initial cost is going to be a little bit higher. But it's also a lot of times we're not really doing the appropriate calculation and the right communication or the right median to tell the executive suite that this is actually going to save you money, even if you invest now. But this is how it looks like in simple in simple terms, they can understand. And this is how it financially

looks like for our budgets, pro formas, so on and so forth. So it actually becomes way easier to pitch it that way and get backing.

Richie Stever (27:53)

So I do want to say many of the executives want to be pioneers, but they don't want to be first. So as you're pitching a new idea for a new thing, it's helpful to say, even if it's a different industry, we want to incorporate this idea into our project. Here's why, and here's who's done it successfully before.

could be aviation, could be industry, it could be other than in our case healthcare, but they're really afraid of being first. Because, and you have to imagine why, it's because people's lives are at stake. We can't afford to put in something that doesn't work, right? Because in our particular case, people die, right?

And we don't want people dying on our watch. And so that's why I say just be cautious if you're bringing a new idea. Do a little research, figure out where it's been done successfully before, and

provide that research to the people you're talking to. And that should ease some of their concerns, especially if it's something novel.

Austin Wallace (29:01) have a redundancy plan built in. That's another thing I've seen.

Richie Stever (29:04) You always have redundancy. Yeah.

Peter Nabhan (29:07)

Yeah, you always have your best alternative offer. I appreciate you saying that, Richie, because a lot of people don't think of the stakes in the built environment for healthcare because it's not just financial business risk, it's also human life. So it makes sense for them to move slower than maybe other industries, especially in adoption of new technology.

I did want to use this to build upon and so we looked at what is sustainability. We talked about some of the maybe misconceptions or some of the implementation and I think we want to touch a little bit about the future. We're sitting with two experts in sustainability and we know that the workforce is shifting. It's been a kind of a shift. like a lot of young people come up to us and say,

You know, what is the company doing about sustainability or what is the company's vision? So that's something organizations are paying attention to. So I want to start with you, Austin, because I know that sustainability is your life. You live this every single day throughout your work. What are you seeing some some systems doing and how are they actually implementing sustainability with an eye on the future and the workforce?

Austin Wallace (30:21)

I think there's two key arguments or situations within that. Looking at healthcare facilities.

specifically, I want to say the large percent of our workforce is nearing retirement. And I know a lot of organizations are really stressed on how they are going to get new young professionals that have that experience and intimate knowledge of the facilities that they're in. You know, there's so much ingrained and legacy knowledge that go into these facilities. know, there's folks that have been

there and spent 50 years in one building and they know it.

better than any other person. And it's like, how can you replace it? How can you teach that? And it's, that's something that's keeping a lot of hospital executives up at night and people that are directors and managers and trying to figure out how to bring people in and sustainability could really be that avenue. I know that was something that really, that I was passionate in coming out of school was I want to be a part of an organization and a team that really values and

cares about efficiency and cares about people and cares about health. And actually an AHA was really the perfect blend of all of that. But in addition, you when we're looking at specific organizations and hospitals, these young people are coming out of school and they're eager. They really are. And so finding ways that could be through tech schools or trade associations or some sort of job shadowing programs. These are all ways that organizations can really get their foot in the door with some of these students. I even saw an example, a conference I was at a couple years ago, was they were going in high schools and doing high school job shadows. Like really plucking these kids from an early age and showing them that, this is something that you

can do that we are going to have a need for and you can have a lifelong career in one organization, in one building, I it can take you anywhere. It was really cool to see.

Richie Stever (32:11)

Peter, I'll jump on that. yeah, I agree with recruiting and retaining talent is a big concern, but also recognize through my partnerships in ASHE and being able to talk to facilities folks across the US.

Many of us are doing sustainability work. Where I think the problem is, we're not good storytellers. We're not good in promoting the great work that we're doing with the way we're building new buildings or maintaining old buildings. And so I would say to anybody entering this workforce or considering entering this workforce, ask some probing questions in the interview process to figure out what they're doing.

Do you guys have motion sensors in your building? How often do you change your air filters? Do you have any daylight harvesting in your space? I guarantee the interviewers are going to be like, yeah, we have that. Just because it's very similar to at the house, right? It's just ingrained in how we operate today that we don't even think of it as being sustainable. It's just a regular course of business. But if you're entering

the workforce and joining us in the healthcare arena, I can assure you that we're doing it. Again, we're just not talking about it.

And once you start asking those probing questions, that'll tell you whether that's the type of organization you want to join and or if they're not doing it today, certainly a whole bunch of easy apples to pluck right off the tree and you come in swooping in with some real easy ideas and making big change real fast and making a name for yourself. I do think there's some benefit there. Certainly could use new

ideas, could use new talent, and certainly welcome you in my organization as well as any other organization that actually represents across the United States. So I would not let that hold you back if you think, if you one, you're passionate about sustainability, I'd let that shine through because many times the facilities organization or the organizations in healthcare are already looking for that type of talent.

Peter Nabhan (33:58)

Richie Stever (34:13)

And two, I think you'll find a lot of personal satisfaction in the work that we do in the healthcare arena. I often say in construction, there's like four types of buildings to build out of the ground. And that's kind of easy and kind of boring. But.

When you add the healthcare component to it where we have lead in the walls and medical gases run through the space and the...

Austin Wallace (34:32) you

Richie Stever (34:41)

heating air conditioning requirements, both temperature, humidity, as well as pressure. you add all that up, it makes for very complex building. And once you start building these complex buildings, you're not gonna wanna build anything else, because it's so exciting. And then you tie in the patient that I'm keeping those patients alive, I'm serving my community, I'm making my community a better place because of that space I just built over there. You can't replace it.

that.

Peter Nabhan (35:07)

I couldn't agree anymore, Richie. That was a good way to describe it. Appreciate you saying that. And of course, we're not going to end the episode without talking about the big elephant in the room. And that's artificial intelligence. So we can now use machine learning models, big data.

to do so many predictions and that could definitely play a big role in sustainability efforts and definitely advancing this whole sustainability industry. I'm gonna start with you, Austin, first what kind of conversations are being had around AI and the role that AI has in advancing sustainability?

Jad Sobh (35:30) Thank

Austin Wallace (35:42) You know?

I think the first thing that jumps out in the healthcare space, at least in the conversations that I've been a part of with concerns and opportunities within AI is the security of the data that you put into that. You know, there's a lot of open source and once you put in, put in data, who has access to that? Is that being generated in the future with new reports that someone pulls? And so I know there's a lot of, a lot of closed loop systems.

and those have been used for...

lot of stuff that saves time, saves money. You don't have to have a one-hole FTE dedicated to running this data or doing this analysis. You can put that data in. so in terms of sustainability, that checks every box. Every box except for the whole side of how much energy data centers are using. That's a whole nother beast. And a of worms, it's way above my pay grade to open. But it's definitely conversations that

you

we've been having and that we've been hearing our members have. And it's just something like Richie said earlier, no one wants to be the first, but we have to be all a part of that conversation in order to

utilize an amazing technology that could make our lives 10 times easier. It could help the efficiency and the patient experience in the hospital and shorten their length of stay, which in reality,

As much as we love and care for patients, we don't want them in the doors. We don't want them to be sick or injured in the first place. so the best we can do with our jobs is to help mitigate them needing to be there in the first place. And how that relates to AI, it's a whole other question. But it's a valuable piece of technology that I think we're still figuring out.

Peter Nabhan (37:22)

Absolutely. And I definitely heard about to your point, I definitely heard a lot about companies using patient data for as opposed to reactive management to make sure that the patient patient remains healthy throughout their life. So to do they're doing, you know, data collections, predictive analysis to make sure that, you know, you catch things early as part of the overall healthcare value chain. Richie, what are some of the

What are some of the immediate impacts on your operation for AI and maybe what are some of the first things you would probably use AI to help you with?

Richie Stever (37:51) you

As I think about AI and the built environment, both building and maintaining that environment, two things come to mind. One is the building automation systems. There are many software organizations out there that provide predictive analysis, fault detection analysis that sit on top of the typical building automation system that pick up anomalies that a human wouldn't normally pick up.

That's one thing I think about how AI is improving our environment and our work practices. And then second, with personal performance and time management for myself.

think that it's just going to improve the way we perform and

and streamline our communications. One thing I do want to bring up as it relates to new technology so when DoorDash as an example or you know the grocery, I don't do these things but the grocery ordering platforms where it came out it says oh that's going to reduce the number of cashiers in the grocery store. What I'm finding is actually more staff in the grocery store

store now picking people's groceries up and delivering them to their car, then there ever were the number of cashiers. So just look at what technology is doing at the grocery store, where you thought or somebody could have easily thought that self-checkouts and delivery to your car is going to reduce the number of staff. I'm actually seeing the opposite in the field, which is very uplifting because many people are concerned about the adoption of technology and how it affects

job creation and employment and I'm just I think we're adapting to it and if anything is it's providing more opportunities than less.

Peter Nabhan (39:39) you Absolutely. One thing that I always heard when I first started attending healthcare or ASHE conferences, like we're asked to do more with less and having a tool that allows you to do more enables your human, your humans or your individuals to do more. That's what AI is doing immediately. And I think that's helped us so much.

And there's absolutely no, to your point, there's really no danger about being replaced with AI. The only danger is being replaced by another person using AI as opposed to you not using AI.

Richie Stever (40:14) Exactly.

Peter Nabhan (40:15) And sorry Austin, by the way, back to you.

Austin Wallace (40:16) No, no, you're good. actually piggybacks

really well with that. I mean, I think AI in the, this just jumped out to me in my brain was AI is almost like the bumpers when you're playing, when you're bowling, you know, it helps steer you and keeps you in the right direction. and it allows for that creative freedom or the speed in which you're throwing that bowling ball to head towards the, towards the end goal in the pins. so, know, AI is, could really be a neat tool that

I'm excited to see how we are able to put it to use in hospital facilities.

Richie Stever (40:47) like your bowling analogy. That was great. I don't want a gutter. I don't want a gutter ball.

Austin Wallace (40:53) Exactly.

Peter Nabhan (40:55) Did you ask AI by the way for that, Austin?

Jad Sobh (40:57) Yeah

Austin Wallace (40:58) No, but

I should have. excited. I wonder what they would have come up with.

Peter Nabhan (41:02) That's true.

Jad Sobh (41:03)

Well, gentlemen. I would like to send a thank you to both of you for all the insight today. It's been an awesome conversation because it's, you know, when we had originally met, was like one of those

things like, how many different directions can we go? And I feel like we've done an awesome job today with the two of your help, you know, kind of given our listeners a little bit of good picture of what sustainability is and how it can be implemented and all the different things that are affecting it.

So thank you very much.

Richie Stever (41:27) Absolutely.

Austin Wallace (41:27) thank you guys

for your leadership.

Peter Nabhan (41:29)

So we typically end these with one question that we ask of everybody that comes on the podcast, or we try to, at least. Richie, I'm gonna start with you. Can you tell us something in your life that has been groundbreaking? And this is personal or professional? And groundbreaking is actually the title of the podcast.

Richie Stever (41:46) So as I think about that question, what

for me was groundbreaking. I go back to COVID and during COVID, I was asked by my hospital leadership through a series of events to create a mass vaccination site for the state of Maryland. And I had the opportunity to build a mass vaccination site in M &T Bank Stadium. We operated it for four months straight. We gave 250,000 shots.

We were up to 1,100 shots an hour. And I feel like professionally.

I don't know how I'm going to overcome that experience there, the ability to design and operate and run that vac site and what it did for the entire state of Maryland. We turned the state of Maryland around by having that, standing that back site up. And so for me, that was groundbreaking because nobody was doing it, doing mass vaccinations. As a matter of fact, we wrote a playbook and one of my partners and Ashley borrowed it to stand up their mass vaccination site in Texas. And so

So to me, that's groundbreaking. I hope I get another opportunity to do something that amazing. But if I don't, I'm happy.

Peter Nabhan (43:00)

Richie, just gave me the chills, considering I drive by the MNT stadium quite often. So now it's going to be, every time I'm going to drive there, I'm going to have that image in my mind and might be some.

Richie Stever (43:09) Yeah, I have the image in my mind

every time I drive by like, yeah. I even have season tickets there and it walks through right through the clubhouse where the site was. I can see it in my brain all the lanes with all the people coming through

getting shots happy as hell when they're done and feeling rejuvenated and not scared anymore. I mean, it was really amazing.

Peter Nabhan (43:31)

Absolutely. And just the sheer amount of impact that you've had. And truthfully, when you talked about storytelling, this sounds like a story worth telling. Maybe it becomes a book one day.

Jad Sobh (43:43) Austin, What you got that's been groundbreaking?

Austin Wallace (43:46)

You know, my recent life, what's been groundbreaking for me is probably getting Ben Johnson as the head coach for the Chicago Bears. I am very, very excited to have no excuse this next year on scoring points. But in my, in my professional life, you know, I think what's been groundbreaking within the past year has been my ability to go and speak and travel has really opened a lot of doors professionally and personally to meet some, I mean,

fantastic individuals that are doing some really cool stuff in their organizations and you know that's how Peter and I originally met too and and just getting the chance to meet and it's really opened a lot of doors.

in the way that I think and the way that I approach sustainability and the way that I think how it gets applied in organizations and then the impact that it's having on patients, it's having an impact on staff that use that space in the buildings and then sustainability more broadly and how we're using our or how we're disposing of our waste, how we're using our resources and so I'd say that's what's been groundbreaking for me is

having those relationships and those connections with people that I really want to be a lot like one day.

Jad Sobh (44:56)

Just like the name of the podcast, that's some groundbreaking stuff right there, gentlemen. So to our listeners, we hope that you've enjoyed this episode on sustainability in the built environment. Stay tuned for more episodes with thought leaders, just like Richie and Austin. Don't forget to subscribe to our podcast on Apple Podcasts, Spotify or wherever you listen to your podcast. Thank you for listening to groundbreaking. Where consulting meets innovation.