



Danielle Walsh:

XXXX

EPISODE #036

Danielle Walsh (00:00:00):

The reason why you come to Clearly is you are either going to avoid penalties and a stop in operations and that's on the regulatory front or it's to save money in your operations or to save money in financing. There's a hard ROI here. So when it comes back to, again, let's take the case of a regulatory push because before you could get by when it was using estimates and it's a lot of work to blend the operational, the vehicle and the energy data I can kind of get by. We are now showing that the outputs, when you're actually blend that data, you show exposure. You show that actually if you.

So an example of another client of ours, they are a broker between shippers and carriers. So their job and how they get paid is to fill empty trucks. They work with thousands of carriers and what they're looking for, they've got a technology to look for, oops, that's empty on the way back, will actually fill it up from another customer, right? So as opposed to doing less business to save the planet, you can do even more business.

Jaspal Singh (00:01:09):

Welcome to the Mobility Innovators Podcast.

Hello everyone. Welcome to another episode of Mobility Innovator Podcast. I'm your host, Jaspal Singh. Mobility Innovator Podcast invites key innovators in the transportation and logistic sector to share their experience and future forecast. In this episode, we'll be discussing the role of AI to plan the electric vehicle transition for the fleet operator.

Our today guest is the co-founder and CEO, clearly a startup based in UK and Israel, which helped the global transportation sector to reach net zero emission. It used AI together combine and enhance data across the supply chain so company know exactly where the most emissions are coming from in the fleet. Easily access optimal project to reduce emission and also automate the excess of shared and cheaper financing.

The company's already operating in eight cities around the world and has more than 50,000 assets under contract and has tracked over a hundred million trips. Prior to founding her venture, she was a director in TMT investment banking at HSBC and LED technology for existing and new initiative. She's also an angel investor.

I'm so happy to welcome up Daniel Walch, co-founder and CEO. Clearly it's now time to listen and learn.

Jaspal Singh (00:02:23):

Hey Daniel, I'm so happy to have you on the podcast. I'm really looking forward to our discussion as the topic of energy transition is on everybody's mind. I know you must be talking to a lot of people and everybody asking you how to make energy transition possible.

Danielle Walsh (00:02:37):

Yes, certainly it's our obsession here Clearly.

Jaspal Singh (00:02:41):

Great. Now let's start with our discussion with your personal journey in the transportation transition space. I call it, and I must say that I was really inspired seeing your journey because you started your career in law in Argentina and then entered into investment banking in London for mining and later technology and later you join HSBC and soon become the chief of staff or the head of banking for Europe, which is quite great because starting as a law and then investment banking and mining, it's

great. Your journey so far and you did a lot of projects, you kind of put a strategy behind a \$17 billion innovation spin for the bank and then you also fronted the bank on the technology with multinational company on the focus on transportation. You did a lot of these works.

Can you share a little more about your professional journey and why did you decided to, after your successful career in professional side, why did you decide to take a pain of entrepreneurship? Because generally when you're successful you don't want to take a pain again, but you launch your company in 2021 after such an exciting career at different places. And I would love to know any interesting fact about your career, which you still haven't put on the LinkedIn or you haven't tell to the people.

Danielle Walsh (00:03:54):

Yeah, of course. Great. Yes, I was very lucky. I think I've always been lucky to have great leaders. Some people call them bosses but I call them leaders. So in Argentina was under a partner who showed me the colorful side of law and I think that's when I realized that if you don't like Laura and Argentina, you probably need to get a new career. And then the HSBC side investment banking was under a gentleman that really taught me a lot and pulled me under his wing, traveled with him everywhere, worked me very hard of course. But we did things and one of the things was he was a numbers guy. He loves data and numbers. And when we realized that we were spending a lot of money, like many big organizations, you've got a matrix structure. So you have budgets sitting in different parts of the world or different teams.

Danielle Walsh (00:04:44):

If you don't have a central source of truth, you really can't put your money to work. I mean we like, again, many organizations killed a lot of projects because a trader in Hong Kong would have the same idea as another banker in Ethiopia. So it was that it was streamlining. And then it was a realization that a banker that size is a funder and the funding size is a huge, but it's also an advisor to multinational companies. And we had a huge disruption, which is technology. So it was a two-way knowledge. HSBC is a big entity, so it can provide information around what they as an entity are doing on this disruption and vice versa as a funder, what is the company doing to keep up with the trend? It starts with that. And at the time I said to the bank that I would only do effectively mobility and I say only because mobility touches every company effectively.

Danielle Walsh (00:05:40):

But at least there was a theme somewhere, and it was during that period that I realized through a lot of conversations from people smarter than myself, the disruption was not just technology but it was also climate. There was two ways coming, and this is now seven or eight years ago, came back to the bank and after a year and a half said, kill the team because obviously you've got the central source of truth, you must spread it to the bankers so they can use it in a better way than just keeping it in one place. And to build a new team, which was future cities and new industries. And there it was around how can we as a bank do a number of things. One is to provide advice when it comes to what are the new technologies that are impacting all of the different companies, whether you are a retailer through to an auto manufacturer, through to an energy provider.

Danielle Walsh (00:06:32):

And what products could we create? We are a financier and the biggest hurdle and blocker when it comes to transition and transportation is funding, which is a risk assessment. You are always doing a risk analysis on where to place your capital, whether you are an investor in a company or you are a bank

that's giving a loan. And as a bank, if you are being gained or gaining full visibility across the supply chain, how can you do it in a secure fashion that you can assess project by project to fund the right innovation or the right company or the right new idea within a company. And so within the bank, the idea that I had and tried to build was effectively what's called a data bond.

Danielle Walsh (00:07:21):

So the idea was that at the time a lot of people were telling me, especially the auto manufacturers, that we're going to make a lot of money by selling data connected vehicle data. We're going to make 40-50 to 70-80K annually, it's going to take seven cars, free cars. I think even the CTO of Ford came up with a book. And then I think what we realize now is that that's not the case. You can do things with data, but you're not going to make a lot of money anytime soon. So that kind of died a bit. And then the second thing I realized that you could not be a bank, you had to be a neutral entity and I couldn't let this go. It just became the problem statement came an obsession, left thinking I had all the answers, thought it would be a lot easier, all these startups that raise a little bit of money, I'll raise 20, I'll buy a couple of companies, I'll put them together, we'll solve it. I then got a nice slap on the face and woke up to what really entrepreneurship was, but still was obsessed by the problem and I couldn't let it go. So I think that's probably the starting story of many things and with a dash of being a bit naive to how hard it is, then you get used to it, right? But at the start I think it is quite good to have that dash of naivety to get by.

Jaspal Singh (00:08:46):

And then only you will take a plunge. My kids, they're learning swimming. So my daughter, she's very risk averse, so she don't want to go into the water, but you need to take a risk to jump and then only you will learn if you are scared of taking risk and you have to be naive, like you mentioned, you have to be naive to do those risks. And the point you mentioned about mobility, I tell people mobility touch everyone, every human being one way or another, it's not about the company, but if you see anything around us without mobility of people or goods, it's not possible. So whatever we are getting in life, it's all about mobility. So I feel it's an important point.

Thanks for sharing that. It's like I loved your point about the problem like obsession about problem because that's important as a founder because a lot of time I see founders are obsessed with the solution, what they're building, what they forget about the real problem they need to solve.

Jaspal Singh (00:09:40):

And that's important to understand what Clearly, which is the name of your venture. And I love the name because it's Clearly.Earth. I would love to know why you put that name.

But at the same time, the startup has been recently selected as a Europe hottest mobility tech startup at the **European Tech Startup Award 2022**, which is amazing because the previous winner includes Spotify, Wise and SoundCloud, et cetera. So it clearly show that what you're building is really meaningful. So can you share a little bit about what clearly does and what motivate you to launch startup and transportation transition space? You talk to the client, you understand that problem, but then why you're so obsessed with this problem statement, what touch you? And you already mentioned launching a startup is hard, it's not easy. So I would love to know why you are doing this and what the company is doing.

Danielle Walsh (00:10:32):

Okay, lots of questions. Let's start with what Clearly does or even the name. I mean I was brainstorming with lots of friends for the name and sometimes you have to play with your co-founder. My co-founder is a Data Scientist who just loves data and things that are easy to handle. And so he said, don't tell the name is cool. Just give me something that is unique for system queries. I was like, okay, it's called clearly good luck, good luck. But no, obviously it's around the complexity that comes from transportation is the biggest that we are seeing in many different industries and with the eye in a very kind of cheeky way with the eye to bring clarity to the industry, which is what we do. So we are effectively, we're a data platform. We've built a technology that is hardware and format agnostic and we can blend data across the supply chain to give trip level emission insights.

Danielle Walsh (00:11:33):

We clearly always challenge ourselves, but it keeps on coming back time and time again over the past two years that the trip really is the key. Or if you've got the trip, you can do everything. If you are a bank, if you are a fleet operator, an innovator in batteries, it all comes down to the trip. I can obviously give some examples of why, but when we first started this, people thought we were being too granular and now it's coming to bear that when you've got the trip, everything else comes from it. I think the passion, we'll come back to more around what the business is doing, but I think I've probably touched more around the passion at the start, but really how can you not get excited? You are working with the latest technologies and you are making a fundamental change because it's not clearly making the change. We are just in the background. We are just the backbone to allow the big guys and the small guys to work together to make that change. But the impact is not small and the impact is positive. Obviously for accessibility in transportation, changing the way cities move, changing of course the environmental impact it, it's very rewarding and you get to basically nerd every day and then work with other people that are also excited about the same thing. And yeah, it's cool.

Jaspal Singh (00:12:57):

Yeah, I agree with you. Sometime as a founder you feel like why other people are not so excited about this because it's something very obvious and what you said is it doesn't matter whether it's a big or small. Every impact is impact.

And if you can even create a small impact, it can ripple, has a ripple effect and lead it to big thing and triple level monitoring is important. And you mentioned something very important. You mentioned about the data in the previous question you mentioned that how data is important and it play a very crucial role in the transportation transition strategy because if you don't have a data, you don't know whether whatever we are doing is correct or not. And especially for the big corporation without data, it's not possible. So as a company, as a startup, clearly collect a lot of data from different sources like you collect from vehicle GOS level, fuel, energy level, and your point is to blend them together to calculate the result.

Jaspal Singh (00:13:50):

So it's complex, it sounds very easy like okay, collect data and just blend them together and get the result. But the biggest challenge I see is one, to ensure that you have a quality data because a lot of organizations struggle with that. It's not given that you always have a quality data, so how do you ensure that you maintain the data quality? And can you also explain the process you do for this data integration work and inside you provide to the customer, you're taking data from them, but what is the magic you're doing to make it more useful for them?

Danielle Walsh (00:14:24):

Yeah, of course. So you are delving into the secret source clearly, but we'll give you a little bit.

Danielle Walsh (00:14:32):

Yes. The biggest friction when it comes to what we're doing is obviously that data integration and then what you do with the data. So we'll start with the data integration effectively here, the positive thing that works in our favor is that regulation tends to push innovation. And actually it comes back to even around how you can drive more profitability. So with the regulation, what we have is we've now got, you've got to do this and there's a standard and what it's forced companies and governments and academics around the world is to come together to say, what is the standard and actually how the hell do we do this? So you've got a lot of materials and fortunately my co-founder, Dr. Pedro Bayes is actually sitting on a chair in fact of the regulatory body for everything to do with FinTech globally and then is embedded into engine transportation, finger on the pulse there. And I think it's very important. So that works in our favor because now you've got a framework

Danielle Walsh (00:15:33):

And what we have, what we're effectively doing here is we've got chunks of data that's coming from the industry. So we've got the vehicle and where it moves, we're very good at that. It's called fleet management. And typically there's a new boom here when it comes from connected vehicles, but we're a long way off all vehicles being connected. So telematics comes in or it also come from an app. So you can get a lot of things from an app. I can actually tell whether you've got a second person in the car by the vibrations because the door is slammed, things are there, you can simulate it. So we're good on that. And you've got a second bit of data that comes from operations, i.e. what's inside the vehicle, which is super important. Let's stay in logistics for the sake of the example. If I am a logistics company and inside I've got two different brands, I'm going to throw two out there, Adidas and Nike, because we all know them, Adidas doesn't care about Nike, vice versa.

Danielle Walsh (00:16:23):

So you've got to go to the package level, that package level. It could be that the weight is very heavy for a Nike, I don't know what they're selling, but something very heavy and then that just light. So weight destination, how it's boxed, where it's going, all those aspects, it's a different data set and if effectively it's a different team, it could be a different company because if you are outsourcing your vehicles and the vehicle operation, it's just a different company. And then the final one is around energy. And that can come from a whole raft of things. Now in Europe, we're being very innovative with things like open banking. So you can scrape open banking and you can actually then see the amount spent on energy, fuel it back to the vehicle. But those worlds never married together. They never needed to. And what you're now doing in our favor, we've got two things working. One is the regulations, which is live and ongoing, but it's a standard. And the second thing is technology. So the things that we're using in the business now, I mean if you take a step back here, Pedro was doing data quality obsessively for the past 25 years in the bank. I mean trading floor of trillions live.

Danielle Walsh (00:17:35):

We've gone up so many notches in the past, even three years when it comes to the data ingestion and the labeling of information to actually tag it back. I mean technology is vast when it comes to that, but what works in our favor is two things. One, the regulations I mentioned, and secondly it's being obsessed in an industry. There are far too many companies out there that are just saying we're a data

company. So you go very high level. We obsess when it comes to the technology. So it could be LLM and other labeling aspects and transportation. So you've got data scientists that are obsessed around an industry and so what they're doing is they're knowing how to identify similarities, labeling, how do you speed it up? Actually you know what X means y model it in.

Danielle Walsh (00:18:25):

Then training a system to identify similar things, but you've got to train it. And so when you are very specific in an industry, it works in your favor because you become the standard per se when you're building a system that is very micro. And the final point on there is that, so we're a little bit like a cyber company when the company has a lot of data, I'll tell you why. So let's say that I own the fleet and I have access to all the data, but I really do not know how to marry it together. So we are pulling your data, it's a data dump for us. You just do a dump and we'll do the rest. We'll go back to a customer. We'll like so the good news is that we're making progress. The bad news is that we started with over a hundred thousand errors. You're not their best friend, they don't want to hear that. But then you're telling them, and this is how we're going to rectify it over the next few days to actually get you the results that you need. So with us, it's a case of data dump from the customer or third parties. So if we bring it to another example where it's a retailer and they're dealing with thousands of different carriers.

Danielle Walsh (00:19:31):

What they're doing is they're just asking their carrier to do a data dump into one system. Then you're extracting. Now let's say that you don't have the ability to take the exact information when it comes to energy. What we'll do is we are bringing proprietary data where we look at the location, the vehicle type, the typical energy source, the typical energy supply in that location simulate it back. So the decision making tree is always going through different decisions of do I have X? No, I go back down. Okay. And it's going through to give a result that is getting to the highest level of accuracy possible with the data at hand.

Jaspal Singh (00:20:07):

That's amazing. That sounds super clear now how you're doing it and I agree with you, a lot of organization, they have data dump and they don't know what exists there and they don't want to hear anything about it. It's like if you tell them there is something wrong and they will try to pass on and they say, okay, this is what we have or we don't know, but I think that's a good approach. You're going back to them educating them and helping them to improve because sometime they need those kind of help to do it.

Now, you mentioned about how you are building, doing, helping on the trip level calculation, knowing also the electrification source and the important point you mentioned about the regulation tend to push for innovation, but I think the other push for electrification is also what we are seeing in our climate.

Jaspal Singh (00:20:50):

July is the recorded hottest month in our history already three days with the record hottest day. So climate action I would say is not a choice anymore. Everybody has to do it and that's why governments are waking up and one of the biggest component in climate action is road transportation because 25% of our CO2 emission is coming from road transportation. A lot of people don't know that. They feel it's not our problem and they claim to other, but road transportation is one of the biggest contributor to the carbon emission. So you are focusing clearly on helping companies to achieve their emission target because there is a push. Now government want you to do that and it was done earlier. Also I would say

the history of electrification is not new. There was a lot of work done in electrification, but we really see result now because earlier probably there was not big push or there was not urgency, but now we have urgency. I would love to know some of the success story or example how you actually help to make a measurable impact on the company's sustainability efforts like big retailer like you mentioned they're working with thousands of carriers, they want to do something, but sometime it's challenging because not everything in your control. So how you're helping company would love to know some example earlier you spilled some secret sauce. Now some client story, your user cases.

Danielle Walsh (00:22:11):

Yeah, sure. I guess one good example would be, so there are a number of things mean the history of electrification is wonderful. I think the wife of even Henry Ford was like, darling, please don't smelly noisy cars. It's not really one to turn up, I'm so sorry, but it's cheaper. Comes up with the production line and then over the years we've been kind of flirting in and out of electric and now I mean the innovation that's happened in the last even 10 years has just been phenomenal.

Danielle Walsh (00:22:40):

We're definitely not enough for that. You made a good point before I go into examples around it's not just a regulatory push and it's true and if you look at the voluntary net zero goals of multinational companies and then what we may talk about later is the voluntary carbon credit market. This is a push companies and obviously if you are a small fleet of 15 vehicles that's delivering in the supply chain, you may as well be regulated because you are supplying for the multinational and the multi international has a 2030 net zero target, you're a supplier. So this really is now a push from all sorts from employees, customers, companies, regulators. I mean it is a movement together and it really is now around doing good business, some of this accessory. So I guess that what we are doing here is we're helping from a fleet owner through to a banker when it comes to the push together to actually get to net zero.

Danielle Walsh (00:23:42):

And when you're a fleet owner or an operator, you have two things that's alarming you. At the moment I'm working in operations in a retailer and my obsession is around operational efficiency. Now my manager said, Hey, actually sorry, you've also got to get your remissions down. So they've got driver's score cars, it's going back now to the drivers, okay, I've got 10,000 drivers in front of me and I've got now go, Hey Bob, listen, listen Bob, that breaking, what are you doing? It's causing CO2 emission, right? Your scorecard's terrible. Can we have a chat on that case? It's the only way to do that and we're helping one of the largest operators in Europe to actually do those daily scorecards

Danielle Walsh (00:24:23):

Interesting insights there is, Hey Sally, listen when you are putting the package outside the door, just turn the car off just throwing it out there, you'll to turn the car off. And with that, I mean on that case it saved like 20% of emissions tire pressure. The tire companies now are innovating when it comes to new tires and also tire system platforms to actually monitor the tire pressure. Huge amount in terms of emission savings. So there's a lot of things that we can do. People just think that you can just go, oh, okay, right Sam who runs the operations? You've got X amount of budget, just go and buy a load of electric vehicles. Well, you've got a supply chain issue, a lack of budget and then everything else you need around it in terms of the energy and infrastructure, not so easy for Sam to do that.

Danielle Walsh (00:25:10):

So we are helping with those daily changes that you can do. That's a huge amount where you are balancing that operational efficiency with the emissions efficiency, it's saving a bunch of cash as well, right? So Bob did better. Bob now is leading the pack by the way, in terms of getting down his emissions. Amazing crossover to the states and I mean wow, that was the inflation act that came through was a huge turner and they're doing a number of things that's keeping up. So there's a lot of now what we can call free capital. It's tax rebates, which is the positive push that's coming. And to get access to that, effectively what companies are doing is they're using consultants that are fantastic at processing those grants and generating that money back because we can, when we go to the trip, the foundations of the trip is a load of variables, the variable obviously being vehicle energy and everything else. And then you've got that trip to, you pull that up to a map and you have a map of all your fleet across the US. A number of things goes on. One is you identify a hotspot. Now let's say the hotspot's Texas, you want to reign in there. You want to see what's driving that. If you can see that actually Bob in Europe or Sam, sorry I'm getting confused on names here, can't do a lot. We're back to the asset, right?

Danielle Walsh (00:26:31):

What we identify, because we've got that supply chain data, we do two things. It's not just saying Bob's messing up, it's also simulating in the future because we've got the data on the local energy source, what will flag is what a consultant still needed. By the way, consultants still needed to do all the complex stuff, but we are the data platform where it says, listen before you go ahead and buy all those electric trucks because we've analyzed a historic trips from the hub out.

Danielle Walsh (00:27:02):

You need to make sure you've got X amount of charging infrastructure on this trip. Now think about it, let's take a live concrete example of Y. You cannot have siloed data. I won't mention the brand name, but there is electric truck, so it's very difficult on the truck side. Now the range of this truck was 500 miles. Wow, that's fantastic. It's awesome. Look at that. Now once you put the products inside, let's say they're like a lighter product like crisps, it's still 400. That's not bad. You know what, if we are just doing the 400 trips, we don't even need the charging infrastructure. It goes point to point. Great. What about when they're bottled Coca-Cola, Pepsi or whatever a brand it is out there? It's a heavy, it reduces to 100 miles.

Danielle Walsh (00:27:52):

Okay, we didn't consider that right? And because the operations team, I mean the drivers are switching vehicles every day. They don't care what vehicle they're using. They could be using a 20 year old diesel vehicle or the new electric, they don't care. So when you don't marry that data, you won't show that you've just gone ahead and bought vehicles but you can't use them instead of sitting there. So it is avoiding those things to actually allow, and again, it's just because you have that data both historical, current and simulated and you are overlaying the frameworks whether it's how to care, collect an admission, what are the low emission zones, what are the things that you were required to actually get access to grants or indeed a better electrification. That's a live case. I think a final one that I'd raise is then going to Asia and I'll pick out a country that is not obvious, it's Thailand.

Danielle Walsh (00:28:48):

Now Thailand isn't as fully aware and hot when it comes to the consumer awareness of sustainability climate change and the government is doing things but not on the scale that we're seeing in Europe followed by the us. So we're there allowing the private sector to take it by the reins. The biggest electric

vehicle distributor is working with us. It's a fantastic company. I'm really excited to be able to reveal the name. And what we're doing with them is we are producing carbon insets, which we'll speak about later, not offsets. The carbon insets are produced by us, they're high quality, so they're proven to reduce and that is for the charging infrastructure that facilitates the usage of the electric vehicles that in another country like Norway, the government would've put in Country like it's not there. So you are using the credit for two things. One is customer awareness. I have plenty of credit when I'm actually buying a vehicle. And the second thing is to facilitate effectively shared financing for the charging infrastructure needed for those vehicles.

Jaspal Singh (00:29:53):

That's super cool. Thanks for sharing these examples from Europe, US and Asia. And one thing I learned is so much of diversity in example, and each country or each region is trying to do different stuff and what you mentioned that's very important. Sometimes these small major have a very big impact and a lot of time we ignore that. Like you mentioned about turning off the engine, tire pressure, making sure the load the weight factor. A lot of time, to be honest, I'd never consider weight has that much of impact like a hundred miles, that's huge impact. It's like 20-25% of your mileage. So straight away you're losing that and if you don't plan it well you will start blaming external factor but you're not conceding like it's because of the weight. It's the weight you're putting, the stuff you're putting.

Jaspal Singh (00:30:39):

And for logistic, I think that has a big impact. So it's great to see and thanks for sharing all these exciting projects. You're doing carbon inset. That's something I learned new. So thanks for pointing out these thing and we will discuss about carbon offset, but now I want to discuss something which you mentioned is bringing that changes within the organization because a lot of time people think that, okay, I'll replace my fleet, everything is done, but it's not true and you need a lot of other component level of changes like operational changes like you mentioned, resource planning, supply upgrade. It's very important to have a proper change management process within the organization or executing any project because electrification process is not just replacing vehicle because if you're not managing your energy source, if you're not having a proper technology platform or you're not following good practices, it'll not have impact.

Jaspal Singh (00:31:30):

Like the project will be failure or will not work properly. So what are the most significant challenge you have encountered in developing and working with fleet operator? Because now you're working in different region already in eight countries around the world, which is great and you see in the cultural difference you see in the regional difference, you see in the policy difference. So what are the challenges you're facing and how do you addressing them? How do you address those challenges with the operator? Because I know you need to learn different languages to talk to the client in their own language because they are very different. So how do you address those challenges?

Danielle Walsh (00:32:06):

I don't think it's about one challenge. I mean there's obviously a core challenge here, but I think one of the new challenges coming with fleet operators is they're becoming an energy operator as well and an energy manager. So what they're now having to do, which they did not need to do before, is to assess the amount of supply they're going to need for the vehicles and to manage that, but also it's then vehicle to grid because they're also going to be a supplier to the grid when they have excess and the

hours that you are challenging and for that it's not going to be back to the driver. I mean there are certain cases where the innovations when it comes to trucks, we're not always seeing that electric is well, it's just not satisfying the needs of large trucks. And so with a hybrid, if you're going to be balancing between electricity, then again it's not for the driver, it's going to be artificial intelligence and it is artificial intelligence that has that load in terms of when to take energy, when to use the energy, when to give it back, et cetera. So I think that transition there is that what we're doing here is just being that connector before there didn't need to be such close communication between the fleet operator and the energy provider both being the supply and demand. So it's that again the data-driven and artificial intelligence to make that connection, to make that collaboration work.

Jaspal Singh (00:33:26):

That's very true and they never thought they have to do these kinds of stuffs. It's something new for them and there is a lot of, I would say it's a learning curve so they need to learn these new thing, how to work with the grid and vehicle to grid and then managing the energy load and also some cities or some country you have that peak demand and non-PE demand and you have peak charges and non-peak charges. So you also have to balance that because it has a big impact on your cost. In Shenzhen, the nighttime charges is one fifth of the day charges. So you want to charge everything in the night because otherwise it'll be super expensive for you.

Danielle Walsh (00:34:00):

For sure. Unless everyone demands to charge at night, then the price will be high.

Jaspal Singh (00:34:04):

Yeah, that's another challenge. Now you mentioned about your working with a lot of these freight and logistic companies and I tell people like mobility touches not only people but the delivery and it's a big segment and freight and logistic contribute eight to 10% of global greenhouse gases. So it's one of the important sector.

ITF actually projected that the emission will be double by 2025 because there'll be a lot of packets delivery happen. I was reading the data and I was shocked because I never thought this will be so many. In 2021 there were 159 billion packages delivered worldwide like 8 billion population. That was, I never thought in fact UPS and FedEx alone delivered 37 billion packages per day. Huge number. If I haven't researched these number I would have never trust but now I was shocked when I read these numbers.

The purpose of business to make money, like you said, logistic company, ultimately they want to make money, but there is a push for sustainability, clean energy, net zero. How do you think companies can achieve both sustainability and profitability? Because that's a question I think probably people was asking you is like, okay Daniel, we want to go net zero but we want to survive or remain alive. So how they can balance both?

Danielle Walsh (00:35:25):

Not how can they, this is good business.

Danielle Walsh (00:35:28):

About making, I mean obviously the core of Clearly is to reduce emissions, but the reason why you come to Clearly is you're either going to avoid penalties and stop in operations and that's on the regulatory front or it's to save money in your operations or to save money in financing. There's a hard ROI here. So

when it comes back to, again, let's take the case of a regulatory push because before you could get by when it was using estimates and it's a lot of work to blend the operational and the vehicle and the energy data I can kind of get by, we are now showing that the outputs, when you actually blend that data, you show exposure, you show that actually. So an example of another client of ours, they are a broker between shippers and carriers. So their job and how they get paid is to fill empty trucks.

Danielle Walsh (00:36:25):

So they work with thousands of carriers and what they're looking for, they've got a technology to look for, oops, that's empty on the way back, we'll actually fill it up from another customer. So as opposed to doing less business to save the planet, you can do even more business. Your point around the number of products out there, I mean I've done a bunch of work in fashion and that's even worse, but it's like 300 billion items of fashion items are created a year and 85% of them goes to landfill, but different topic, different podcasts.

But for the transportation part of it, I'm obviously interested in, but that's a different topic. What we're speaking about here is we want to do more business while saving the planet. Well because regulation, all the push to go green forces people to blend data and do the work they did not need to do before or create innovations Clearly has done. What it means is that you're then exposing that you had a bunch of trucks that were empty, so you're just paying unnecessarily to have these empty trips. I think the second point is we're now going to a peak and actually on average we have to be very careful, but on average the total cost of ownership when it comes to electrifying your fleet in 24 to next year will be at the peak point of which then it'll start getting cheaper

Danielle Walsh (00:37:41):

Because yes, so this is obviously on average and it depends on certain countries and the infrastructure, everything in place. But we are now seeing that push and I think what we have to remember here is of course the whole issue around energy and charging infrastructure is there, but we've also got other things we need to get over, which is the psychological range anxiety that's not always there and how you can a positive impact thereof. Even here is a spare battery just to be on the side and be at the petrol station just in case you need. So no, this is the biggest risk, but the biggest opportunity for any business out there to get it right, it is efficiency, it's prudence. Think about it. Before you wouldn't really need to think about, okay, I have to charge at that point or I only have this much energy, what can I do with it? I haven't got much Before you're just like, yeah, I'll think about that. It's on my long list of things to do. I'll get to it. We're still making a bunch of money, we'll suck up the cost. Whereas now you are forced to listen. You've got an electric vehicle, you've got this much energy to use, what are you going to do with it? I guess we can optimize that trip and I guess we can do X, Y, Z. So you are forced to be more prudent. You're saving cost.

Jaspal Singh (00:38:59):

If I compare it with the human is like we all know we should eat healthy, but it's only when we fall ill we start eating healthy because we have no other choice. And I think what you're saying is absolutely right is don't go to that level, start doing it now because otherwise you'll be out of the business. So it make much more sense. And that's very interesting. What you said is from next year onward, it's already reached a peak and it's going down. So actually you can make more money if you're going for electrification and if you adopt these best practices. But that's great and I agree the package is delivery, it's important part of our economy. We can't deny it, it's just how we can make it more efficient. Like

you mentioned, filling up those trucks which are empty. That's the best use of resources rather than letting them go empty and using for nothing. So that's the best way. Now other you'll see,

Danielle Walsh (00:39:46):

You will see more innovations coming in the space, right? Behavioral change will have to shift to facilitate this huge movement that we're having within businesses. So before we could, I mean I'll be open, I couldn't really leave my desk today, so I did a quick delivery, I won't do brand names, but the one that you get the bottle of water or the yogurt at your door in five minutes. I mean when I first heard about this I was like, this is mad. And now I'm like that's kind of inconvenient but I can also just get up and take a little walk around the shop for 10 minutes. So will there be decline in those kinds of business models? Will there be a means where we're doing the super-fast fashion that's going to change or the fast food, whatever it may be. So I think there will be a shift in innovations that we are seeing that will behavioral change is never just the person, it's always a mix between businesses and consumers. So there will be change.

Jaspal Singh (00:40:45):

Yeah and I think people are in that's make us human. We are adopting to new change. So new reality and we will do that. Now the other topic which is close to my heart is public transportation and I feel that's another a good alternative to reduce greenhouse gas emission. And there was a lot of study done which say that if you can just replace the car trip with walking public transportation and taking instead of in France now instead of taking a short out flight, you take a train. So they are promoting that people use train more than the flight. So there is a scope there to reduce greenhouse commission and I think both public and private sector need to work together. The government need to come together to bring everybody together. So how do you think government businesses and other stakeholder work together to accelerate that option of sustainable transportation practices?

Jaspal Singh (00:41:37):

Because it's not easy. There are some policies which are done and how do you see currently there is a lot of push for public transportation to go green and what I tell sometime people is that it's already green. You are carrying so many passengers so you don't need to go for electric. I mean it's good if you make it electric but you can still be green and I think there should be more push for cars to be cleaner or logistics should be cleaner. So I want to know what do you feel? Do you feel the common should do it or private sector should do it? Who should be the front runner?

Danielle Walsh (00:42:13):

I'll be political and I'll say that it depends and I'll also say it's actually a collaboration between the two. I'll give you a sneaky little fact that was surprised me. I was in the states last week and I was speaking to the Chief Data Officer of a very large transportation company that is providing pooling services for little vans, not little. It's basically an alternative to a bus and they obviously are monitoring the competitor, which is the bus and the average utilization of a bus, six people.

Danielle Walsh (00:42:55):

So while we think it's great that if I take my bus it's going to really save the planet, well actually producing more emissions if it is a utilization of six people versus you even taking the single car. But that's not to say that we should decline public transportation. What it means is that we need a collaboration between public and private industries to make it that the bus is utilized more. Also there's

another service more, I'm a little bit more of a skeptic when it comes to Mobility as a Service (MaaS). I hope it changes. I just think that it's a radical change around behaviors of people moving out of family cars or even just a single car. I think it will take a while. I think there was a lot of work by even those manufacturers to try to create new business models around this. It didn't happen.

Danielle Walsh (00:43:46):

But in terms of the shift of electrifying, any form of fleet or trying to establish more forms of multimodal to get around, it really can't be one entity. The decarbonization of transportation, however you do it. The whole purpose of reason why we did this is that it can never be one government, one entity or one person. It has to be this form of collaboration between parties and whether that's the financing or whether that's the setting up the new innovation in itself, it needs to have a form of collaboration. Now the reason why we took the data approach is that we tried to do forms of consortiums back in the days of the bank and you could, you're a big organization, it doesn't work. It's too slow. It's a lovely idea. It's a lovely idea that we all come together, we make a nice partnership, but it's just too slow.

Danielle Walsh (00:44:38):

And again, it's not enough because it's case by case and it takes too long to set up. So if you have the ability to say I've got a neutral foundation where which is basing on, okay, you are this variable and you are this one, you've all got access to this go for your life and just switch out. So you can actually then say I'm this segment and I'm that one. Now whether it's you just take it on as that part of the project or whether you say, okay, I'll finance that segment and I'll do this one. As long as you have this and you can test the variables, that's when you can test them and also split the risk. You split the benefit and you split the cost only way you'll do it. Are there any other way? It's going to be too small scale.

Jaspal Singh (00:45:21):

I agree. I agree. Split the risk and split the benefit and split the financial burden because that's the only way to go forward. If you try to push for only one particular player or segment, it'll not work. It'll kind of running a car with one wheel and stopping the other one so the car will never move, it'll crash. Now you work in eight countries and across three continent now. And the point you mentioned initially it actually stuck in my mind is regulation tend to push innovation.

So now you are seeing regulation in so many different countries and so many different places. You mentioned example about Europe, US and Asia. I would love to know what are the policy and regulatory initiative required to make energy transition possible? Because you said Europe is doing well, US is falling and Asia is kind of behind, but why you feel that? What are the energy or regulatory initiative you feel? And if you can share some of the best or worst policy initiative, sometime you make policy initiative and it backfire instead of bringing benefit, it actually reduce or impact the sector in bad ways. So what do you see from the regulatory side?

Danielle Walsh (00:46:32):

I think by way of example, so if we look at, it's well known that the leading country in Europe is Norway and they've just stormed it, fantastic job. And they've got a number of things there. One, the government went very hard when it comes to providing the infrastructure. So the charging structure is there. There are a lot of incentives when it comes to if you purchase, whether you're a business or an individual, if you purchase an electric vehicle, you get a lot of tax rebates. Even small things like if you do have an electric vehicle, even if you're driving on your own, you can use a bus lane, it's easier to get to work. There's little things where effectively if you look at the statistics people, we were all interested

that we want to save this planet, we need to leave it in a better hands for our children than when we came into it. It's role as beings on this planet. But then if you ask the next question in terms of well do you want to pay more for it? Oh, not really. And would you like to inconvenience yourself? Yeah, I will, but maybe another day.

Danielle Walsh (00:47:37):

So what works is when you make this that it's as cheap or cheaper and as good of an experience or better and just an easy transition, it's not so abnormal to do that transition, right? So if you look at in Norway, they just made that obviously the awareness of this as well is very high. If I may use the word, the sexiness, it's there, it's cool, it's cool to do it, people are on the movement together. That kind of awareness and acceptance is definitely there and it's just the feasibility. You have a better experience by having the electric vehicle because of traffic controls and other means if you go down that path, and it's a case now where going back to the whole costing and profitability as a business, you are saving money if you make that transition. Now that said, obviously it's easy because it's a smaller country to do those radical things, but other countries can step up.

Danielle Walsh (00:48:35):

It's not the case where I'm now sitting in London, I'm not going to the government and saying, please pull all this money into putting the infrastructure we need. It's putting the incentives in place. So if you get it right, then you are just providing the infrastructure, sorry, the frameworks where companies want to go ahead and have a race to upgrade the grid or provide the infrastructure or again the means the instruments where a number of entities can say we'll do this together. And as long as you are either, technology plays the role of providing the innovation to support the frameworks, to make it easy for the companies to utilize those dashes of, it could be a tax rebate, it could be a credit, it could be a grant to stimulate to say that this is a way forward. Carrots are one aspect. There needs to be a little stick.

Danielle Walsh (00:49:32):

I think also what is happening is the penalties that are coming in place, if you look now, if you are breaching a low emission zone in places across the United States, your vehicles can be taken off the road. This is not just a case of oops, parking fine. Okay, well we'll swallow it.

Danielle Walsh (00:49:54):

You have got two things that are coming down here now. One is you may have a stop in your operations. Well if we go back to Sam in Europe, he's not going to stay in his job. If he does that, he's not fulfilling his role. And then you've got another way that's coming up which is around climate litigation. So if are you are exposing incorrect data or you are not actually following your goal as an organization to reduce and do the efforts to reduce, again, it can backfire then with reputational damage, more penalties, et cetera. So I think in terms of what works is when you have a mix of the penalties and incentives, but you also do need to have those frameworks where it is good for business to actually get involved. Forms us of collaboration together. One obviously is blended financing the carbon credits and blended facilitating companies to come together where the private sector can fund this and the government are there to provide positive instigator.

Danielle Walsh (00:51:00):

A country that's falling behind is, which could catch up. But at the moment anyway, and it's a very large country. India is a place that's lagging a little bit at the moment. So there's a number of reasons.

Obviously the typical mode of transportation, there is a two wheeler and there's less innovation when it comes to vehicles for two wheelers. That's one thing. Again, the consumer behavior, they very much like certain brands that they know that are cool. And the electric side is just again, not there yet. And there's an energy issue. There are certain electricity that's still powered by coal. So the difference in terms of or the benefit for the planet isn't so great. So obviously there's no one answer, but I think that making the right or facilitating, not even if you don't have the budget, but even facilitating that investment when it comes to upgrading the grid, putting the charging infrastructure in place and then obviously the supply chain that comes from the vehicle or the battery or any, there are other means. It really is a bit of a mix.

Jaspal Singh (00:52:08):

Yeah, I agree with you. I think incentive play a really big role. And you mentioned about India and India in some sector they give a lot of subsidies now for buses and the sector has just boom in last 3-4 years because it is more feasible for businesses to move toward electrification because if you push them to do something which is not profitable and not feasible, it'll never happen. So you need to have mix of both incentive as well as kind of a stick to push them and have some regulation saying, okay, by 2035 party we need to have all clean vehicle. And important point is the big agencies will come forward if one start making sense. And I think I'm happy to hear when you said next year that will be kind of a peak for the cost and we will start seeing some decline.

Jaspal Singh (00:52:54):

So that's kind of next question I want to check with you because a lot of companies want to go for electrification, but the biggest hurdle is the capital cost. It's still expensive. So at TCO level, they try to compare and without any subsidy and without any external funding, they feel like, oh, it's not making business case for me. So the fossil fuel are still cheaper, but good things are changing now. So next year we will change.

But I think the other important thing which is happening in the market and a lot of people are not noticing is the carbon market is back. So I'm talking to people now and people are telling me that there is a lot of things that are happening in the carbon offset market and there is a strong momentum now in voluntary carbon market. A lot of big companies want to spend money or invest money in the clean projects and support this transition being an expert.

Jaspal Singh (00:53:42):

Can you share your perspective on that? Because I know a lot of people are saying there's a lot of movement, a lot of things are happening, but I know probably you have a different view. And also if you can demystify the term digital MRV, because a lot of people don't know what digital MRV is. It's actually stands for Measurement, Reporting and Verification. But how technology is making it better. Because when we have a carbon market in 2010, the digital MRV component was missing. But how that thing is bringing new change in the market.

Danielle Walsh (00:54:14):

So when it comes to carbon credits, we must or remain very prudent about this. I think what we've seen. So yes, you'll see some cases where people are very pessimistic and think that the whole thing needs to stop, have a different view. I think that it's just been abused in the past years and going back to the measuring and verification, the technology that's coming there, this is really important. Not only that, but also when it comes to awareness now, so if we look at the voluntary carbon credit market, there are two bodies, viral gold standards, which are the ones that verify that the project can stand for a certain

amount of credits and then they can be traded from existing traders or within companies, et cetera. By nature, it's voluntary, and I mean in terms of how big this is going to get many different stats. I read different stats all the time. Yesterday I read that it's going to be \$100 billion by 2030.

Danielle Walsh (00:55:20):

And yesterday an article, it's going to be \$950 billion by 2037. That's a big jump in seven years. We know it can be a trend. I think that the reason why people are getting excited again about it is that if used correctly, this is a fantastic instrument to share the cost and the risk across the supply chain, which is needed. Fundamentally it's needed. So if you look, what happened before is if we go back here in 101 or what a carbon credit is, effectively I've been good and I've created something, it's either going to avoid emissions or it's going to completely remove them and because you've been naughty, you've got an excess and you are going to reduce that excess by either changing things in your business to be better or removing it further because you're going to send money to me and it's going to reduce your emissions by the amount that you've sent the money to me and you are basically funding me to remove emissions whilst you can continue because you can't go.

There's a reason why we are aiming to be zero. It's impossible to be zero, which again is why the carbon credit space is a positive in our view. It is a positive mechanism to reach that Net Zero. What's happened in the past few years is that there hasn't been a lot of greenwashing. A lot of people have been thinking, okay, this is a means here because of the lack of measuring and verifying projects and the lack of technology to do it or the lack of the push to do it.

Danielle Walsh (00:56:52):

There's been projects where they were completely phantom. So when people think of carbon credits, what think about they think or take a flight and I'll plant a tree, look at me, I'm fantastic. We actually don't even know whether planting a tree is going to really have a big impact, but I feel good because I've planted that tree. Go and plant a tree is very good, but we have to come back here that you've had projects where, I mean I've heard all sorts of stories. When I went to conferences, even as soon as I think three years ago, I went up to a company and they very proudly, they said, hi, we are a carbon credit company and you're going to get your money back from what you've invested. And I'm like, huh? How does that work? Well, this money, we'll plant some trees.

Danielle Walsh (00:57:37):

And so we reduce emissions. Okay, we will trade the credits, but that's not going to give you enough to give your money back and then we cut the trees down and we sell the trees, you get your money back and they didn't see the pitch that was wrong to me. I was like, am I hearing this correctly? And that was just accepted three years ago because there was a boom. It's exactly the same boom when it comes to the carbon accounting, right? Okay, we need to measure it. And now what people are realizing is that a lot of companies are going internally to do this themselves because it's just too broad to cover a whole organization. It's the same, had a bit of a buzz. Everyone's going green, let's make money. Okay, let's go with one of the organizations that I mentioned. 90% of the projects when it came to a forestry planting trees were phantom.

Danielle Walsh (00:58:27):

You've got this technology now that is measuring and verification of size. If you did a hovering over a site where there are meant to be trees, there's one thing missing guys, there are no trees, right? Okay, so companies, multiple companies were buying credits, the money were going to these organizations

where they said, yeah, yeah, we're here down in this location, we're planting away these beautiful trees. Here are some images. Those were trees and then there was nothing, right? So I'm in the positive camp. We are being prudent in the organization of clearly when it comes to us modeling the output of what we're going to be generating from credits because we see carbon credits as one of many financial instruments to get there, but it is a financial instrument that when it's used in the correct manner with the correct policies around it, rigor, measuring and verifying that there is a project that I think this is a positive demystifying that.

Danielle Walsh (00:59:25):

So effectively what you had before is like I said, the processes that you are an organization. I am a generator of credits, so I've got my plot of land, I've filed in an application that I've got X amount, I'm going to plant X amount of trees and I've made a calculation because I've had a consultant that's done it, it's going to save me X amount of admissions. I'll push that to the verify and they'll be like, okay, that's project. Yes, it has the number of many trees. Yes, I agree with how they've done that calculation because it suits our frameworks. Now what you've got, not just because remember that I've estimated that and then I get the money and I use that money to plant the trees or to have peanut coladas in The Bahamas, but now what happens is that I have to have a verification of the product of the project, sorry, and then every year, because typically what you're doing is you're generating credits over a period of 10 years.

Danielle Walsh (01:00:23):

You have to verify that through the technology before you would estimate from the number of trees in that project and then go for it. You are trading those credits every year. Sorry, you receive those credits every year that you can trade and there was no checking of the process. Now let's go to a project that the likes that we are working on in transportation, how would it work? So we have, what we are trying to do here is scenario number one is that there would be either a fleet operator or an owner or a distributor that wants to go ahead and electrify a fleet. Option number one is they don't do it because there needs to be X amount of money that upgrades the energy and the grid to even provide the energy needed. We won't go ahead because we haven't got this. Scenario number two is that we will go ahead, we will fund it, but if we fund it, we are going to benefit by 40% capacity and there's going to be 60% capacity that goes to our competitor. So that's a project here where we're effectively paying for a benefit that's going to happen in the supply chain, which means that it could go anywhere in the supply chain.

Danielle Walsh (01:01:34):

There's a capacity here and that capacity can be traded. The new world of a data-driven form of a credit that you are verifying the whole time is that at the start of the project you estimate, you're estimating, you're estimating that, but the way you are estimating is even data-driven, done a snapshot of the number of vehicles and a snapshot of how many miles those vehicles have been doing over the past few years, even a year, and it's generated X amount of greenhouse gases. We are replacing those vehicles with new vehicles and what allows us to go ahead, it's called additionality rule, is if we fund the grid upgrade, so we have the energy to fuel these vehicles with that full project, we're going to save X amount of emissions every year. And so with that you estimate at the start and a data-driven approach because you've been doing historical trips at the start, you've simulated the savings, that's the estimate of which you're going to save in the credit.

Danielle Walsh (01:02:40):

Then what happens, the verification actually happens at the end of the year. So you verify at the end of the year we estimate it was going to be this, this was the future mileage, it saved this. So it's a data-driven estimate and it's a data-driven verification. Amazing. So in that case, there can't be a phantom and it's concrete. And again, because you're going so granular on the data, it means you can do even more projects that you could have not have otherwise done and use the credit to split the cost of capital for an important thing such as energy.

Jaspal Singh (01:03:14):

Yeah, I think what you're saying is absolutely makes sense. And other point I feel is probably carbon market was before time because at that time the verification was not possible and people were selling all kinds of phantom project and now with the digital technology you can verify each and every point like you mentioned about drone. So earlier you can't use drone, but now you have a drone to check whether there are trees exist or not. I think the other point is whether all the trees survived over the period of time or not, what is the net impact? Because you need to water them, you need to do a lot of other stuff. But with Digital MRV technology, you can go trip level, you can monitor each and every carbon saving at individual level. You can do that and you can verify. So that making it much important, and I was like probably it's the right time now for digital MRV to be used for voluntary carbon market because earlier it was not possible to verify, but now you can do it. So I agree with you, the market will grow, I don't know whether it'll be 950 billion or a hundred billion, but it'll be somewhere. It'll be somewhere

Danielle Walsh (01:04:18):

There'll be somewhere and we just need to keep being smart about it being fair and the additionality rule is very key. Additionality rule is something that we are always in the industry looking at, which is would the project have gone ahead had it not been for the carbon credits i.e., are you giving someone money when they put, I mean you could also claim that a grant, is there additionality in a grant? Would we have gone ahead with the project? It wasn't for the grant, so it is always going to be a little bit blurry. We can't be so strict when it comes to the additionality point, but effectively it meets the need. If the carbon credits are facilitating a project speeding up, we're not going to wait three years, we're going to do it now. It's going to obviously allow us to speed up the route to net zero.

Jaspal Singh (01:05:10):

That's great and I think that will play a big role in the whole ecosystem because it's like chicken and next story, like you said, incentive and the stake. So providing those incentive will help to accelerate the transition. Now I would like to discuss a little bit about your entrepreneurial side. You said when you started you were very new and you got the slap on the face and you learn it's not easy and you learn some important lesson in your entrepreneurial journey so far, what are those lessons and would love to know what are your lesson in your entrepreneurial journey so far and one of the biggest challenge I see with founder is finding a right co-founder because a lot of time it's either the product is not right or the founder is not right or co-founder is not right. How to find your passion and co-founder would love to know your perspective and your secret sauce.

Danielle Walsh (01:06:03):

Okay, three questions in one. So how to find a passion. I mean keep looking. If you really want to be an entrepreneur, don't build something that you really do not believe in, even if you think you're going to make a lot of money. So I think there's kind of like a fairy tale. Well, you're in the shower, you're dancing away, you're just getting to that really high pitch where you think you're going to be the future of

Madonna and then the idea comes and there's a billion pound company and it's actually still small enough because we need to be bigger than \$1 billion in this market. That doesn't happen. The idea is important. You need to be going after a big market, you need to really believe in it, but you've got to be obsessed with the problem

Danielle Walsh (01:06:43):

If you're obsessed with the problem, then what you're doing is you are taking each, you get a lot of No. So I remember at the start, honestly I wasn't used to many No. You are working in banking and you just get a lot of Yeses.

Danielle Walsh (01:06:59):

When I was getting No at start, I was like, oh my gosh Pedro, we need to shut down the whole thing and start again. He was just like, Nope and he's been just like this. The whole process, the same thing has been building from then to now just like this is the cool character, whereas I'm the one that's doing this and completely testing it the whole time knows at the start you really take to heart and then you realize you don't do that. You just take no each no is a fundamental feedback. Is it the product? It's not the product wasn't the pitch. It's not the pitch. Was it the person? Did I not get to the right person? And as long as you keep being obsessed with the problem effectively all you're doing is you've found this wonderful plot of land. In our case, let's call it planet Earth and you are building a house and you've just managed to get a beautiful infrastructure of this, you are really proud.

Danielle Walsh (01:07:49):

You look at that and you're like, what a beautiful house. It just looks awful. Then your role when you're actually building, which is a daily grind, is you're filling in and you fill one room and then the next minute you welcome friends that one room and they kind of hang out and they're having a good time and they're like, wow, I feel really cool. And then you fill another room and they start hanging out together and they're having a good time. You're like, wow. And then when you filled it, you step back and be like, yeah, rebuilt that.

Danielle Walsh (01:08:15):

If your passion is okay guys, I'm going to go into this technology because I'm going to make a bunch of money, it's not going to work. Passion is the actual product and the problem and you look back, sure, you need money to scale anything. We can't be shy and we can't be put money on the side. I mean it won't allow for scale, but it has to be where you're fundamentally passionate about what you're doing and you're seeing that build every day, which is wonderful. I think another thing that I've learned, and I've discussed it with other CEOs, it is pretty lonely being a CEO. That's kind of known and I think that what really your role is that you are just the conductor. So you're having to know a little bit of everything and make sure that all of your instruments and the people playing those instruments are fit and well and they're doing the right thing and actually we need, this is the hole here and we need more instruments of that type in one location and you are making a lot of micro decisions the whole time.

Danielle Walsh (01:09:26):

So I think another thing I've learned, you've always got to know enough to make the right decision at that time because it's better to make a decision forward. And actually a friend told me something that his professor told him is that 99 decisions actually don't really matter, right? There's 1% that really matters, but 99 don't is actually the action and if it was wrong, you'll quickly know and you'll shift. So

make calculated risks the whole time and just move forward is probably another lesson. Many of them, but I think that's probably two that are good enough.

Danielle Walsh (01:10:02):

I was really lucky. We were very lucky. Yeah, we're really complimentary. We really agree on strategy and where the business goes and we're both wonderfully passionate about it. I smile a lot and I catch myself smiling. Sometimes I'll be in the street and I see people smiling back. I'm like, oh yeah, I'm smiling. So really we're having a lot of fun, but we are opposite. We could not be more opposite. I mean I'll shoot hair and obviously he's panicking because he is doing the build in the background, so he'll shoot in another direction and I think it's find someone that compliments you in terms of your skill sets. Because you could have a founding team of five people. My friend had a founding team of nine, it worked. We've got two. It really works. And I think it's also always been an open communication, open dialogue and when you both enjoy it and you can also have a lot of patience and trust.

Danielle Walsh (01:11:11):

I think also trust is also you've got I think mutual respect for the other party and trust. I have a lot of respect for my co-founder and if I didn't have that then I don't think he pulls me through and I pull him through and he's also got a family and a wife in the background saying, what the hell are you doing on this salary this long? If you get any X salary and you're not, and because he's also thankfully got the trust in the business and myself, then he's like another year next year comes round. But yeah, so we're really lucky.

Jaspal Singh (01:11:51):

I wish that continuous success and I agree with you, trust is the most important factor, which I feel the co-founder need to gel together. It's not easy. And finding a co-founder, a lot of founder I spoke and they always say they were lucky to find their co-founder and some of them met them during parties, some of them met during some event, some of them just met them during conference and they know each other like a love at the first sight, okay, this is a person I want to work with and I want spend time. So it's very important to have a trust and I think what you mentioned about having that conviction, obsession about your idea is important. If you don't have, it is tiring. If you don't have, you will get tired some point and you will leave it. But having that obsession is very important.

Danielle Walsh (01:12:45):

I think it's, but one needs to be careful. You need to have an obsession with the problem. So what you are doing is you're a hunter every day and you're a fact-finding machine where like I said, you don't take No to heart. You take it as a feedback and you make sure that you are never missing the point to. You can't be naive in that. You have to say, okay, what did that mean and do I need to change X in the product, the strategy, the customer base, the country, something needs to go on here and as long as you keep doing that then that with a dash of obsession and commitment and very good employees around you, I think you'll definitely get somewhere. No, Pedro and I actually met in the bank, so we were doing the exact same thing in the bank. That data bond together.

Danielle Walsh (01:13:35):

Speaking of the learnings and perfection, we both suffered for being perfectionist. Actually this is now seven years ago. We were going around and we're interviewing globally people for this data bond around data fusion and all the aspects that we're doing now. We had everything around collaborative

financing and needing to do all the things we're doing. We actually had this in a huge paper that we wrote seven years ago, but we were on the means is that we couldn't release it because we're like it's not quite done. So getting it good enough, good enough is a lesson.

Jaspal Singh (01:14:10):

Yeah, I don't know if you to release it now and probably we can release it with the episode.

Danielle Walsh (01:14:17):

Have many other research reports we can.

Jaspal Singh (01:14:21):

I'm just like whenever it's ready and I agree with you, good enough is good. Now, one important point to mention as a founder, you're not ready to take a lot of Nos. You need to have a skill to accept Nos, but as an investor they trained you to say a lot of No. So as an investor your role is to say no to many ideas and say yes to one. So when you are raising fund, and I know raising fund is not easy, especially for Cleantech company because a lot of people don't understand what you're doing and why you're doing generally they understand social media app and other app which are quick D2C brand, but building Cleantech hardcore data platform, it's not easy. Not everybody understand can you share your personal experience while you were raising funding and also picking a right co-founder, you also need to pick a right investor because that's also very important. If you pick a wrong investor, it take you to other direction and eventually it'll die. Everything will die with that. So how to find the right investor, what are the checkpoints?

Danielle Walsh (01:15:23):

We've done one round, we're actually doing another one pretty soon. We're in a good position, but we just need to run faster. We super would've actually taken more money on the first round, but it wasn't the right investor and it is really careful, it's very easy that no, you must are picking partners. You're not just picking capital. It has to be smart capital as a company, we'll hold out for that if it's really the right cause. So we were lucky our experience, we were just very, very prudent. This is pretty much like at the start, pretty much self-funded and bootstrapped and we're just very, very tight when it comes to the spending and staff et cetera for the customer. So part of it now obviously we're also making money from customers and that can go into the business. The first round it came from, so our Go-to market was now that we are going out to what we call type two customers, which are the fancy years, but the type one were fleet owners and operators.

Danielle Walsh (01:16:33):

We went to investors that fundamentally knew that industry and backed by LPs that are also our future customers. So we have three funds, two in Israel that are mobility backed and they get the industry they didn't get as much the climate. So we are also, it's like a two way. It's helping each other also around the transformation that's going on. And then the third was in supply chain. I mean the third fund was built the VC for Coca-Cola and Henkel. He understood the business halfway through the first meeting, so much so that he could sell it better than I did and everything was signed within that week. It's just full conviction and it really, really helps because like I said, they really are your partners. I'm on the phone to investors a lot. I do use them as advisors and even in downturns, Silicon Valley Bank, okay, WhatsApp guys, we have an issue.

Danielle Walsh (01:17:39):

We do. And right back they're with you, they're part of the team. So we were lucky. Let's see what happens in the next round. We're trying to keep a tight cap table for that very reason and we are now picking investors where it matches on the geography as well as the expansion of the model into other industries. But it's hard. I'm not going to sit here and say that you have a couple of calls and people throw money at you and it's all done. You do get a lot of no's and you learn just as you do from a customer, no for a reason. It's either that you're just pitching to the wrong person because it's not the fun for you or that you are not pitching very well, you're not getting the message across in a very, and back to your point, this is not like I'm making ice cream and it's just a new form of ice cream and everyone loves it and would you like the ice cream and invest in my company?

Danielle Walsh (01:18:37):

This is complex, right? This is not what we are doing. It does require you to either want to know or you at least have certain amount of experience in the industry to fall in love with it. If you do though, I mean this is not a pitch for clear, this is a pitch for the industry. This really is the biggest disruption and the biggest opportunity that we can find out there. Whether it's transportation or in, I mean I obviously think that transportation is the best thing that anyone can do. Just so much fun and there's so much chaos, but other industries as well. I mean decarbonizing the planet is good business.

Jaspal Singh (01:19:16):

Planet is good business and I think we are living on this planet. I was telling my kids about space and I was telling this is only planet where right now there is some life. There is no life outside this planet. So it's the best planet we have and the best place to work and business. And I agree with you. It's hard to pitch if you're getting no, you're getting no for some reason. Either it's a wrong person or you're not pitching well. So you need to improve something. No, great.

Thank you so much Daniel. That's really insightful. Now this is my last question and it's a little bit philosophical. At the same time I want to see your future insight is how do you see or would like to see the world in 2030 and what role Clearly will play to make it happen?

Danielle Walsh (01:20:03):

Wow. I mean let's be ambitious, right? I would like and I foresee if we keep pushing hard that the transportation industry would lead when it comes to meeting net zero targets by 2030, a mix of decarbonized zero supply chain or by funding others' innovations in the supply chain. And Clearly his role will be the backbone as the standard when it comes to calculating missions, the standard of calculating the financial risk return of projects and really being that data platform to allow for this needed collaboration between parties. But on a less high level, I guess that we're going to have more collaboration. We are going to have a huge increase in innovation that we've seen. We've seen a huge amount in electrification and it will only continue and it will continue by the continuation of this push and by the backbone of financing and technology.

Jaspal Singh (01:21:08):

Yeah, I agree with you. It the whole space is growing, so we will definitely see a lot of innovation and I love your point about that clearly will be the backbone and I can clearly see that, that it's going to be the backbone of that transition.

Daniel, thank you so much. I mean I really enjoyed that conversation and when we were started discussing, I told you in these interview I have a lot of these aha movement and when I say like, ah, I

didn't know that a point, and I get a lot of aha movement in this conversation where I learn something very new.

So thanks for that and we always end our episode with this rapid fire question round. An idea is to get a little bit personal side of you. We know now you as an expert in the transportation and carbon transition space, but we want to now learn about your personal side. So if you're ready, I'll start with this first question.

If you were not in banking or transportation sector, what other profession you would've selected?

Danielle Walsh (01:22:01):

It would be fashion. I think that the fashion has a lot to do when it comes to the transformation supply chain and behavioral aspects. And actually I do have as a little side project, a charity in Paris in the topic.

Jaspal Singh (01:22:16):

Amazing. I think you mentioned about how fashion industry, they produce 300 billion item and 75 or 85% of them go to landfill and it's need a lot of disruption. So good, make Clearly successful and go for another passion. That's another thing. But we need you right now in transportation, so be here. That's nice.

You travel and lived in so many different cities. So I want to love to know which is your favorite city in the world and why?

Danielle Walsh (01:22:43):

I don't think I can have one. I think I like different cities. I mean people know me, know that I do travel a lot and I think choosing one, I mean London where I am now, obviously I love it for nostalgia and this kind of melting pot of cultures. But Tel Aviv, I mean for his energy, it's just a crazy energy. Many cities really. I mean Paris also for its charm. I'm picking also cities where I've kind of hung out for quite a long time. So I've got part of my heart there and I think every city actually shapes. You live in a city with Buenos Aires it, I'm told off now I move a lot and I'm using my hands and expression too much to be British. But yeah, cities shape you. So I think it's a hard question to choose one.

Jaspal Singh (01:23:36):

I know it's hard because every city is so beautiful. So I am in the same boat. If somebody asks me the same question, I have no single answer. Now my third question is which technology innovation you are bullish about in next five years? Which one you think will reshape our society in next five years?

Danielle Walsh (01:23:57):

I have probably a different take on that. I don't, same with the company. We don't get excited or back one technology. I think that a lot of people are doing that. They get very excited by one aspect. People are talking about it. And again, I mean obviously we're a data company, so any technology around data ingestion and quality is something that we are very excited about. But even with Pedro, you'd ask him that and he started by being really excited about technology and now he's excited about the problem and the technology that comes. So we'll have some lovely lunches together where we'll kind of blend. I mean the conversation the other day was around satellite imagery and the new forms of machine learning over the imagery of satellite where we can identify vehicles and then if you've got multimodal on the language side, not the vehicle side, you can then blend that by taking reports from sustainability reports. Now if you overlay, you've now got a picture and a text and you need to transform them both

into code. If you overlay what's happening with typical local energy sources and points of interest around factories or headquarters, you can get a rough idea around the amount of emissions from the transportation side versus that report. If it's vastly out something wrong here.

Danielle Walsh (01:25:19):

You can go and take a look. So things like that we're excited about. That's not one technology, that's the problem of verifying what's outside of the market and whether it's right. And then having a poke around obviously aspects that we spoke about earlier in terms of the labeling and data ingestion and new forms of ways of data quality. By training the system, which effectively is you are going from being the teacher that says, please do X to the professor to say, have you learned correctly and the computers are for you? So that's exciting for us because obviously then we can have more growth and quality, but we are in transportation and I think that we are excited and have to be excited around or just rather appreciate the amount of information that's happened in electrification in the past years that have come and what's to come ahead of us is exciting for us.

Jaspal Singh (01:26:12):

I agree. I think that's a very insightful answer. Thank you for sharing that.

Now my next question is what one thing do you wish you should have learned early in life or in profession?

Danielle Walsh (01:26:25):

Oh gosh. I think that it's probably that the good enough point, right?

Jaspal Singh (01:26:36):

Good enough

Danielle Walsh (01:26:37):

Don't have to be perfect. It doesn't have to be perfect, is probably what I'm now learning still. But I think I would've done things quicker if I'd learned it earlier.

Jaspal Singh (01:26:47):

I agree with perfection. Somebody was saying perfection is the enemy of creativity or work done, so you need to be good enough to show up and then keep improving. So it's not wait for perfection.

Thanks for sharing that. I agree. I used to be that and now I'm changing myself. This is my last question. If you can change one thing in life, what would it be?

Danielle Walsh (01:27:13):

Oh, I think that life's changing and evolving every day and there's no kind of one change at one point. I think that's the exciting thing. It's always evolved, so it is not an arrogant thing to say I wouldn't change anything. I think I'm just always changing little things.

Jaspal Singh (01:27:34):

Again, I would say this is really, really amazing.

Danielle Walsh (01:27:37):

I've not given you one answer to any of the question. I'm very sorry I've been a complete politician, but it's true. I think that it's changing lots of little things. Yeah, you'll ask me an hour ago and it'll be one thing and you'll ask me one more hour and it'll be another thing. So I'm definitely always changing things, but it's just not that one big thing.

Jaspal Singh (01:27:56):

Yeah, I agree. And your point about we are actually changing every moment, so if you really want to change, what movement do you want to change? One minute out back or one hour back, one day back, one year back, 10 years back. There are so many things you can change.

Really insightful. Thank you so much, Daniel. I really enjoyed our conversation. I know we has a little bit of technical glitch, but we made it and I really enjoyed this conversation, find it very insightful and wish you good luck with clearly what you're building there and also the funding round. More than happy to see how we can help.

Danielle Walsh (01:28:31):

Thank you so much, it was great to speak to you and we'll be in touch. See you soon.

Jaspal Singh (01:28:36):

Thank you for listening to this podcast. If you like this episode, please don't forget to give us a five star rating as it'll help us to spread our message. If you have any feedback or suggestion for this podcast, please feel free to reach out to us at info at the rate mobility innovators.com. I look forward to see you next time. Thank you.

Podcast Link:



Follow Us:



Info@mobility-innovators.com



www.mobility-innovators.com

