Hi, I'm Mauro Porcini. PepsiCo's Chief Design Officer. Join me for our new series, where we dive into the minds of the greatest innovators of our time, with the goal of finding what drives them in their professional journey and in their personal life. Trying to uncover the universal truths that unite anyone attempting to have a meaningful impact in the world. This is In Your Shoes.

I believe that design by its very nature, breaks boundaries. A designer is to be a leader. A designer must have a strong attitude about what design as a discipline is. Where design should come from and what purpose it should serve. I'm quoting today's guest, a designer, an innovator and a social scientist. As Senior Vice President of Samsung Electronics, he heads the Samsung Design Innovation Center, Experience and Insights Lab out of San Francisco. And the next generation experience planning team in Seoul. Before joining Samsung he worked at Motorola and Phillips design. envisioning and creating innovative product experiences. You also founded and directed the MIT Design Lab and the MIT Mobile Experience Lab. He holds a PhD in Sociology of Culture and Communication from the Sorbonne University, where he focused on media communication and social interaction in network communities and smart cities. He has published several scientific papers in peer review journals, books and articles. Federico Casalegno, welcome, to In Your Shoes. Grazie Mauro. It is my great pleasure to be here and thank you for the invitation. It's a super, super pleasure for us to have you here with us today. Uh, Italian fellow Italian, as you probably.

Probably can,

Can, as people can hear from your accent, uh, and mostly reading your name, but with a very international career, Italy, France, America, working in America for a Korean company. We talk about this as well, what it means. And in a very top position, but there is something that I was reading your resume. There was something that really catch, caught my eye as an industrial designer, an innovator. When you read that three, those three letters, you know, that that word immediately, you know, it catches your attention. MIT. You had an experience at MIT, you actually founded the MIT Design Lab. So how a guy from Turin, Italy end up in the MIT, that's just already an achievement and create a design lab, the design lab, the first design lab at MIT. Tell us a little bit of this story.

Yeah, That's a, that's a good, a good story actually, because, uh, as you know, for any innovator designer,

The place you want to be. And, uh, every innovator probably read that the Stewart Brand book about the Media Lab, like early nineties, Nicholas Negroponte being digital. So, uh, I had real an appetite to move at one point from Europe to, uh, to MIT, uh, which is, uh, has been always at incredible place. So when I moved to MIT from France, I started to work with Bill Mitchell and Bill Mitchell was at that time, the Dean of the School of Architecture. And, uh, he really, uh, had several passions. And one of those definitely his passion for design in the way, in a way, design is understood today, which is really how you can, uh, foster innovation, how you can design a center towards users. And, uh, I arrived at MIT early, uh, in the year 2000 and then little by little with Bill Mitchell we started to teach classes and to really have a design driven approach.

Uh, at MIT.

And how did you have arrive to MIT? You got a job there? Or with Mitchell or?

Yes, I basically, uh, as soon as I finished my PhD in France was, uh, I defended my thesis in July 3rd. Um, and I, September 3rd, I started at MIT with Ben Mitchell. So at that time I was working actually with Phillips design and I move to MIT to work with Bill Mitchell in the School of Architecture and Planning. And then at the Media Lab with other groups. What's your job officially back then at the beginning?

I was originally a scientist. So I started to work on a several project. And, uh,

I was,

I have been always interested in, uh, connected communication and community driven experience and so on. So, uh, with Phillips design i was working on connected communities. And at the same time I was working with another professor, Pierre Libby, who actually was well-known for this collective intelligence framework. So there was all this idea of how it could work with, uh, within MIT, around communities. And I'm on the first project. We started to work on remote collaboration on, uh, for architects. How can you improve creativity, uh, utilizing emerging tools and enable architects from distant location to be more creative together. So that was the initial project I was doing with MIT.

And then what happen? How did you arrive to create the Design Lab?

And then a student discuss, at MIT We actually did lots of work within the media lab. So at that time, MIT, uh, uh, Bill Mitchell was the head of smart cities, which, uh, was basically, um, for Bill Mitchell. He was the one who really brought the idea

of smart cities to the, the front end of the discussion. And, uh, the media lab of course, had an approach very interesting. We all know the media approach of demo or die pushing advanced research, et cetera, et cetera. But with MIT, what really wanted with, uh, with Bill Mitchell, what we really wanted to do was to, uh, to bring different groups together, to apply a user centered design, to apply design as a way to explore a variety of ideas. So we started to collect different groups within the design lab, and actually the first project was around, uh, smart mobility, uh, smart, uh, innovative trade shows, uh, and or as citizen of, of, uh, I would say a domain that really investigate the bandit of design across many different disciplines. So the design lab was a way to bring together very different department from MIT. or students from MIT, and have them working together in one unique, uh, topic.

So this is very, very interesting because this is one of the key aspects of design. I often define designers as experts of everything and the experts of nothing. We are trained to facilitate different worlds, connect them together with our ability to prototype ideas, focused on human beings. And these aspects of design is often not understood, it's not clear to people. How, the media lab, well, the MIT understood this. You are able to explain it to them. How did you do it? And I'm sure there are many design leaders now in their companies thinking, "I want to explain exactly that to my boss, to my company." How did you position it and how did it happen? Well, actually, when we started with Bill Mitchell, we started to teach a class at the media lab, which was called Design Without Boundaries. And we usually started with one topic, re-inventing mobility, re-inventing public transportation or, or any interesting topic. And then the idea was to hire, or brings students and research it together from very different departments. So as a, as a foundation from the class was to bring student from mechanical engineer, computer science, um, media lab, uh, school of architecture. And then we also had students from Harvard. One of the incredible things in Cambridge is students from MIT can take classes at Harvard and vice-a-versa. So there is a hybridization of knowledge, of peoples, of talent. And we were really fostering that really actively hunting from students, from very different department, from very different, uh, uh, knowledge, skills, but also cultural backgrounds. So we had students from every, every where from the world, so a way to foster...

You're making me feel like going back to school to experience

this connection between Harvard and MIT, so fascinating. Yeah, it was incredible. Yeah.

And so how did it go? How did it go? It's still there? There is still a design lab at MIT?

Well, now since I left for, uh, I left for, uh, for Samsung, so I, I closed the design lab for, for some time, uh, we do still have the, uh, some of the work, but for now is, is on, on pause. Overall MIT now is really embracing design as we meant at that time. So when we started the design that we were really the, the, the ones really pushing the boundaries of experience through in design, the way we, we understand today and now MIT, we have a minor in design, that teaching design and so on. So it's definitely embracing, uh, a good, uh, approach to design, which is complimentary to many other design that exists, uh, existed already at MIT.

So then you mentioned Samsung, I have many, many questions I want to ask you about Samsung, both as a culture, as a Korean company, as well as obviously consumer electronics, technology is the future of the society we live in. Starting with culture. So you are an Italian, in America, not in the headquarter, in Korea, in a Korean company. And, and, you know, th the, the Korean culture is, you know, is a certain kind of culture is a, is a beautiful, amazing culture, unique, very different than the American one, and very different than the Italian one. Is a Korean company that is dealing with a global world, like PepsiCo American company, trying to figure out how to move in that many countries around the world. So what is your role there? And how did you integrate yourself within the Korean culture, within the American culture as well, you know, with your Italian heritage, how do you make it work? So two things. One is that the role I have in Samsung, but the, the, the intriguing question about culture and, and, and perspective is interesting. So, uh, in a way for me, Korean and Italians are way closer than we imagined. We are basically the, I don't want to say the same. There's a peninsula. Uh, we, we love food tremendously. There is a huge tradition on, on food, uh, both for what to eat, but as a social rituals. We love beautiful things and design. Koreans they're crazy about good design, uh, arts, So I think there are many, many interesting points that make us, uh, really close

So I guess on that aspect, I feel somehow very, very, uh, close by Koreans, even though it's very hard to understand the language, to talk, et cetera, et cetera. But, uh, I would say that's, um, that was a good surprise.

And so why din't they, why didn't they ask you to just go

to to Korean in a way.

to, to Seoul and to the deadquarter? And they, they let you work from America. What's going on there? Well, no, no, actually.

You have a global, you have a global role, right? But not in the headquarter. Usually the most of these roles are and in the headquarters of these corporations right? I spent last year, I spent almost six months over there. So I spent lots of time in Korea.

I think it's true I have a big role there, I have a big team, uh, there, but at the same time, uh, one of the value that we bring from here from, I have teams in Europe, I have teams in the United States. And one of the big value, big values that we bring is really, uh, we have a unique, uh, capability to understand, uh, silent signals, behavior changes, uh, to interpret, uh, lifestyle and behaviors and bring it back to headquarters So the, the, the reason why I have offices, uh, at global, and especially in Europe and United States is really this ability to bring those behavioral changes and signals and, and bringing them to, uh, in a way that then we can bring those shifts into our products and inform design. So, and do you find any problem in translating these insights across different cultures? I'm asking you from the seat of a multinational corporation. I have teams as you in different regions of the world. And my role is, is the one of really trying to build this connect of these facilities, or I need people within my team that know how to talk different languages. I'm talking about cultural languages, obviously. So how do find this challenge always working for you.

Well, I do have of course great designers that actually work with me and really connect.

In my team, we have a lot of, uh, Koreans here in San Francisco or Europe, but as well in, in, uh, in headquarters and really our designer, they're trying to, uh, to work across culture and across countries and in a way translate and adapt in a, in the right way, what we do from, from here, because that's, that's, um, one way, but, uh, overall what we do, that, there is an additional difficulty in ways. Like, how do you understand, uh, a shift in people's aspirations today? Is not only of, of cultural difference, but it's really a matter of how do you understand people, uh, today, which go beyond the cultural differences or language differences. Samsung is obviously a tech company, a is a company that I admire for the longest time. I remember when I was in Milan uh, you either, or Samsung had a design center in Milan, run by friends of mine, uh, there, where they're hunting for trends and try to understand what was going on there. And that's when I

started to study the company and they use Samsung many times, in the companies I work with and for, as an example of how you could move from an OEM, providing technology to other brands and companies, to one of the most amazing design companies in the world. And also number one in consumer electronics,

Amazing, amazing design story. For the people that don't know the story, go online or buy books and read this story. The first design evolution, the second design evolution driven by the top of the company. Uh, I, you know, at the beginning of my PepsiCo journey,

Long story short, I admire this company. We are now in a moment of major transition driven by globalization's. The new technology at Samsung is, is the driver or multiple of these new technologies. Um, and also now a pandemic and the social unrest and many things that are reshaping the society we. Live in. What is the role of technology in all of these? There are amazing things that technology is doing. And then there are also eventually things that are less desirable. What's the role of technology? And I know, I know that technology is

a very broad word, but, you know, let's start from there, the role of technology in this world, in the future of this world.

Well, I, I can, I can ask that in two ways. So on one way, uh, for example, the way technologists have helped, uh, nowadays throughout the pandemic, because you mentioned is, is incredible the way we actually still can connect, communicate, uh, being attached with the people we love and care. So that was, I was amazed at the way, uh, artificial intelligence or, uh, the next level of computation helped, for example, even to, to, um, to discover the vaccine. So technology had and, and keep having an amazing role. And, uh, it is definitely important to push the boundaries of the technological advancement, however, You know, my role and the way we, uh, my contribution is the way in a way it's really to think through the lens of user, through the lens of people and, uh, Samsung and our products are amazing from the point of view of technological advancement. So for example, you know, some of the product really show the amazing technologies and amazing achievement, but, uh, you know, one, uh, uh, one great designer that, that, that we love and, and, uh, uh, Munari. Munari used to say, no, it's easy to put everything, every color, every shape, every forms, every

So in every rock, there is a David, the point is how do you

everything into something. But what is really difficult is to

remove everything and leave the essential.

remove all the unwanted material to leave an essential statue, which is, an amazing celebration of beauty. So, and the way we do that in my team is trying to push not what technology can do, but what technology should do and should do not. Because we try to empathize and talk to users and have an ongoing relationship with users. So.

The role of technologists is more and more important, but if you let the technology go without a human center perspective, it's a simple, uh, search for perception, for perfection, without a humanity is a perception within human progress.

And in a way, again, we try to achieve the opposite. That's why, for example, you know, when we start to work, and this is for, for designers, is it is a common process. When we start to work, for example, in the future of, uh, of video cameras, our approach is never, uh, to start thinking by the technology. But first of all, you start to ask a question to yourself like storytelling. Humans have been telling stories since forever, uh, 17,000 years ago, the Lascaux cave in France. They have the first, uh, mural on the cave, and that's in a way the first, uh, image of, of one millennial going out there and seeing good food and coming back in the cave and then portray in the cave and telling the story to his friends and family. Now we use mobile devices and we post on, on social media, but the human needs to tell stories, to connect with people through storytelling, to share and be connected remain the same. So that's what we try to achieve from our lens.

I, the power of words, I love what you said earlier, can versus should. The ethics also of technology and making sure because yeah, technology empower, gives you freedom, but then give you freedom to do good things or bad things. Or eventually it gives freedom to some to use others in certain ways. Uh, I found a quote from you that is really interesting, "to design technologies we can use, but not let them use us." That's fascinating. It's beautiful. So many times we become slaves of this technology.

I try to be very objective. If we think about social media, for instance, a lot of people are like, oh my God, you know, we're always in front of the screen. Well, there is the negative side. And then there is the positive side of connecting with other people. The fact that there are regions of the world of a certain kind of culture that somehow were eventually were discriminatory, or, and now these people are exposed to other cultures, and there is a new awareness and, and things are changing and technology is accelerating the change.

So there is the good and the bad. And so it's in people like you Federico in companies like yours, uh, that we need to rely on to have that ethical compass, right? You, you really have the possibility to do the right thing, to push technology in a certain direction. You don't control everything. So obviously there are many, many factors in place, but for sure to have this companies with good designers, driven by a purpose by the right thing, by the stuff that kind of ethics is fundamental. And I think it's at the core of everything you say all the time, right?

Yeah. I, I, a hundred percent agree with you. It's, uh, it's really, you know, how, how you can bend technologies towards human purpose. How do you combine technology towards the planet? I mean, uh, it's easy to, uh, to fell in love with technological advancement and that's, you know, coming from 20 years at MIT is, you know, I, I know that there is a huge passion around that and that that's alright, but then when you start really to drive products, it's really, you know, how do you ask yourself, uh, how.

How can you design for humans and, and with humans, but also how you design for humanity. So now again, the pandemic between, uh, uh, social issues, between economical issues, between health issues, it's really evident that there is, uh, a needs for designer to consider not only the user that they work for and designed for, but at the generally, like to have this very systemic approach, to, you know, try to identify a solution that considering that we live in a planet, this planet, this shared with certain, uh, limited resources that we need to do the best to, to, uh, preserve that.

So ethics in that, by the ethical approach is absolutely fundamental in here with that lens. So that's a... Well, obviously we work in, uh, in PepsiCo food and beverage industry and the most of the time people think, well, what technology has to do with this? With what we eat, what we drink. And, and eventually when you think of technology for many, many companies in this industry is well, social media, communication, PR, marketing branding, blah, blah, blah, blah.

What we've been.

Trying to do in the past years has been to try to understand how technology can help you instead in understanding what is the right food for you, how to customize your food, your drinks. So we came up recently with these wearable technologies in Gatorade to customize your drinks, in SodaStream professional, this machine, to customize again, your drinks on the base of your, your needs, physiological needs and your

tastes and desires. And many of the things that we are in, we have in the pipeline. You and I have been chatting about opportunities of technology in food and beverage in many ways as designers and dreamers. What's your point of view on what technology can do in the world of food and beverage? Well, It's quite embarrassing. You are the expert. I have. Uh, but, um, you know, you said one thing that is about customization. So, and that's, for example, immediately touch one of the argument that we were discussing before, which is about ethics. So in order to personalize, uh, food and beverage and beverage, you need to know your user and you need to know the user. How do you deal with privacy? How do you deal with data? And of course the more the user gave you access to his, her behavior, data, etc. etc., the more you can, you can customize services. So in that case, the balance of how, you know, how much you know about the person, how do you protect the data? How do you utilize the data in a good way is definitely, uh, one of the key element.

Um, and I know that, uh, it is true that the, in mission in your, in your business, uh, the level of technological advancement is really, you know, going, going far. And, uh, and it's amazing what can be done, in a way that is a level of technical sophistication. How do you design products that achieve some, some, some sort of, uh, of the same basic functionality? So if you designed a fridge, how the fridge can have a constant, uh, uh, level of cold and preserve the food in the right way, and this is, you know, at the same time, how the fridge can, uh, be sustainably, um, for the planet, for the environment, for the use of energy. So that's one area, but more and more, I would say, consumers are in search for a sort of partnership from object that have some sort of subjectivity and, and propose or work with the user in finding the best, uh, food, the best uh, diets and so on. So that's the thing, there's a good opportunity to, again, to bring ethics and, and this type of design into the way we design products leveraging by technologies.

Well, I, you know, with out revealing anything, but I really believe that we'll have a future, in a few years. Few is, uh, is a comfortable word. We don't need to define our many years, but we'll we wake up in the morning and there will be something, it could be a refrigerator, or it could be a new device that doesn't exist today, that will tell you, well, by the way, we talked to you, right? Because now the machines talk to us and they will be like, "oh, Mauro, I know that probably today you need a certain kind of drink and a certain kind of snack, and I'm going to make it for you, you

know, on the base of your taste. And I know that you need this kind of drink from a functional standpoint, because you need an extra boost of vitamin B12 today and some electrolytes.". And why, because I have a wearable device on my skin and it could be my watch, it could be my bandaid that is a smart bandaid, that is telling me, that this monitoring my, my body, but then it's also connected to my agenda and knows perfectly I'm going to have a very intense day. And so there will be space. And today, I don't know, I wake up and they, and they get something like 12, 13 different pills with different kinds of integrators and everything. You know, in the past few years I got into this, there will be probably a future where I can have a very.

Tasteful snack, you know, with zero calories that can give me all of these and it's created on the moment for me on the base of what I really, really need. And then I can still go out for lunch and get a good salad or a lobster or a fish or. Whatever I love. And there will be this very balanced combination on different things. This is my wish for technology in the future, but I think it's going to happen. What do you think?

I think it's going to happen, uh, for sure that, I mean, th there is a level of sophistication as, as we know, but, you know, listening to you, I was, I'm remembering one of the reasons why I moved from Milan to Paris is because I read, you know, I was, I started to work with a professor who is still my, uh, mento Ponce, my Maestro, uh, my mentor. And, uh, one of the books he wrote was The Shadow of John Dionysus. And Dionysus is the Greek God of orgia, of but orgia in that sense of being together, it's how do you socialize? How do you create community? How do you empathize? And a lot of the elements in uh, in his book and his work was really about, you know, being together and food, that is definitely an element, which is how you maintain your, your, your body active. But on the other end, especially as Italian, the, the rituals around food on, on, uh, having, uh, the slow food movement, having a long lunch with friends, with family, to socialize, to, to laugh and, and empathize. These actually have amazingly, uh, good effect in, in our health, uh, physical and mental. So, you know, Harvard Studies they did a very interesting Harvard group. They did a very long study on happiness. And definitely one of the interesting point of happiness, uh, is, you know, people who are the happiest in the world are the one have entertained the social relationships, social connections. And of course, through the socialization of food, uh, is one of the, uh,

elements or moment in our lives that keep us healthy, uh, in, in a true sense, like mentally and physically. So definitely th the way we can architect or design food and food experiences can really make a difference in, in our lives.

By the way, you just say a key word, happiness. I just wrote a book in Italian, and I end the book.

Talking about how to design happiness,

But the entire book is connected to that theme. I think you should be, we should remind ourselves all the time that everything.

We do, the work we have, you know, our connections with family members, friends, uh, and our communities, anything, anything should be always driven.

To reach individual happiness.

And social happiness.

The primary cause of why we do all of these, that is to create happiness for us, individuals, society. And if we are in position of responsibilities, like in my case, your case, we have the responsibility of trying to enable the happiness of our teams of the people that in a way or the other we work with every day. So Harvard did the work on happiness. I didn't know. Can you tell us more about this?

Yeah, It's a 75 is a longitudinal study where they interviewed for I guess now 80, 85 years, like family and it's really trying to understand, I would say I will share more detail, but it's really trying to understand how, you know, what make you happy and healthy in your life.

And definitely is, uh, you know, the, the how for how long you entertain the relationship for how long you, um, uh, you, you stay connected with the people that, that you truly love, and these are people are definitely happier. So way more than career achievement than... I mean, let's say, say something that is trivial at the end of the day, because, but I know you, you, you brought the, uh, you've worked on happiness and I think it is super interesting for two reasons. One is, at least two reason, but the first one is, you know, we lead teams of designers that need to invent, create, build the future for, for us, for them, for their kids, for our kids. And the future cannot be read on Excel spreadsheets, looking at data from the back. So the only way that the create a good future, if, if they are creatively engaged and happy about what the future could be. Then the product can definitely embody this, this level of joy and happiness.

And I think that's fundamental. And the second thing is like, we had the big meeting.

And we were designing a new product.

We, we are structuring the product and the drivers for the product and so on, and I force one of the pillar, which is joy. Like, design a product, a product they give you joy, like, you know, make you happy so that it, so happiness and joy are definitely pillars that we need to drive towards and keep it at the very center. That's a, that's a, that's a definite important value, a hundred percent agree.

Completely. So I agree so much. Um, you run the Samsung Design Innovation Center. Um, when we talk about innovation, especially outside of the consumer electronics world in, in, um, in food and beverage,

In packaged goods and in, in or in tech, in the RnD technological companies, like my previous company, 3m. Often innovation is either owned by the traditional RnD organizations, so science, engineering, or, you know, other companies once again more in CPG by marketing. Yeah.

How do you work with other functions in Samsung, in innovation, who owns what? What is the responsibility of the different functions? How do you connect with the other functions withinn the organization? So that's.

Two things. The first one is basically I joined Samsung, um, um, originally, uh, by taking a sabbatical from MIT and, and, uh, you know, I wanted to explore, uh, and take some time and, uh, embrace new challenges. So I joined Samsung and, uh, and then make a choice to remain because I thought it was an amazing opportunities. But when I joined Samsung, uh, the center was called Samsung Design America. And they change into Samsung Design Innovation Center. And the big change, uh, is, is basically due to the fact that, uh, Samsung Design America was still mainly driven, uh, more by industrial design, which, which is great. And we still do amazing industrial design and, and I love it, but I wanted to bring more this experienced lens, human centered lens. So, um, then Samsung design lives within the Samsung corporate.

And I'm lucky enough right now to have three hats within Samsung. So I have one team, uh, within design, which is Samsung Design Innovations. And then I have one team within, um, Samsung Research and the team is a global team. And again, the goal is to bring, uh, uh, experience and insight into product development and the third team within the business line. So in a way, I bridge from advanced research to design, to business line, I bridge this, uh, this area and the way I bridge it is, is through experience. So the only thread that connect everything that, that we are doing and with my

teams, is really the lens of experience. Then how, who owns innovation is always a, uh, a very good in a way tension between what we bring as a designer, what we observe, what we desire and what other teams brings as a technologist as, as a, uh, product leads and so on. So there is, uh, I would say it positive tensions with lots of discussion and engagements that help products to advance. And everyone tried to protect certain ideas. And I think this is a richness for us. So you have innovation teams in business and innovation teams in, I don't know how you call that function engineering or RnD.

Yeah, yeah, yeah. They're innovation teams. And there are innovators.

We try to do project together. So we tried to work with, uh, rather than everyone, you know, rather than in a linear process when you do something and so it's really trying to, definitely there is a lot of coordination there is a lot of um, engagement, discussion, uh, pre pandemic, lots of travels, uh, bring teams to work together. And that's actually is also very interesting, uh, point. When you bring people from overseas here, or vice-a-versa, you, you go to other country, you, you, you apply a lens, uh, in your look and what you observe totally different. And that is interesting. And this enriched tremendously, our, our design. I'm going to say something that probably so many people here almost every week, it happened to me last night, I was at the dinner in a restaurant. There was the owner of this restaurant that told me, uh, you know, I have a son, he's 14 years old. And he spent all the time in front of the computer. You can't remove, and he plays with it, He makes friends, I don't even want to move him away from the computer because it's going to impact his social life, but his social life, some are virtual. And now I can't wait for him to go to high school. So maybe we need to go to school and some how we need to connect with other kids. How do you see technology, a new generations and socializations.

And gaming? I mean,

Right now is, is really not ideal. You know, I'm always, again, very open and, uh, about the power of new technology and what they enable us to do. So there is the beauty for these kids to connect with kids that are, that are completely different kinds of cultures and way of thinking. And this is great, but also the physical interaction or meeting somebody in the street, or even just working out in the street, just running after a ball is important. So how can we change this use technology, but eventually in a more hybrid way,

what's your point of view?

I think, I think let's say as, as designer, if I shortcut or classify in a very personal way, the, the evolution of design. So let's say back in the,

Late sixties, seventies, the, uh, Engelbart invented the mouse. And basically the design was really focusing on the human computer interaction. How do you as a person interact with the machine? So that was a big evolution. So that was phase one. And the designer really was the, in a way, the master who need to really define a good framework for the person to interact the machine and be efficient into that interaction. Next step, late, uh, early 2000 little bit earlier, we start really to think ecosystem of services. So we realized that products live within a larger context. If you design something, this needs to be connected to other, other, other services. And in that case, the designer is the orchestrator. You know, you, you understand that there is a larger image. Today when we discuss the cars, but, and we discuss ethics. Today's when you design a product, you not only design the product, but you need to design also the way the product learn from you, how use artificial intelligence on sensors to, uh, to grow, learn and have a proactive action. So in a way designer in that case is really the master, is the creator of

One thing that is happening in this field, I mentioned gaming and playing with others is the, all the E-gaming industry. And now no matter they all play virtually and disconnected from one another. There is this new phenomenon, that is. Not that new anymore at this point, of going to these stadiums and getting together for two, three days and looking at people playing, So it's a fascinating job for many designers.

Today. And many of the people listening to us, look at these industry, this interest look at industry because there, there may be opportunities to do with design things that we are not doing today. These people need to eat and drink and have fun. And spend time and break all those poles, and then go back to the energy of the game and watching the game. And maybe they want to play them too. So it's fascinating.

How, no matter it's all virtual, and you're.

Disconnected from people, sooner, in a physical way, sooner or later, you converge towards a physical space where to meet everybody.

And again, going back to this, you know, these are the ethics of design in the world of technology, what you were just saying just a few minutes ago. Understanding what is the full experience. And now you can bring people together using technologies and enablers going to be cute.

Yeah. But I totally agree and raised on it for what you, what you said. Actually,

When I studied in France, we, I was, I was leading a research group on the use of technology in, in everyday life. And one of the first publication we, uh, we made was called, basically Cyber Sociality. And was the exploration of, you know, despite the fact that we love to be in the internet and create discussion groups, et cetera, et cetera, we all love to be together at one point. So, and, uh, we are, uh, in early nineties, mid nineties, you know, when the, when the web started, et -cetera, et cetera, and there was lots of voices that really say, we'll say, oh, this technology will break us apart. Now we do only partly online and song. But we did studies and work and, and with lots of people, and actually the point was, there is still a level of amazing engagement through network on, in online communities, but still we come together.

And actually one of the, for example, one of the big projects I did at that time was, uh, you know, we had the balloting board system, the BBS. And BBS's were different than online communities. BBS were basically, some of them managed by people that love to have online conversation about whatever they want, but they came together to have dinner parties, et cetera, et cetera. So there was definitely an online amusement and interaction, but that there was a strong level of human empathy at the same time, which is still what has happened. Like people, you know, before COVID, of course people skip traveling, meet in it. et cetera, et cetera. And actually we rediscover the pleasure of this human, the necessity of human and, and in the gaming industry is definitely the same. I love how often in this conversation, you, you tap into history to decodify what's going on in the present and the future. Many, philosophers and historians do this, understand the past to really better understand, study the past to better understand the present and forecast the future. I was thinking about all the conversation going on probably about 20 years ago on how technology will have impacted in a negative way, all the travel industries, airplanes. Exactly.

And the reality is that we learned already long time ago that actually technology amplified your connections with others and therefore, eventually you need even more travels to be connected because sooner or later you need to have this connection and...

## Exactly.

Why I'm mentioning this, it was inspired by what you just said, but also because we are in the middle of COVID, hopefully we're slowly getting out of this pandemic.

And a lot of people are thinking, well, we know we're going to travel less. We're going to probably, probably is going up. You know, a change will happen, but the reality, and probably we'll cut what was not necessary, but this need of human beings, of getting together, both in the same city. So we saw immediately people running out of their home and going to movie theaters and restaurants and everywhere. This was pretty obvious what was going to happen. But for the longest time in the past few months, people were like, oh, people won't go back. They will change behaviors. They rediscover what you can do at all. And you can cook with friends, no. The same with travels, I think, both for business and pleasure. I think when we feel more comfortable enhanced by these technologies, uh, we will try to reconnect physically and travel again.

Absolutely. Yeah, absolutely. Is that I think, um, what happened, definitely we had a, through COVID, we have an opportunity to think or to many aspects of our lives and lot of people, probably when they're saying, you know, about traveling is in the bay area. For example, our commuting to work is a big, big issue. And people start to think, why should I spend three hours a day or even four, uh, sitting in my car when I can do certain tasks in different ways. So it's not that that, you know, I, I want to go full remote or, or, or fully present, but how do you manage your life to be back to what we were saying before to be happier? Yeah. So sometimes you need presence and sometimes you need just to, you know, work from home. So, uh, but it's through that, all those, uh, Lou dyes, all those elements of, of people, uh, or, or things that we hear in the past, like killing the travel industry, killing the, is a recurrent topics. But at the end of the day, we as humans, we, we enjoy to socialize and be together. And we are seeing this also right now, how people is suffering by, staying. Staying apart actually.

Well, on this, we can close. I love this idea that we just share of the need, the human need of socializing connected to happiness, understanding from the past to envision the future. And this is what we do as designers and innovators. So, Federico keep envisioning the future with this ethical filter that you have in everything you do. You have a very important role in a very important company. Thanks for this conversation with us today. And thanks to everybody that's been

listening to this conversation.

Thank you Mauro. It's always fantastic talking to you and having this great conversation and then see how we can bring design to the right place. So it was great to see you and talk with you.

Thank you Federico.

Thank you. Grazie.