The Future of Business – Season 4 – Episode 2

Host: Andreas Finzel Guest: Melissa Benn

Transcript

Intro

Andreas: Welcome everybody. And thanks for joining us for another session of The Future of Business, the podcast where we take you on a journey to explore the diverse range of sectors and stories embedded within the Oxford MBA cohort and beyond and how they will shape the future of business. My name is Andreas, and I will be hosting your conversation today with Melissa Ben. Hello Melissa, thank you so much for having us. Let's kind of dive into the topic sneakingly: What did you have for lunch today?

> **Melissa**: A wonderful question. I had roasted, barbecued jackfruit. It's like a vegetarian alternative to pork. It has that same kind of shredded texture. Very delicious.

I love jackfruit, guys. Check it out if you don't know it

> Check it out! They are Huge and delicious for both savory and sweet dishes. Look it up.

Uhm, there's a reason we are chatting about food so much is because we kind of want to dive into the bigger scope to find out how food is being made. Melissa, can you help us dive in: What is for you the future of business?

> Yes, so it's the future of food systems and food is how we produce, package, consume, transport, waste. What we need to survive. So: It's hugely complex. It accounts for a third of all greenhouse emissions, so it's hugely impactful and is clearly. A huge sector for disruption and a really exciting future.

Absolutely, the thought of greenhouse emissions is a really big deal and I'm glad that together we get a chance to kind of unpack it a little bit here. Can you help us understand why this is so important? Why would anybody care About food systems?

> I see it more as how could anyone not care about food systems? It's something that literally touches every human living on the planet every day. It's how you go to the grocery store and you're like, oh, I want this pack of cookies. Well, where did that pack of cookies come from? Who harvested the sugar? How did that sugar get to a plant? How was that processed? How was it packaged in appealing way that made you pick it up? Go home… how does it taste? How do you enjoy the cookie? And then you throw away the package later.

OK, it's clear it's a very clearly many different aspects of this, but can you help us understand the urgency behind tackling it? What is it about the system that is broken? What is it that needs addressing urgently?

> I think when you look at food in the context of the climate emergency we're currently facing, there are hundreds of problems within our food system. So clearly, we have large problems of access. We have some people that are homeless and hungry and are unable to access. We have issues of overconsumption. We have issues nutritionally; we have issues of what happens when this food is wasted. Does that go sitting in a in a dumpster in a landfill? Is it actually repurposed and put back into the earth? For our meat consumption practices.

What I think is really important in all the conversations we're having around food and climate, is just the use of words. You talked about the climate emergency instead of the climate change or the climate disaster and kind of crisis, whatever. But I know that this the way we consume food is a is a huge driver for this. Already earlier today we mentioned that a third of all the greenhouse emissions actually come from the food we produce. And if I understood you correctly, it's also true that, the beef we're consuming actually emits much greater amounts of greenhouse gases than the air travel we are doing. Can you talk a little bit about this and how the impact it has on climate specifically?

> Methan. Yes, I think that our beef industry is definitely not the same as any other part of the food system and many experts are saying we should be tackling the beef industry much as we do fossil fuels and other dirty industries because it's a huge emitter of methane. For example, all male cows are killed immediately because they're not good for dairy obviously, and they don't produce the best meat. So, the dairy industry has this huge issue. With what do you do with male calves? That's just one section of it, but it's that the meat industry is very ripe for disruption. There is huge demand for vegan or more sustainable alternatives, and that's leading in the coupling with this huge technical change that we're seeing technological change in new industries that are looking at how can we produce meat without actually having to kill cattle or...

Or yeah, yeah. So, there's clearly a lot of things that are going really wrong the way we are consuming especially meat. So, we look at it like what are we having for dinner, but we're actually asking is what meat are we having and then everything is considered a side and we are kind of moving into a direction where it was getting better. We clearly get that direction where There's more and more vegan products There is a lot more milk alternatives and there's a couple of amazing startups in this space. They're doing a really good job. And can you maybe talk a little bit about? A couple of trends in the area that are helping to tackle these issues.

> Yeah, I think you can look at the meat problem in multiple different angles. There's clearly the vegan push and people that are pushing for less consumption. There's also a segment of society that will always eat beef and will always eat meat, so there is this new technological innovation startups that are saying: OK, how do we tackle the consumer that no matter how harmful beef is, will always eat? And so, there's a whole new range of cultivated meat products and cultivated dairy products where we are actually able to produce biologically the same beef, the same milk without the slaughter of animals without the huge amount of water land resources Required to actually take a pound of meat from birth to slaughter to consumption.

Right. This is having meat and dairy without animals being involved?

> Yeah!

That sounds like something that's happening after Elon Musk got to Mars. I see how this is an issue that should be tackled, and I heard some news about this before but for me it's quite difficult to understand right now: Is this something that was like a far-off future? Or can you kind of help us and explain where we are? In what stage of development are we with these different things where we can specifically kind of focus on the one side or the other? Do we call it cow-less beef, like the meat that is produced without killing animals and on the on the other side dairy products that are being produced without cows involved.

> So, it sounds like sci fi, it does, but it's really not that far out. I know it's exciting there is as you as you kind of mentioned an issue with how do we name this product. A lot of people kind of see the lab grown meat as kind of a scary name. Some people are pushing towards clean meat. I'm going to use cultivated meat just for this conversation. But it's a way where we cultivate stem cells from beef and then create... So imagine you just create a steak. This that's it. You just grow steak. Take it's so cool and it's already being done. The first prototype was, you know, 10s hundreds of thousands of dollars because it included all the costs of R&D, but we're really rapidly getting to a point where it's going to be available. I think in 10 years we'll have cultivated meat at the grocery store.

So the state for this development is... So what we are doing is we're trying to grow only a specific steak in the lab.

> Our chicken wing.

I mean, I don't think it's going to be fried yet, but at least I get. I get the idea. There's some stem cells being used to go specific parts of the animal was on the whole anymore without being a nervous system attached to it that they feel anything like pain. And I see how this helps. I see the impacts of this so clearly: There's no need for slaughter, there's no need for the water that's being used for watering for the land, and I'm sure you have some ideas on how much of the resources being used can be cut down here and at the same time. And I understand that currently people are already doing this. Scientists are actively growing meat, at a very high price because there is a lot of R&D involved. And the next step for us to tackle is to kind of reduce the price point, tackle it, and get it to the consumer. So, this is less, Sci-fi let's figure out how this is possible thing, and it's more like a business issue in how can we get this to the consumer?

> How do we create the systems? So: When the science is ready, and it's close, that we're able to jump at it, create the factories, the supply chains, the marketing, get it to consumers?

That's right.

> Because there's been studies showing that what consumers really care about in food choices: Number one is price and convenience. So once this gets the price point where it's the same, maybe eventually even lower than biological meat, it's going to explode. I don't see consumers necessarily caring where it comes from. And then there are consumers who do care about the environmental impact. It's going to be a huge boom to be able to consume meat which uses 90% less resources than biological means those are the current numbers, but the estimates are so. Just imagine 90% of cattle ranching. If you look at Brazil, one of the biggest cattle producers in the world. They're facing huge deforestation issues because they need so much land to literally

> graze and grow cattle. But if we have these cultivated meat factories, all that land can be rewild. We can put the forests back where they're supposed to be, and we have so much more water. It's a huge issue. Big resource for inputs into agriculture. There are so many resources that will be available to us that currently aren't because they're embroiled in this. It's a very resource intensive meat process.

That's absolutely incredible. Maybe if we have time later we can talk a little bit about what we could do before this land is being freed up to see resources that are being freed up by these developments. And before we jump on this now, we can have a look at the other side of the cow, so not so much about the meat, but about the dairy product. We need to understand a little bit what's happening in this space? What the current developments are? How this can change the way we consume? And how we impact it?

> So for dairy, it's similar to cultivated meats bio-reactor dairy, so essentially still in the scientific phases what we're able to do is using a caster, a big vat basically were able to synthesize milk proteins through catalytic processes, so this is just like cultivated meat, literally producing cow milk, but without the cow And so currently dairy use a lot of antibiotics and highly industrialized dairy, So the dairy that we're all drinking and again just significantly less waste less inputs into creating very, very exciting.

Is this like, Should I imagine it's like, this is probably something that is a huge tank. You know that somebody would set up a huge factory which could produce millions of liters of milk per year.

> Yeah, ideally absolutely. And I still see a market for the biological milks or meat, but I think once this hits that price point that consumers want, it's going to definitely take over the market because it would be cheaper to produce.

Yeah, I mean there's already a lot of stuff happening on dairy side, so a couple of years ago we used to have only , you know, different kinds of normal milk: Whole milk, half skimmed, whatever. And it was just the last, I think two to five years when we saw all the alternatives really hitting the shelves only. So, somebody was like soy, more almond milk, own brands, different price points where we see a couple of strong brands emerged from startups. But at the same time, that's what I'm even more excited about: We see a lot of the discounter, the normal retailers, you know, coming in with their own product, really kind of serving the mark at a different price points when it comes to this and I think we also hit a point now where somebody using soy milk or old mark is no longer considered like a weird vegan. Yeah, but contrary opposite.

> Starbucks: They're all there, and that's shows that's become so accepted. What really strikes me about being in the UK is every fast-food restaurant here sells these vegan meat options already, and that's very different from the US where Burger King has an impossible burger, but really no one else does. Or if they do, it's not really being advertised as heavily, but clearly the, the demand for alternative meats is out there. So, what's next is this going to be an alternative protein.

And I'm kind of curious when you talk about stuff like clean meat or the new kind of dairy product, do you think that it's going to kind of compete with existing alternatives like Veggi products or other brands or will it compete more with the classical animal grown product, just the thought...

> Yeah, great question. It's definitely going to compete with both, but the consumers that these cultivated meat industries are looking to convert are not vegetarians. They're looking to convert meat eaters, so they want to say: Hey, you want beef? We're going to give you beef. We're just going to make it much more sustainable. Although I think there will always be a market for impossible burgers or beetroot patties, because there are there will be more hardline vegans that are interested more in the purity aspect or just being against animals in general, so this will be playing to your average consumer who does eat meat on daily basis.

Yeah, no, absolutely not. We are not looking at a world where there's no cow anymore. The goal is not to get rid of the last cow on earth and shoot it to the moon with Elon Musk, but instead the goal is to reduce this incredible scale at which meat and dairy is being produced right now, and we are trying to kind of see the impacts on the macro systems like at the climate, environment and kind of tone this down. And then we can still have a market for, like you know, nice dairy products that are locally, organically produced, there could still be a market for high end beef restaurants you know where somebody has a nice angus steak from Ireland. I think the whole point here is for us to understand where this mass production is happening and the overconsumption is happening and what we can do to bring this, like, back to a more sustainable road.

> Yeah, it's bringing more choices to the market. Consumers want more choices and this would be an excellent way to continue eating meat, which we've you know been raised to eat. We and our bodies are designed to consume and digest meat and people like it. But how can we do it in a better way? I still see there being an industry for literally eating the cow down the road. But I think it will be reduced significantly. And additionally, the price structure right now is artificially cheap because of government regulations. But if you actually look at the externalities COP26 next week they were talking a lot about carbon financing. If we look at the carbon footprint of the meat industry and if we're pricing the impact on the environment, it's actually, way more expensive. Government subsidies are pushing for the feed, making it cheaper so that way we're able to go off and buy a burger Patty for, you know, one pound or £3.00 at a restaurant. But once those subsidies start to shift and governments see this new push and are able to make this cultivated meat more accessible and a better price point. I see a point in 50 years where it's more expensive to eat a biological piece of meat, then I cultivated piece of meat.

Yeah, as it kind of doesn't make sense, but given the fact that in a lab because they could probably be grown within a matter of months rather than several years to breed like a huge cow, and then you actually end up wasting a fast majority of the resources needed and the poor cow itself and you already check it out quite a couple of very concrete things that would need to be done. You mentioned how in laboratories we can start producing both meat and dairy products. We talked about how our government subsidies can help change the price structure. Sort of from a price point of view that gets more approachable to the consumer. You talked a little bit about: How the way we talk about it.. Yeah, the words we use. I think you didn't call it lab meat…

> I call it cultivated meat or clean meat

Can help us kind of put this to the consumer in and a more attractive right and it's not like a weird stem cell meat and can you maybe help us understand one or two other ways we can push this forward. What levers do we have right now to support these developments?

> Yes! I think there's definitely a cultural shift that's important if you look especially in the US, there's a big anti GMO, Genetically Modified Organism, movement and kind of coupled with a, I don't want to say, anti science, but that kind of fear of those incoming technologies and so there is that cultural conversation of making people comfortable with the idea that it's ethical and not creepy to consume meat that's been produced in this laboratory. I see that as being a huge cultural barrier that we will be facing. This can be done a lot of vegetarian or vegan organizations starting to push that. Now it's also just being done by conversations. First time I talked about this with my parents, their reaction was that's so weird and it's Frankenfood and it's creepy and I think it will take us a time before our kind of cultural like guys thinks it's acceptable. It will take time and it will be a barrier for sure.

Apart from this, what else is needed for us to get there? What else are steps that we can take to get this to us quicker.

> To get this to us quicker, we do have to wait a little bit for the R&D to get there, and it's coming. I think that big corporations can start should be investing in these startups and starting to look at how they will need to change their manufacturing, pulling up those factories. It's a complicated question. And I think we are still in the early stages, so it's the perfect time to be looking at startups looking at R&D. And as Cop 26 makes carbon financing more concrete, I see a lot of these maybe beef industries will be looking to invest in these startups to eventually get their carbon credits, as those markets are strengthened.

Yeah, absolutely. If you have a couple of billions to spend then put it in here. We've talked a lot about kind of the macro environment, and I think next what I want to speak a little bit about more kind to round the conversation up. What's the next steps for you are, Melissa? There's so much exciting things happening and so many of us are eager to move things ahead to position us well. If I want to be part of this, how do I get in? And where do I go? What do I do?

> Yeah, so there's a really amazing resource I would recommend: It's the good food institute. They're researching lobbying, investing in startups. Really cool thought leaders. It's a great place to start to learn more. Also, they have an amazing job board and they're connected to really cool startups actively working in this space that are going to be doing really amazing, innovative Disruptive things.

OK, so that's the good Food institute, right? Good food institute. Let's go to learn about it, then you get it all, yeah.

> Or to also just see who is working in it. It's a good place to understand the ecosystem a little bit better. Especially if you're interested in the alternative proteins.

OK, really cool. Let's try to check it out and see who the players are. Mostly people are that are moving this ahead to a further extent than regarding podcast. Talking about people who are recording podcasts about this can you very briefly connect this back to this conversation with us? So, help us understand what impact do you personally want to have in this field. And how's the Oxford MBA helping you?

> Yeah, I would really love to in the medium- to short-term right after graduation: Get into ethical and sustainable sourcing. So kind of procurement for a large Agri business food company. Understand how it really works. And then in a few years transition into one of these companies.

> But hopefully that by then we'll be getting closer to coming to market and bringing those really good strong business skills which I'm definitely getting from my classes and learning a lot but also from incredible other students who have incredible experience and then also from Co-Curriculars and different professors and different departments who are really on the cutting edge of food systems and food sustainability and helping me understand and think of these issues in really interesting nuanced ways.

OK apart from apart from kind of seeing where this is going and kind of class you're doing right now, can you little bit understand how doing an MBA fits into the wider picture? I mean, you have been doing this for 15 years. You are an expert on this. I think. Cut yourself some slack here. Cut yourself just a little steak here. But if you can, can you describe while you decided hold on for a moment and do an MBA. Can you talk a little bit about how this decision kind of fits in your journey here?

> Yeah, so personally have more of the strategy lens, pretty down pat. I really don't understand the more finance and analytic side, so I really came to Business School to help get a wider understanding of how businesses actually function. The real nitty gritty stuff. And that obviously is essential to food systems because it's such a such a deeply complicated industry.

Yeah, that makes sense to me. Well, I truly hope you get everything you planned for. And I really think there is no doubt that what you are doing really is the future of business. And I think it's clearly an area that can be transformative. And I am very curious to watch you and I want to watch the space develop and to grow and to have the impact it deserves and get your attention it deserves and in the next years. And I'm left here to say: Thanks a lot for coming on. Thanks to you folks for listening. And I hope we will… We're not going to see you, but I hope you hear us again, you listen to us again and the next set of some of the future of business part curves. And after then be kind to one another. Take care.

Outro