## 'Future of Business' Podcast Episode: Artificial Intelligence and why the future is bright Transcript

**Andreas** [00:00:01] Hello, and a warm welcome to the Future of Business podcast, where we take you on a journey to explore the diverse range of sectors and stories here at the Oxford MBA and a cohort and beyond. And we look at how these people that shape the future of business. My name is Andreas Finzel, and I will be hosting our conversation, with Shubham Saraff

Shubham [00:00:25] Andy, how are you?

**Andreas** [00:00:27] I'm good. Had a lot of pancakes or breakfast today, and it's an incredible social thing to do after years of living in and lockdowns and being home offers and eating alone. It's an absolute privilege for me to have a crowded table. How about you? How are you doing? Not too

**Shubham** [00:00:45] bad. It's been fantastic. You're already. So yeah, looking forward.

Andreas [00:00:50] I'm really excited about these episodes. Shubham is quite a character has given Ted talks about this. He has been advising institutes and large corporates, and he's really kind of our Go-To expert on subjects matters like artificial intelligence here on campus. But before we dive into these fields, can you can you briefly say what you enjoy about Oxford the most?

**Shubham** [00:01:14] Well, absolutely. I mean, what I enjoy about Oxford the most is, I think the people, while it's got a great legacy, great history, good infrastructure. What I enjoy the most is that it brings all the cool people, all the intellectual people, really diverse people together. And to be able to meet all these different types of people together is just beautiful. And I don't think anywhere in the world I could have done that except Oxford.

**Andreas** [00:01:45] I agree. And our MBA programme is astonishing in terms of how international it is. I literally had people up for breakfast from Australia, Nigeria, America and South America, and then a little German between juggling four pans. So now let's let's dive into it. What do you think is the future of business?

**Shubham** [00:02:12] Well, I think it's pretty bright. I'm really excited for it because the future that we're heading towards is much closer than we think. It's much brighter and it's very exciting. And the reason why I say it's exciting is because it's very different from what we're used to. And very quickly, I think much quicker than we think it's going to drastically change within the span of the next decade or so. I feel that the next generation is going to question the way that we used to work in the beginning of the 21st century and think that we were archaic or Orthodox. And that's what exactly happens when we think about the 1950s and 1960s. And I believe that technology like A.I. Blockchain of the Metaverse, all of that is it's just a very logical extension to how the mankind has progressed. And it's just going to become a much more integral part of our lives. So it's really going to be exciting.

**Andreas** [00:03:16] So of all the technologies that are shaping the way that our society and our economy is, it's moving forward. What I really admire about AI is the breadth and the width of its impact that it is clearly not something that that is going to change the way we shop only or the way we teach kids in school. But it really can can impact everything we do. And at the same time, it's difficult for us yet to understand with which sentiment we

can tackle it. So very similar to the way we started researching the genome in the last couple of years and ideas just voices that speak critically of it, given a lack of understanding or not. And obviously, it has many excited voices like yours in the case that are that are pushing it forward. And at the same time, there really are a couple of quite clear ways for us to see how I can actually benefit what we are doing. And there's a number of really interesting applications and medical sciences and media production, obviously in manufacturing and in computer sciences, where we can see where we can see AI driving us forwards. Um, and a small example, for example, is the way we transcribe podcasts. So I still remember sitting there for hours, typing down every single word and hating myself more than ever before. And now, you know, you press a button and start automatically, and it frees me up to to spend time with my loved ones. And it's not a bad thing at all. But I'm sure that you are aware of much more drastic applied applications of if I can you maybe name us a few ways AI is transforming our lives to kind of saw the power behind it.

**Shubham** [00:05:14] Absolutely. But yeah, you're absolutely right. I mean, it's not just technology for use case in industries, but it's going to get deep into our lives and and showcase very significant changes in the way we lead our lives. And there are there are very, very pertaining examples. While certain examples are fairly popular things like an autonomous vehicle, I love driving and I love Lewis Hamilton. But the fact is we as humans are horrible drivers and because we don't have 360 degree vision, we are horribly slow at the reaction times. We we can't predict another car coming to head, so we can't look at the map and predict that there's a car moving at eight hundred, I mean kilometres per hour and it's going to be detonated in seconds. What one of those things, and that's exactly why we should leave certain things what we humans are not designed for towards technology. And that's exactly what happened when we built the pyramids. And that's exactly what's going to happen now, and I think that's what's going to happen in the future. So examples such as autonomous vehicles of the digital world, for example, the way we have looked at the social media and the one that we have to look at metaverse, it's all going to be a part of the intelligence that this technology is bringing into. It's it's not just A.I., but it's the combined intelligence of these emerging technologies, which is going to change our lives ahead.

Andreas [00:06:42] OK, with all of my reaction to this. Let me be devil's advocate here, because on the one hand, it is clear how this can shop and speed up things and at the same time, scale up things. But in terms of AI being used for self-driving cars. We see that there are certain situations where the data that the ask efforts of didn't give it solutions like ethical problems or, you know. Might be like a trance in the sense of maybe something as far as you know, anything that's more that hasn't been there yet. And then it turns out the humans are actually quite low. And finding a new potato solution to the extent that we have more than 30 seconds, which is clearly too long. But are certain things in that we are quite good at. And at the same time, when you talk about social media, it's dear to me and said, we have all these algorithms, adaptive intelligence that help us moderate the content and that that helps us scale up operations. Mm-Hmm. You know, one person would be able to moderate, I don't know, 10 comments per hour and not a content pick 10000. And at the same time, we see it rapidly spiralling out of control. Right? And can you talk a little bit about why these kind of mistakes are now still holding us back? Mm-Hmm. But how this will be different in the future?

**Shubham** [00:08:02] Absolutely. I think this is a great question because this body, this nature of being critical of these technologies and and just being this distancing yourself from it is what's holding us back from accepting it much faster, which is fairly OK because

that's exactly what we've done all throughout history. But this is the logical evolution of the technology that we are building. So when we get in an algorithm to a social media software, it's very primitive in the early years and now it's gotten very, very comprehensive. Yes, we have recognised certain areas which need to be better ethically, morally or in terms of turnaround time. And that's something that as developers, as people who work in this industry, we know that we can fix it. And that kind of feedback loop that we get from the society is something that's going to be really helpful to me. And I think being critical of new innovation is something that we've and I speak about this better than when we when the first words were written in Mesopotamia, the previous mankind. I mean, and B, it's just that those when when the first literature was written on a piece of rock, humans were scared because they thought that they're going to lose memory. But that's no justification to not have written language. And that's exactly what I feel is I feel that even if it has its issues, even if autonomous vehicle is not the most, safest form of transportation today, if social media has its downsides, we will still make it safer and take it ahead. But it has to become an integral part of our lives because it has its own merits.

Andreas [00:09:48] Yeah, yeah. This is clearly developing at a rapid speed that is more and more increasing, and it always it already has profound impacts. And yet right now, if I had a kid, I didn't want to hang out on a platform that is formed and moderated by and I. I didn't want her to have to get in a car that is controlled by an A.. But I and I also would like the idea of her being read to at night by Alexa, which is, by the way, I think people say to her kid, Go to bed and Alexa can read to you for 20 minutes. Hmm. And and I do believe that all these things are quite possible. And what I want for you to talk about is, can you can you help us understand like in broader terms, where AI is right now? Like what the current status in our achievements are and also what kind of issues are? And maybe talk a little bit about what the next stepping stones for us are to take to get to a point at one point where I'm like, the AI is going to take care of my cat and I forget about it.

**Shubham** [00:10:57] Right? It's a fair concern. But so A.I. is is much closer than we think it is. It's not. I mean, I've stopped talking about the AI as a standalone piece of technology anymore. It's something that's getting involved in absolutely everything, including your transcribing software, including the photos that we click on. IPhones do absolutely everything. And I and I just feel that it's just become a very good form of computing. So to answer where we stand today with the AI, it's an integral form of computing for absolutely everything. What's going to be the next stages of A.I.? I think we're looking at very, very personalised form of Al going forward in healthcare. Very what would happen is currently digital prints is going to be formed using it. So digital twin seems to be something very shopfloor. It used to be replicated on the on on a software digitally and used to simulate scenarios on the software to understand what's going to be the future scenarios. Now there is going to be within the next three to four years digital human twins. But your biochemical body is going to be replicated onto a software and you can. You can. Simulate certain health care or accidental scenarios to understand how your body will react to it. and I think that's what we're moving towards, is more personalised, super hyper personalised scenarios with the eye and that's not far away. Maybe three to five years. And yeah, it's going to be it's going to be an amalgamation of a lot of technologies within the next 10 years, including the digital, the Metaverse, the A.I., the blockchain, the iottie, all of that to come together very, very thick and strong. And it's going to be very different in the next 10 years.

**Andreas** [00:12:51] And you mentioned a really concrete difference for America abroad. Globally, a person, I tend to agree. I hate to say it that if that was the case, I would indeed feel much better about my copying software event all the way. I interpret my friends online.

And if I was, if I was known that the specific to me, and it also at least gives me the feeling that I have creative control over it, even though they're probably not the case. And but what I wonder about is the one thing that we at the moment criticise of AI is that given the nature of machine learning, it needs to see the data, to find the patterns, to be able to apply it to specific situations and to achieve this degree of personalisation. We would need to get away from a causal loop, but I have to see it once and then and then be able to do it. Can you explain how this could work?

Shubham [00:13:50] Yeah, no. So I think this this nature of the algorithms of machine learning is both a pro and a con. The the the advantage is that that we already have algorithms like GPT three. We already have enough data. I mean, you'd be shocked to know that what you consider data that is more data than that. I mean, we produce more information than we think that we do. And I believe that what humans, what humans would capture is far less than what a machine like animal or any AI system would. So there is more data for the system to consume than we can think of. But the other bit to it is because we know that they need this primary form of data to process and then learn. That's exactly why I feel that we also have safety mechanisms within these algorithms to protect it from something going wrong. So when the Facebook algorithm started chatting between itself, we could pull the plug. That's because we knew that if we stopped giving the data, we're pulling the plug. So I think it has its own advantages and disadvantages in how it functions. There is enough data, but we also know how to create a safety plug in the system.

Andreas [00:15:05] Will it remain the facts? Well, the fact remains that the basis for any Al to work is the access to so much of data that at the same time leads to this power struggle of whoever gets to collect and process this data is the one will be able to apply. I mean, we already see it now. And a very, very small scale of advertisment and all the people, you know, move away from third party data, first party better. And we already see like that. The struggle really is who gets that? Obviously, once we talk with stuff like health care, it's got much more interesting, right? So if that's going to be the battle ground on which there's going to be fun

**Shubham** [00:15:54] for the next couple of years? Yes, and I think it's twofold. One is the global leader, which is more generic and the other is the personalised AI, the globally AI. Yes, it is data intensive, and I don't think you and I can do much about it because by simply being in the world and being active on the internet, we are shelling out enough information for it to work. But the personalised data, which is super hyper personalised, which is I know about what coffee you have in the morning, what pancake you're like candy or what what's your health care pattern like? What's your lifestyle like? All of those things will become will become a battle because your financial data, your health care data, your lifestyle data, your wellness data, all of those things are mental. Wellness is all I hope. Along with the regulation that's moving with the GDPR, HIPA guidelines will become very, very protected and will remain with only the agencies that you allow it to be used for.

Andreas [00:16:52] OK, let me get into this. On the one hand, you talked about speed and I'm from Europe, and I could say that I'm proud that we have the most progressive consumer data protection regulation in place. At the same time, we literally didn't manage to get COVID apps going for like a year because they refused to save our email addresses. I'm sorry this is like a public health crisis, right? And that's what holding us back. But the question I want to ask us, so I kind of see three three solutions here. So the question seems to be, who's got this large amounts of data on us, on everything? And it's a top of my mind. I kind of see three scenarios and I would I we'd like you to tell me what's

the most likely one? One is somehow technology finds a way that a large amount of the data kind of stays with me, and I get to decide what's happening like in a wallet of some sort. The second is that there are some sort of central commercial entities that control other data begat Apple, Google or other companies. And the third one is that there's actually some sort of decentral blockchain enabled, whatever, where you know where data is more or less evenly spread and everybody has access to it. Maybe it's depersonalised maybe than a, as you know. But the big question is, is that, you know, am I in control? First be is there are few gatekeepers that are incredibly powerful and are absolutely unable to control by anybody, including governments or thirds? Is it possible to have some sort of open sea data, black pool and vulnerable atheroma access? But is there like a decentralised equal access way to that data?

**Shubham** [00:18:31] So what kind of answer you're looking for? I looking for an answer that you desire of the answer. That's the reality.

**Andreas** [00:18:39] I personally would like the first bit about a presume those people are looking for

**Shubham** [00:18:43] what's going on. Yeah. So I think while we all hope that we are in control of our data, which is the first scenario that you're saying or third, which is the decentralised, anonymized data, I think the most likely outcome would be the second scenario, which is we will end up choosing and giving permissions to one or maybe multiple corporations to use that data, in particular formats. And that's the reason why I say that is because that trend has already been set. We can see that motion already where between the Google and the Apple fight, Apple has been able to security do better than Google. And people are comfortable with that, but they're also using that data very, very effectively in ways that we have become used to it. I mean, the photos app is something that you can just simply tap on someone's face and you can show all the photos of your friend and stuff like that. So what I'm saying is it's going to be concentrated with corporations. And the reason for that is convenience. Even if even if they open it up for us to use it personally, it's going to be. Maybe I'm OK with that. Maybe you're OK with it, but there's a whole section in the society which would find it bothersome. So and they won't be able to utilise it in the best fashion, and they will end up not enjoying the benefits of Al positive systems.

Andreas [00:20:04] And then we would have to see whether or not that everybody excluded exactly what's happening right now. People in Germany had access to stores if they kept sort of cold parts of their phone left and got a phone, they can go inside and we can, you know, nobody talked about violence and health care, and all that clearly gets more complicated. Right? It's a very interesting and dark point. I don't want to stay on this on this critical and scary notion of it. So let's kind of zoom out a little bit and vision and vision of how our society model our economy could look like once it's been applied, you know, in a good, responsible way in an otherwise good future. Can you talk a little bit about because I know you think about this? Like what? And I can actually enable us to do in the future a lot.

**Shubham** [00:20:57] I think the most fundamental concept that the AI and I dislike speaking as a standalone and the other emerging technologies together will do is lead to more connectedness between humans. We have always wanted that historically and we will always want that in the future. Every piece of tool that we've built in the past towards every piece of technology that we're building today is to connect us more may be a telegram in the past, a telephone in the past, a fax machine, internet, social media or

metaverse. All that we're trying to do with everything being there is. We're trying to be connected more. So what will be the beauty of all of this technology, including a I and the other emerging tech, is that we will not be this dispersed as humanity. We will come much closer. We will be more connected. We will be more involved and distance physical distance would be a thing of the past.

**Andreas** [00:22:05] Talking about physical things, I have so many questions of and not going to get into now, but then probably also means that a lot of the tasks, the mundane tasks we are doing are not going to be part anymore. That probably means that the the way the level of communication and building connexions is going to increase rapidly. It probably means that stuff is made of us, that the time zones and distances have got a meltdown. Where do you think? And I hope that the answer to this, where do you think big changes are going to be visible next year in which areas of our life? Do you think we first are going to realise, oh, here are the impacts of a

**Shubham** [00:22:54] I think health is one big event. We have already seen a lot of a movement in social media and media, which has been the biggest adopters of high health. Tech is next in fintech has already taken it up, but

Andreas [00:23:09] that's the kind of health tech because I do agree. I think that that clears an area as much for us to do, and I personally believe that the way the pandemic forced us to digital our stuff will help us tremendously in adapting the next step behind us. And there clearly is many things to do from virtual visits to the doctor to data sharing, to a diagnosis, to a drug development to a better supply chain. A lot of stuff happens and clearly we benefit from the personalisation of drug treatments and stuff like this. Um? Many of the people listening to our podcast are looking at an MBA at a transformational moment in their lives, maybe want to make a career turn. And clearly this is a very important growing area. That's your problem. How can I get into this?

**Shubham** [00:24:02] Well, there are a lot of ways, and I think it depends on what the ultimate outcome is. But the and specifically for business oriented people, people who were doing the MBA or or business oriented courses. It's I think it's very important to have this flavour of technology in the language that you speak and the thought that you have because as leaders, as when you make business decisions, it's important to know that it's not an isolated, stand alone thing that you do. It has to be coupled in with technology. So what one can do is that make sure that one's reading enough books or articles or courses, even Coursera or nano degrees. Nano degrees are really good for somebody who wants to get deep into a deep into even understanding the coding and algorithms behind it. But if you just want to get a flavour of how to integrate technology into business, what I have observed is talking to people really helps, you know, just in your own field in the industry that you are reach out to somebody who's just technically there. I mean, while making business decisions and even one hour of conversation with them over coffee can actually give you perspective on why and how that technology is making impact in that industry, which may not happen purely from an article or a book. So, yeah, yeah,

**Andreas** [00:25:32] that's the perfect answer for me, really, because I feel like it's at these kind of connexions to bring my experiences to life. And can you maybe as a closing argument, kind of just briefly mention how the Oxford MBA fits into your own journey here?

**Shubham** [00:25:52] Well, I think as I mentioned, the people, it so the way the reason why I am here at Oxford is because not only does it let me meet brilliant friends and the MBA, we've had some really diverse experiences which I can learn from. I can also network with

BHP scientists and researchers in the extended Oxford environment, which is I've met people from the Google society, the Oxford Air Society, meeting neuroscientists in my college farmers and all of those things. I mean that interaction being at a pub, talking to a PhD in musicology, which I would have never done at a different school. So my intention is of being in the Oxford MBA is to, you know, expand my horizons, learn more about different fields. Because the technology that I build, I want it to be useful for a larger section of the society. And that can only happen when I have the perspective what's happening in the different fields? And an Oxford MBA fits perfectly in that.

**Andreas** [00:26:56] No. Thank you so much for taking the time today, I suppose. Thanks for coming down and chatting with me and thank you guys for listening to that. And again, for the next episode of the Future of Business podcast, I'm Andreas Finzel. And take care.