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AI and the Metaverse for Retailers: Chances, Limitations, and Managerial Recommendations in 2024

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Artificial Intelligence and Metaverse: The Next Frontier in Retailing



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Al and the Metaverse for Retailers – Chances, Limitations, and Managerial Recommendations in 2024

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Schwerpunkt Interview

Al and the Metaverse for Retailers

Chances, Limitations, and Managerial Recommendations in 2024

Diego Borgo is a Web3 and Metaverse advisor, guiding Fortune 500 companies into the Metaverse and NFT space, including Adidas ("Into the Metaverse"), Shell, and Skoda. In the interview, he shines light on the recent significant metaverse and AI developments. He emphasizes that while the metaverse is still in its early stages, it represents the next evolution of digital connectivity, adding a 3D layer to our interactions. Meanwhile, AI has already had its breakthrough moment, with its understanding and adoption growing exponentially. Borgo's insights highlight the rapid pace of change in these fields and the need for clear understanding and ethical considerations as the technologies continue to evolve.

The interview is conducted by Michael Hoang, Research Associate, Institute of Retail Management Gottlieb Duttweiler Chair University of St. Gallen In 2023, we have seen a lot of ups and downs in the field of metaverse and artificial intelligence. Could you summarise the current state of these technologies? Where are we now?

Currently, the biggest news regarding the metaverse has been Apple's release of its Vision Pro in the US on February 2nd. They are pushing spatial computing with their own glasses. In terms of names, there is obviously the metaverse, there is immersive experience, there is immersive web. I think that this industry movement already shows where we still are. This sea of confusion that no-body seems to agree on a term, and nobody seems to want to simplify what this actually is. So, I think we are early-stage when it comes to the metaverse. There is still a lot of confusion and misunderstanding regarding what it actually is. For me, in a very simple manner, the metaverse is nothing else than just another evolution of how we connect digitally as humans. We are basically adding a 3D layer on how we interact digitally with each other. We came from chat rooms to video and audio, now we're going from video and audio to 3D and virtual worlds. This development doesn't seem to be well understood or well explained by major tech companies because each of these companies wants to grab what the next title or what the next concept is. That's the current state. I think, Apple is coming in and changing the game. Many are hoping for the release to be the new iPhone moment, a disruptive moment where the masses are going to understand what's going to happen next from a device perspective. Q1/2024 is going to be really exciting. The rest of 2024 is going to dictate a lot on how our industry will develop.

With AI, I think we are past that iPhone moment. Crazy enough, as AI isn't as old as the metaverse, obviously talking from a mainstream perspective. We've been talking about, experiencing, and experimenting within the metaverse for a bit longer than with AI. But the adoption, awareness, and understanding of AI has been growing exponentially faster than those of the metaverse. So, from that

Diego Borgo

Web3 and Metaverse

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sense, we have a much more developed awareness from a public perspective to the point that now we start more fundamental questions. We start questioning what the ethics behind the current fast developments we are facing are? What is the danger behind major corporations literally going to a gold rush battling to see who is going to be the first to do the most disruptive things? Who is going to be the first one to achieve AGI? And things in that direction fundamentally have a major positive or negative impact, depending on how you look into that, on everyone's life. That's how crazy this current technological disruption is. So I think that we are in a very

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distinct side of things. I think that AI definitely

poses a bigger disruption in any sense of work, life,

branding, relationship, positively and negatively.

We're going to see major plays throughout this

year that will show us how far AI is going to be

developed. It's exciting and concerning at the same

time. My main concern is that the incentives for

the companies operating in the field are not nec-

essarily aligned with what's best for everyone in

the society. We are looking to a more competitive

rather than a collaborative behaviour. Competi-

tion obviously is going to push people to commit

mistakes that, with this technology, we should

probably not be committing. It's frightening and

exciting at the same time. So, I think we're talking about two very different things when it comes to the current state. But at the end of the day, from a marketing, an e-commerce, and a web perspective, I think it's undeniable that together, the metaverse and AI will shape how we connect and interact

The underlying technologies of the Metaverse and AI are so-called general-purpose technologies, indicating that various industries and functions can profit from them. What are the specific opportunities retailers face with the Metaverse and AI?

with each other digitally.



With both technologies, the core and number one question is how you can provide a more enhanced experience to your customers in-store. One of the main reasons why retail has lost a lot of traffic or momentum to the web is that an online shop provides an easier, more immersive, more detailed, and more exciting shopping experience from home. So, the first opportunity lies behind answering the question, how can we counterbalance the web experience by using those technologies to give an experience that you can just get in-store, for example. Then number two, it's customer service. It's undeniable that the amount of information available while shopping digitally is much higher than that while shopping in the physical shop. Obviously, there are salespersons in-store, but a lot of times, they are not trained well enough to compete with a quick Google search. So, I think that the combination of going more immersive on the product while being physically present through the metaverse, augmented reality, and mixed reality, plus the benefits that AI can bring from a content and generative perspective is great. And then I think the third opportunity is combining the two worlds. It's about building a bridge that brings the digital closer to the physical experience, creating that so-called omni-channel experience that we've been working on really hard throughout many, many years within marketing and retail. Through more usage of information and better experiences, we can now close that bridge between customers and brands.

What are the risks and dangers for retailers engaging with such technologies?

I think that the core element here is going to be privacy. Being a major concern, privacy has been the biggest danger when it comes to e-commerce, social media, and different other things. Obviously, with all Web 3.0 conversations on decentralisation and blockchain, we see that the topic of privacy has been picked up more and more and is developing further. So how do you, one, ensure you can offer that personalised experience that we talked about before, but two, still keep privacy at the forefront of that development? We have already seen ChatGPT causing a lot of trouble from a B2B perspective when employees of companies were inputting very sensitive information into large language models. So how can we avoid certain risks when it comes to customer information privacy and breaking any laws that have been developed, for example GDPR in Europe?

In recent years, many companies have launched innovative metaverse and AI projects. Some were more, others were less successful. What user experience are customers asking for? What customer pain points could have been solved so far, leveraging those technologies?

I think many of the metaverse experience we've built so far have focused on a very specific and niche audience. So if you look into, for example, "The Sandbox", "Decentraland" or "Spatial", many of them have focused uniquely and specifically on the Web 3.0 native user. So people that are engaging with the blockchain, cryptocurrency, crypto wallets and so on. So that has obviously set the

"With both technologies, the core and number one question is how you can provide a more enhanced experience to your customers in-store."

range of people you can reach to a very small niche compared to the mainstream audience. And I think that this has been a challenge. On the flip side, obviously, the opportunity arises when you start looking at immersive web and experiences where you're leveraging similar technologies, but you are not necessarily isolating the access to that experience through a crypto wallet or an NFT. To give an example, I advise a company called "Journey" and what they do is they build experiences for major brands such as Macy's. Within Macy's experience, you get into a New York-like city digitally on your browser, you navigate through that space and you can almost feel the fabric of the clothing that they are putting on display. With this, you enhance the storytelling of your brand. Also, in the immersive experience, customers can directly add products to the basket, check out, and ship them to their home. So, instead of offering a traditional product description page of an e-commerce platform, you're zooming in and immersing yourself into a world within which you can navigate and look around at the actual product exactly like you would do in the physical life. So, here is where I think the opportunity is: Taking away barriers to accessing products and adding more hyper-quality layers



IDEATION

of realism to get people to understand how the product actually works.

And then, from an AI perspective, I think that it is extremely early to anticipate what the role of brands and retailers will be around all the recent developments. What I have already seen is, for example, from Chevrolet, using a chatbot powered by ChatGPT's API to improve customer experience on their website. However, a lot of people ended up using the chatbot in a harmful way. Customers identified how to interact with the chatbot to receive value for free and bypass a necessary premium membership of Chevrolet. So, early stages of adoption in innovation sometimes cause funny things like that to happen from a customer behaviour perspective because providers haven't really put guardrails around what that tool should be doing. They just open up and let people do anything. That's not necessarily a big negative thing, but it's just funny to see what customers are going to do. So, I wouldn't necessarily call this a failure. It's just one thing that has happened. But I think that one thing that I haven't seen yet be leveraged at scale is co-creation with customers. So imagine you create a "The Sandbox"-like environment, which is guardrailed, and you can invite your customers to prompt certain things, such as how this next product should look like or how the potential branding of the future could look like. Through that, you start giving customers that feeling of co-creation with the brand. From there, you can obviously find ways to measure engagement as well as incentivise and re-award things in that direction. I find that exciting. The technology is suitable for co-creation, and there is an interesting way on bringing customers closer to the brand that I haven't seen happen too much so far.

The economy is currently struggling through plenty of macroeconomic developments and uncertainties, for instance, high inflation rates, different wars on the planet, etc. Focusing on profitability becomes even more important for retailers today. Could you please elaborate on whether retailers should still invest in and work on such innovative projects, including the metaverse AI and so on? Or should they perhaps postpone further investments?

Yeah, I think that is a very important question as it's crucial for survival. A lot of times, innovation for



THE NEXT EVOLUTION OF THE WEB

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the sake of innovation becomes definitely a big issue because as soon as budgets are short and you cannot justify the innovation project, there is now a motive why that project should be stopped. However, what we often forget is that we are not just doing business for the now but also for the future. So, I think, for a balance, you need to ask: how can you decrease the fluff and really focus on the KPIs and any innovation aspects that can drive business? Also, how do you learn from your projects to then scale up moving forward? For instance, Macy's and also Adidas, for which I worked in the past, approached immersive experiences that way. The bounce rate on an e-commerce platform is often two to three seconds. Customers come in from social or a Google search, land on a product landing page or a product description page, have a look around, and bounce

back. That's usually the customer journey. And all that the company is trying to do is to increase that period of time that a customer is spending on their page. So, if you look at that example from Macy's, the average time the customer has spent within that immersive experience is 15 minutes. People have been spending 15 minutes within a branded experience, which has also ended up with a higher conversion rate. Further, Macy's runs A/B tests. We launched Macy's campaign with and without an immersive experience. The immersive experience has converted better, and people have also spent much more time with the brand within the brand experience than without it. So, this is an example of what you can achieve with this technology: increase conversion and engagement on the way as well as learn and be on top of your toes to make sure that whenever you start having more room to play with your innovation budget, you can extrapolate on your past learnings.

What are the first steps interested retailers should pursue to approach the metaverse and AI?

I think, the first step is a lot of what we've been saying before, especially when it comes to immersive experiences and the Metaverse. Find a way to integrate that new channel or experience within an already existing journey. So, if you say you have a new campaign that you're going to launch or you have a new product, you're going to push out, you will have a journey already preselected. You're going to do CRM, social, and obviously retail. But how do you add an immersive experience to that journey? How do you add a deeper level of experience for your customer to learn and engage with your product and get a better understanding of the story, the material, etc. to then increase conversion rates. And most importantly as a deep dive, how do you connect the physical shops with the digital store? How do you connect both experiences, and how do you bring them closer together? I think that one thing that we've been exploring quite excitedly around is the loyalty element. How do we measure what has been done digitally? How do we measure what has been done physically? How do we connect the two, and how do we reward people for engaging with both channels? So, I think that's a really good space to start from because that's exactly where we are heading. We are heading to a world where physical and digital are getting increasingly closer to each other to a point that today we don't say I'm going to surf the web as we did in the mid-90s or 2000s. Everything is pretty much seamless and it's getting more and more like that. From an AI perspective, I think that one of the key elements that everybody is looking at everywhere is process streamlining and also increasing efficiencies. So how can AI do the job that is nitty-gritty or wastes a lot of time and resources? How can we streamline that, and how can we use the resources that are unlocked after completing the process optimisation and leverage those resources into other parts of the business? I think a lot of the early stage we are within AI implementation is going to come down to process

"Find a way to integrate that new channel or experience within an already existing journey."



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optimisations and similar things at the end of the day, especially in the macroeconomic setting you mentioned before, following becomes the key: Decreasing costs, decreasing time wasted, etc., so you can leverage the remaining energy and resources to do other value generating activities.

What are the biggest mistakes retailers make when approaching the metaverse and AI? How can they prevent and mitigate them? Yeah, I think that the biggest mistake is overcomplicating or just surfing the hype. So the metaverse was super hot one and a half, two years ago and everybody was just doing something because they wanted to do something. AI is super hot right now, so everybody is just doing something for the sake of doing something. So instead of zooming out and understanding that what's happening currently is several different upcoming technologies are getting together, shaping the way we will behave, connect, and purchase. How do you want to position your brand within that new change? A lot of managers are just more concerned about the headlines, more concerned about the hype. This tends to be a big mistake. We've seen that before with the internet, with e-commerce, with social. We've seen that with the metaverse, NFTs and are now seeing that with AI as well. A lot of times strategies are driven by either PR and marketing or an agency trying to win a prize. It's just missing the huge opportunity by being distracted with shiny things. How do companies prevent that result? Three words. Long-term thinking. So, how do you zoom out and take a long-term perspective? What are the long-term effects?

The advent of generative AI has already demonstrated impressive developments, for instance, in text and image generation with ChatGPT and MidJourney, respectively. How can AI advance the metaverse to the next phase?

I mean, both go hand-in-hand, right? It's crazy for me to think that a lot of people are still putting one against the other or claim "AI killed blockchain", "AI killed the metaverse", etc. These are all belonging to a different set of technologies that are coming together to shape the future of how we experience the web. If you look at the technologies from that angle and you want to look back to video games, for example, how did non-playable characters (NPC) influence how you play the game? Those are early-stage "AI-bots" that improve your experience based on how they evolved. How will you, as a human, interact with NPC, bots, or agents digitally? Also, agents interacting with other agents, which is going to happen, is going to become huge. The second thing is the scalability of content creation. There are already a lot of examples in which you can literally prompt an entire new digital world with a line of words. You could write a prompt "A red store with a Christmas



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motto to push a new product that we're launching." And boom, the whole world is created with just one prompt line. Then, obviously, what you need to do is fine-tune the details and how the overall experience is going to look. AI is going to scale the production of digital worlds and digital experiences to a dimension we've never seen before. It's going to be the core element accelerating how the metaverse, visual experiences, and visual worlds will develop. As soon as everybody's ready to jump into those spaces, all we will need is content, right? AI is going to play a huge role in creating that content at scale.

What is still missing so that AI, and especially the metaverse, might be adopted by the mass market?

Time and use cases are missing. We are going through this transformational moment. If you remember the first iPhone, the OG of the iPhones, what did you have when you bought it the first time? You had a couple of apps you could play with, and the phone was extremely expensive. Nobody else had it. So, how do you connect with others? Why would you have a phone that would cost that amount of money? As the ecosystem evolved, more applications were available, and more people were owning that phone, there were more motives for you to be within the ecosystem. It became impossible for you not to own one. This includes obviously not just iPhones but smartphones in general. So I think Apple has kicked off the overall ecosystem on February 2nd, especially with the "dev space", in which developers are now getting access to the gadget to actually create applications. This will kick off an enormous amount of use cases that people will be looking at and thinking "Oh, that makes sense. I never thought about that. My neighbour is using it. I would love to give it a try." We're starting to see an increasing amount of things going in that direction. It's hard for me to say one and the other, but I think AI moves in the same direction. I think AI is more advanced in terms of valuable use cases. We are in a space where we should be rather slowing down the development and the adoption of AI instead of accelerating these. Because the genie is out of the bottle, and the pace of development has been insane. So that's what a lot of people are scared of, especially the ones that really understand what's happening because the pace of development is just too fast.

What developments are you expecting around the metaverse and AI in 2024? What are you most excited about?

I think it's undeniable to say that Apple's Vision Pro causes the biggest excitement. We know what happens when Apple establishes a new category. They established smartphones, tablets, and smartwatches, each as a mass market category. Before Apple's market entry, smartwatches existed, but not everybody was wearing one and now everybody does, right? So, whenever they choose a new category to push forward, they put themselves almost like the creators of that category, right? And that's going to happen right now with augmented reality,

"Al is going to scale the production of digital worlds and digital experiences to a dimension we've never seen before."

mixed reality, and virtual reality, as they're coming hot on that space. Observing the competitors' response will also be exciting because now Meta needs to up their game. Many other companies, including many mobile, entertainment, and car companies are going to jump on that movement, trying to win or at least participate in the race of what many anticipate to become the next smartphone, its next evolution. So, it's undeniable to say that this is the most exciting thing of the year. I think the release is going to dictate and give the course of everything else that's going to come after that. It's going to be a huge shift. Regarding AI, it is about getting a better understanding of how regulatory organisations are coming together to decide on the standards and guidelines for the developments that continue to happen. We definitely need those. It will also be interesting to see whether governments need to step in. Such an involvement is often the case but is extremely messy and slow or arises if any really crazy correction needs to happen. So everybody's going to look around and say "Hey listen, we need to get together and talk." I feel like this year will be a decisive one for regulation because if AI develops as fast as it is right now, we would otherwise not be able to control where it is heading in the future.

Thank you very much, Diego.