

Moving Past the Hype: Why the Success of the Metaverse Will Hinge On its Ability to Build Trust

What will the Metaverse be like? This is the question that has accompanied an unprecedented level of coverage of tech companies promising and investing in a brand-new experience of internet, ostensibly coming soon. The answer is rather mercurial with different theories and technological developments influencing its evolution. That said, most scholars, journalists and tech companies seem to agree that it will be a conglomeration of persistent virtual worlds which incorporates both 2D and 3D graphical elements, immersive stimuli, and “avatars” which act as “embodied” virtual representations of human users. With advancements in communication and VR technology in the past decade and promises for a richer, more connected online experience, there is a growing “hype” surrounding its potential advent (Lee, 2021, p. 72).

But the concept of the Metaverse has been around for decades—the term first coined by Neal Stephenson in his 1992 novel *Snow Crash* (Dionisio et al., 2013, p. 7)—and there have been multiple attempts over the years to bring it about. The evolution of the Metaverse, as outlined by Dionisio, Burns III and Gilbert in their article *3D Virtual Worlds and the Metaverse: Current Status and Future Possibilities* (2013), has gone through five phases of development already. The first phase began before the concept of the Metaverse was even conceived in the late 1970s with text-based virtual worlds like MUDs (multi-user dungeons) and MUSHs (multi-user shared hallucinations) (p. 2). Second was in the mid-80s with an early two-dimensional virtual video game, *Habitat*, which was ostensibly the first to use a graphical interface and first to use the word “avatar” to “describe its virtual residents or inhabitants” (p. 3). Phase three in the

mid-90s entailed an increase in computing power and graphics and a shift “away from a gaming model toward an emphasis on providing an alternative setting or culture to express the full range and complexity of human behavior” (p. 3). Fourth was a “dramatic expansion in the user base of commercial virtual worlds (such as *Second Life*)” in the early 2000s (p. 3). Finally, the fifth phase (which began in 2007) is characterized by “open-source, decentralized contributions to the development of 3D virtual worlds” (p. 3).

Building on that work, it is safe to say the Metaverse is likely onto its sixth stage of development at least, now that large tech companies like Facebook, Epic Games and others are throwing their respective hats into the Metaverse development ring. As one can guess from this history, many versions of the Metaverse have been attempted and yet all have either failed or faded into obscurity, consigned to the chasm: “a stagnant phenomenon of diffusion between early adopters and the early majority of the technology adoption life cycle” (Lee, 2021, p. 73). And yet, unlike with past attempts, the current hype around the Metaverse, signified by a reported increase in internet search traffic on Metaverse topics, higher frequency of coverage in the news and major announcements by information and communication companies (Lee, 2021), seems to signal the Metaverse’s best chance to be realized in years.

However, is this really the moment where realization begins or is the hype just massive speculation? I would argue that it is and can be a bit of both, but there are also concrete reasons that the Metaverse can and should move past the hype. Much scholarship has been conducted on the various capabilities, technologies, and contexts in which the Metaverse would be justified, including but not limited to a more seamless transition between education in virtual worlds and the real world, the implications of gender on avatar embodiment, and the effect graphical quality has on immersion and expression (Choi & Kim, 2017) (Rivu et al., 2021) (Morie, 2010). For this

paper, I will look at scholarship on three potential uses of the Metaverse: collaboration, creating unique experiences, and retail. This will help build an understanding of what the Metaverse might offer as well as identify current lines of thought in metaverse research.

Collaboration

Since the third phase of development, the Metaverse has often been promoted as a gamechanger to how people will work and play together online. One focus of this collaborative use is the Metaverse's effect on teamwork. In *Avatars, People, and Virtual Worlds: Foundations for Research in Metaverses* (2009), Davis, Murphy, Owens, Khazanchi and Zigurs propose research guidelines, terminology and a model for research based on a perceived "research gap...in our understanding of how metaverses are different from traditional virtual collaboration and what theories are relevant for enhancing understanding of behavior, management, and technology phenomena in this environment" (p. 91). Metaverses, they argue, have the potential to deepen knowledge and teamwork capabilities in both virtual and real-life settings. To show this, Davis et al. propose a socio-technical model which "recognizes explicitly the role of human actors and the multiple potential paths that they can take through interaction with each other and with technology" (p. 92). The model is broken up into five components: "the metaverse itself, people/avatars, metaverse technology capabilities, [and] behaviors and outcomes" (p. 92).

The first component, the Metaverse itself, gives further recognition to its increasing prominence as a "common platform for social, education and business activities" (p. 93). People/avatars are the combination of the actual people who interact with each other in virtual worlds and their appearances and behaviors which represent them in the form of avatars. More than that, Davis et al. stress that avatars affect one's "sense of presence" in the Metaverse, citing previous research on mediated experiences and virtual reality (p. 94), and that understanding

how avatars interact with virtual worlds is important in cultivating the user's "level of engagement" (p. 95). Metaverse technology capabilities refer to "a set of capabilities for communication, rendering, interaction and team process" and "provide potential features – both current and yet to be discovered – that can be developed for specific functionalities" (p. 95). Rather than pointing to fixed elements in current technologies, Davis et al. choose to focus on potential capabilities as this approach allows for "a more flexible view that has potential to incorporate new features as technology evolves" (p. 95). That said, any capability should fall under four certain areas: communication (e.g., feedback, language variety, channel expansion), rendering ("executing life-like images on the screen and...supported by the capabilities of personalization and vividness"), interaction ("interactivity, mobility and immediacy of artifacts") and team process ("process structure, information processing, and appropriation support) (p. 96-99). The fourth component is a behavior, which is "manifested through the interaction and communication of avatars" (p. 99). As part of their teamwork focus, Davis et al. look at how behavior is related to coordination, trust, role clarity and shared understanding, as they have "the greatest likelihood to be impacted by technology as well as...impact outcomes" (p. 101). The final component itself, outcomes, specifically refers to "member support, perceived quality, self-image, cultural synchronicity, deception, intent to immerse and reconnect anxiety" (p. 104). Each of these outcomes are also means to evaluate the effectiveness of the collaboration in virtual worlds and they are not mutually exclusive, meaning there is potential for overlap.

Davis et al. further discuss propositions "that highlight key effects" of their socio-technical model (p. 105) as well as examine potential challenges and opportunities related to metaverse design, participation, research design, measurement and virtual world use and adoption. They conclude by proposing that their socio-technical model supports not just research

on virtual teams, but also on metaverse technologies in general. They also emphasize that though virtual teams will inevitably face new and evolving challenges, the Metaverse can help them adapt, in that “a sensory-rich environment, combined with the capability to manipulate avatar appearance and gestures, has potential to enhance team-building and cohesiveness” (p. 111).

Creating Unique Experiences

Another function the Metaverse might use to move past the hype is the potential to create and advertise new experiences not found anywhere else. In her work *Spatial poetics, place, non-place and storyworlds: Intimate spaces for metaverse avatars* (2019), Ayiter examines the experience of permanence versus ephemerality in virtual worlds, questioning whether “there are nevertheless three-dimensionally embodied virtual spaces that go beyond being transitional ‘non-places’ to locations in which an imaginative relationship in architecture...exist[s]” (p. 155). In other words, she aims to understand whether virtual space can evoke a connection between a user and a virtual environment the same or in a more amplified way that a physical structure does with someone in the real world. To do so she analyzes art ecologies and private user spaces in *Second Life* using the frameworks of “Gaston Bachelard’s poetic spaces of daydreaming, Marc Augé’s conceptions of ‘place’ and ‘non-place’ and David Herman’s approach of the storyworld as a narrative domain that combines space and temporality” (p. 157).

Bachelard’s concept of poetic space posits that “there was a dynamic interplay between an active mind and its surroundings to which domesticity was particularly conducive” and that “most meaningful relationships with buildings take place within domestic spaces” (pg. 158). A domicile, as well, “is made out of memories and experiences, its different parts arouse different sensations while; at the same time, it brings up a unified intimate experience of living” (pg. 159). That said, the “outside” holds intimacy as well and the two ““are always ready to be reversed””

(p. 160). Ayiter contrasts this idea to Augé's "non-place," which "are places of circulation, consumption and communication that exist outside of history, relations and identity" (p. 161). Non-places are grand, like the outside, but "an anonymous solitude, a lack of intimacy, also brought forth by the very scale of the architecture itself offers us, their transitory occupants, the illusion of being part of some grand global scheme as the citizens of a utopian, super-modern city world" (p. 161). In this, Ayiter finds the analogy to *Second Life* and the question: "Do we actually live in metaverses such as Second Life, or do we just traverse these worlds" (p. 162). While the initial reaction is to lean toward non-place, Ayiter asserts rather that metaverses are made up of "storyworlds." Referencing Herman, Ayiter describes storyworlds as "'the surrounding context or environment' that embeds 'existents their attributes, and the actions and events in which they are involved'" and "'mentally and emotionally projected environments in which interpreters are called upon to live out complex blends of cognitive and imaginative responses'" (p. 164).

Taking all these concepts of space together, along with the dimension of time, Ayiter transposes them onto *Second Life*. Private user spaces exist as true places thanks to their level of detail and the layers of meaning that can only be peeled back by spending significant time there. Public, open art spaces too "are integrated poetic spaces that are large enough, and detailed enough, to only be experienced over periods of time" (p. 165). On the point of whether the Metaverse is ephemeral or persistent, Ayiter claims that *Second Life* is much past its prime and yet remains active regardless of the lower level of participation. Smaller numbers of users are making prolifically more things and spending prolifically more time in their virtual spaces. With a renewed interest in the Metaverse making headlines these days, perhaps Ayiter's closing questions for metaverse space can shed light on the natural course of metaverse persistence, or

perhaps instead they suggest the answers will lead to the end of the current phase of metaverse space and design and harken the beginning of the next:

“Is the metaverse a panacea that allows us to create our own whereabouts wherein we do in fact have agency over what we surround ourselves with? Is this why a small but telling number of individuals have persisted? And if so, will there be others who join them as super-modernity continues ‘to create neither singular identity nor relations; only solitude?’” (p. 166).

Retail

Being a technology built under the system of capitalism, retail promises to be a major point of appeal for the realization of the Metaverse. *Metaverse-retail service quality: A future framework for retail service quality in the 3D internet* (2013) by Gadalla, Keeling and Abosag details a series of studies concerned with retail in virtual worlds, which “involves selling virtual goods and services to final consumers for personal non-business use” (p. 1494). Their goal is to not only “identify the determinants of Metaverse Retailing service quality (MR-SQ) as perceived by customers of the virtual stores in such environments,” but also “to provide a workable framework for all aspects of MR-SQ to benefit retailers and academics alike” (p. 1494). They contrast “Metaverse Retailing” to that of “menu-driven” 2D web page retail, pointing to the avatar as allowing for a more immersive social experience, Metaverse Retailing capable of selling not just digital products but physical products as well, and the greater importance of “graphics and layout clarity” (p. 1495).

The theoretical foundation for their studies is disconfirmation theory, which they justify by its ability “to indicate the size and direction of a person’s initial expectations in relation to the

experience received” (p. 1495). Indeed, given the relatively uncharted territory of Metaverse Retailing service quality, a framework which can analyze a consumer’s reaction to a whole new commercial experience seems useful for speculating on future behaviors and patterns for metaverse retailers. With the foundation set, Gadalla, Keeling and Abosag proceeded to collect data “using two qualitative research methods, focus groups and the critical incident technique, a form of within-method triangulation” (p. 1496). For both these methods, the researchers relied on *Second Life*, then still a largely frequented and supported virtual world and thus sufficiently reliable in gaining useful data, though not entirely generalizable.

In the first study, the researchers used focus groups and template analysis to identify the most important aspects of “good service” in Metaverse Retailing (p. 1499). The responses from the participants were grouped into four different dimensions: customer service, product dimension, store dimension and platform dimension. For Metaverse Retailing, some common themes that came with responses, compared to 2D web retailing, were more human contact, responsiveness, expressiveness, the ability to demo products, customization, better store reputation and layout, ease of navigation and the capability of direct search within the Metaverse store. For the second study, the researchers relied on critical incident technique, which is “the ‘content analysis of stories or ‘critical incidents’ as data’ when the purpose of the research is to increase knowledge of a phenomenon about which relatively little has been documented” (p. 1503). Here the use of “open-ended questions” allowed the participants to give fuller answers about the retail experience and whether that experience overall was positive or negative. Interestingly, they found that, “of the 70 critical incidents identified, 49 were classified as positive and 21 as negative” (p. 1504).

After collecting the results of the study, Gadalla, Keeling and Abosag determined that the “distinctive active-avatar, participatory-based approach provides a unique experience wherein users can co-create their service experience whilst fulfilling needs for self-expression, identity, and social interaction with others” (p. 1505). While this conclusion may be taken as a promising result for future online opportunities for retailers based both in and outside of virtual worlds, the potential risks of monetizing places and products of self-expression should not be ignored. As Gadalla, Keeling and Abosag admit in their conclusion, the Metaverse can present “opportunities for retailers in enhancing social experience, response service and creative co-production opportunities,” yet it also invites retailers to exploit “customer desires for novelty, consumption aspirations and managing identity” (p. 1510). Given the terms are not fully set in stone, metaverse consumers and retailers have a unique opportunity to create something more collaborative, honest, and creative than what is present in the current system.

Another Way

The current focus on what would appeal to people or what would be capable in the Metaverse based on what has been observed in previous virtual worlds has helped construct the current hype. But the question remains: is that hype sustainable? Perhaps these prospective capabilities and the companies and people who are creating them are enough to warrant continued attention. However, I wish to make my own addition to the discourse. While exciting, the way the Metaverse is currently conceptualized leaves out a key and fundamental aspect that it must develop should it ever hope to be realized and even further to move across the chasm beyond early adopters (Lee, 2021, p. 73). What the Metaverse requires is trust.

Having covered the tangible collaborative, experiential and retail capabilities of the Metaverse that others have proposed in past literature, my suggesting that trust must be

fundamental to the realization of the Metaverse might seem abstract in comparison. However, this assertion is nevertheless just as valid as other proposals, not because it answers the question of what a successful Metaverse might offer but rather *how* a successful Metaverse must operate. Trust is not a given but is essential and central to people's understanding of their "collective" social reality. This much I have gleaned and now repeat from J. David Lewis and Andrew Weigert's explorative essay, *Trust as a Social Reality* (1985), on the sociological implications of trust. As Sissela Bok, quoted in the essay, puts it, "...trust in some degree of veracity functions as a *foundation* of relations among human beings; when this trust shatters or wears away, institutions collapse" (p. 978). Furthermore, Lewis and Weigert assert that "the manifestation of trust on the cognitive level of experience is reached when social actors no longer need or want any further evidence or rational reasons for their confidence in objects of trust" (p. 970). This is all to say that even before the Metaverse arrives, and should it survive past the initial hype, prioritizing trust is imperative for its sustained existence.

I bring up trust based on my observations of how the internet, seen as the main precursor to the Metaverse, operates today, which is to say that it does not prioritize trust. Foremost among these observations is the capability, or rather desire, to embrace or discard anonymity at a whim. Different areas of the internet encourage or dissuade users from revealing aspects of their real-life selves, whether that be one's information-dense Facebook profile or a more non-descript or esoteric "gamertag" on Steam. Depending on the part of the internet one chooses to frequent, the amount one decides or is required to share about oneself varies. Another way of putting this is the ability to choose how "online" or "plugged-in" one wants to be, i.e., the level one chooses to engage with others on the internet. This reflects how humans interact with each other in real life; they employ anonymity in certain aspects of their lives when they feel they cannot trust other

parties with personal information. Their interactions with most strangers on the internet are often too brief for them to share all that much about themselves as well, thus long-term trust is not a priority.

In a network of interconnected, persistent virtual worlds, does this capability still hold? Is anonymity thus possible? As made apparent with past virtual worlds, even should people choose to be embodied by avatars wholly disparate from their real-life selves, there are still means by which they can be identified. Using Facebook's Metaverse "demo" as a reference, Mark Zuckerberg's friend, Boz, is embodied as a red, metallic robot, clearly not how he appears in real life, and yet Mark could easily distinguish that it was him based solely on his voice. (Fig. 1) Even if people could control how they look or sound in the Metaverse, how should they be expected to trust in and thus adopt this new mode of internet if the degree to which they share of themselves in this new interactive experience is not totally within their control? On the other hand, if technology that is supposed to be the future of connection and communication cannot bother discouraging obfuscation and dishonesty in response to a lack of control, why would people believe they can build meaningful relationships or choose to spend time there? Why would they want to be "embodied" long-term if their interactions with others might not be sincere or, worse, open them up for exploitation?

This leads me to another observation. One's experience on the internet these days is one of constantly being monitored, tracked, and surveilled upon. Social media and other websites gather massive amounts of personal information to be sold to the highest bidder and then used to craft targeted ads, recommendations, and news for the purpose of getting people to buy, watch and engage more. Perhaps this is regarded as simply inevitable now: how else would people have their personalized experiences, content, and products right at their fingertips, right when and how

they want them? This was certainly the idea when people first began supplying their information to websites, surveys, and forms on the internet. But this too has come at the expense of trust, and more notoriously privacy. Complete privacy on the internet is a thing of the past, but exploitation and misuse of user-tracking and surveillance, especially when it results in breaches of personal data, has worn thin the trust between internet users and the internet service providers, retailers, social media sites and other internet entities that watch them. So why would someone join the next “phase” of the internet if this new experience would still enable and even provide further tools for surveillance? For further exploitation? For a further invasion into people’s lives, thoughts, and personal spaces? (Fig. 2)



Figure 1: Facebook's Metaverse "demo"

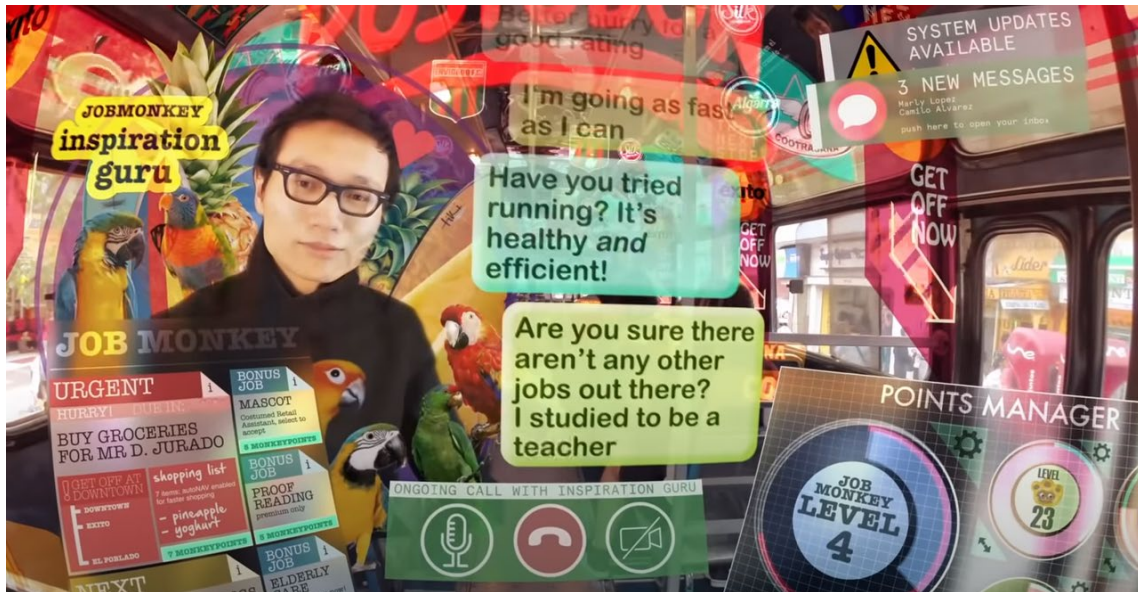


Figure 2: "Hyperreality" by Keiichi Matsuda

This is all to say that the potential embodied future of the internet should not preclude people's ability to build trust between one another. It also should respect that one's time should not entirely be devoted or spent away from real life events and matters. Thus, again, establishing that trust be at the core of any future Metaverse is imperative. Some might say it is too idealistic to ask for a guarantee that people can trust that their interactions between themselves, their friends and strangers will be authentic and sincere, trust that they will not be exploited by data trackers and other forms of surveillance, trust that their experiences will not be manipulated or befouled by those that end up creating the framework of the Metaverse. But I say that these ideas and intentions need to be at the heart of how the Metaverse is brought about and operated. Otherwise, it will be too easy to dismiss or collapse, and rightly so.

One avenue that this trust might be achieved would be to establish new expectations, new terms of engagement for the way interpersonal interactions will play out in the Metaverse. As I

have noted, the disconnect between one's expectations of what is seen and heard in the Metaverse and what they think they know and believe of others from outside of it can serve to inhibit one's ability to trust. Returning to the Facebook/Meta example, Mark's coworker Boz sounds like an adult human male, yet embodied in the Metaverse, he looks like a robot. Part of these new expectations might be to justify that, in fact, while in the Metaverse, people should regard others by how they present themselves, without any preconceived notions of how they may appear and sound like in real life. To use a real-life example of how this would work, park-goers at Disneyland and Disneyworld are meant to regard the various costumed characters roaming the parks as who they represent, not the actors that portray them. (Fig. 3) While the characters have escorts to help them move about the parks and dissuade mischief, park-goers are more or less not given any clear instruction on how to interact with these characters. And yet, through observation and knowledge of the culture of happiness and comfort that is espoused by the parks, they come to understand the terms of interaction with these characters.



Figure 3: Alice in Wonderland characters at a Disney theme park

I am not an expert on online paradigm-setting, but I can speculate that this could be similarly achieved in the Metaverse through espousing a culture of trust in an end-user agreement, encouraging metaverse users to interact with each other in a like manner and having moderators (like the Disney character-minders) embedded in the world as a precaution and to help facilitate interaction. This applies more for interactions between strangers or people who only know each other through their interactions in the Metaverse, as real-life friends, family and acquaintances already share a degree of trust formed outside the Metaverse. And this is not to say that metaverse users should be gullible or open to deception, but that for the Metaverse to succeed, it should operate on a standard of regarding people at face-value and that unexpected or irregular embodiment should not imply deception.

Of course, there will be obstacles to establishing this expectation. Context, for example, cannot be dismissed. If a white user is embodied as a Black avatar in the Metaverse, for example, is that a form of blackface? What if that avatar is modeled after a prominent and popular Black celebrity or historical figure? In this case, acknowledging that there is a history of exploiting Black bodies and the Black profile for mocking and dehumanizing ends is important and thus cultivating not only a culture of trust and respect, but also robust moderation, is necessary. A similar question applies for cis- and trans-women's bodies and their history of exploitation and oversexualization. "Gender-swapping" is already more prominent among male gamers in MMORPGs while "women frequently suffer from harassment in online video games" (Rivu et al., 2021, p. 237). This is all to say that, as much as it is necessary to encourage freedom of expression and freedom of embodiment in the Metaverse, it is just as necessary to establish within the same expectations that the Metaverse is not a bubble and will be influenced by history and societal norms. In fact, this dialogue and nuanced understanding is how trust is built.

Beyond building new expectations for interaction at an interpersonal level, trust will also be fundamental at an institutional level. This is especially important in discussions and decisions concerning whether the Metaverse will be successfully achieved through a consolidated or decentralized framework. To elaborate, a consolidated framework entails a single architect or a group of architects that build out the code, culture, interoperability, and other structural foundations between the virtual worlds of the Metaverse. If conversations in 2021 are any indication, these architects would be internet companies like Facebook, Epic, and others from Silicon Valley. A decentralized framework would be more crowdsourced, echoing how the current version of the internet came about with many individuals, organizations and groups working to build metaverse infrastructure instead.

On the one hand, a consolidated framework, as is apparent today with social media companies, is more likely susceptible to exploitation. When one or a few people are calling the shots, there is less of an option to move to something else should that experience sour or become exploitative. And as it stands, most Silicon Valley corporations engaged in metaverse development have expressed their wish to build the Metaverse by themselves, rather than relying on others with differing visions and goals. However, a consolidated framework would allow for a more seamless transition between virtual worlds and would likely make the establishing of universal terms of engagement simpler to implement and enforce.

On the other hand, a decentralized framework could also bring about trust. With crowdsourcing, the product can only come about when the contingent of people working to make it happen collaborate and thus trust in each other. If that collaborative culture is at its core, it is not unlikely that it would bleed into the wider interpersonal culture of the Metaverse. This is much the same the appeal as with cryptocurrency, also often tied to the realization of the

Metaverse, in that decentralized currency is supposedly less susceptible to exploitation and thus more secure than traditional, consolidated currencies. While there have been cases of grifting and vanishing trust in some cases, other stronger and established currencies like Bitcoin have over time attracted a base of passionate and persistent investors. This is to say nothing about its environmental effects, but that is a subject for another paper. Another potential con is that a decentralized framework could also mean a more fragmented experience, making the establishment of universal terms of engagement more difficult to encourage and enforce. It could also lead to the loss of appeal and potential failure of some aspects of the Metaverse, whether that be from low traffic, obscurity, or lack of interoperability. Whether that failure would result in total collapse or create a stronger network through restructuring is still theoretical conjecture but is nonetheless worth contemplation.

Despite the potential challenges, trust must be established for metaverse adoption to be fully realized and I can point to examples past and present which support this argument. In terms of trust between framework and users, *Second Life*, while diminished in popularity, maintains a dedicated community including several artists and decorators who have the confidence to share their work and know that it will be respected, thanks to how the culture and community have been built. While *Second Life* did not become the ultimate Metaverse, the “creative activity” and “involvement in the world’s economy” (Ayiter, 2019, p. 166) shown by its users indicate that when people feel supported and respected in a virtual world, there remains a level of sustainability, regardless of its failure to become widespread. In the battle royale game *Fortnite*, often pointed to as a Metaverse-type experience, players have the option to be embodied by a growing number of characters from across the media landscape, such as Batman, Lara Croft, John Wick, a Stormtrooper, and the list keeps growing. (Fig. 4) While being defeated by one of

these characters might be astounding by itself, there is no confusion that the character is merely the choice of how a player wishes to be embodied. Thus, there is already a case in which expectations establish that players are not promoting deception through different types of embodiments, but rather are just avatars made up of images, gestures and sounds that need not be trusted any more or less than normal.



Figure 4: Fortnite crossover skins

One example I find best exemplifies how a Metaverse built on trust can be successful is the popular MMORPG *Final Fantasy XIV*. For context, while not technically a Metaverse per se, the game shares many characteristics with other virtual worlds which have been regarded as frameworks for future realization; though meaning different things to different people, it is agreed that it is a virtual experience where people talk, play, shop, create and more while being embodied by virtual avatars. (Fig. 5)

While the graphics, story and gameplay are all interesting and appealing themselves, what many attribute as the game's defining success and key to sustainability is its culture of

respect and trust that has been established by the game's developers and further facilitated and reinforced by the players. This has been amplified by an influx of new players in 2021 coming from many other sources, the most notable being another MMORPG, *World of Warcraft*. *World of Warcraft* had been plagued by sexual harassment at the development level and created an exploitative virtual environment, contributing to a breaking point for distrust and dissatisfaction among the players. With the arrival of many former *WOW* players to *Final Fantasy XIV*, many videos and posts have been made commenting on the refreshing rapport and respect shared by the community. (Fig. 6) This parallels the problems with trust I have noted with the current internet and the potential that the future Metaverse can achieve.



Figure 5: Final Fantasy XIV Player avatars posing for an in-game convention



Figure 6: "WOW Players Experience FFXIV" by Captain Grim |link: <https://youtu.be/8cMkQRBknto>

What people can learn from *Final Fantasy XIV* in relation to the Metaverse is how its developers regard trust as intrinsic alongside the other mechanics at the core of the game. For example, the game relies on a subscription model—requiring a monthly fee to access and play the game—and yet the game’s director has sincerely expressed that the players should not feel pressured to maintain their subscription forever or when they tire of playing. In his own words, “it’s alright not to play it every day. Since it’s just a game, you can stop forcing yourself if it’s hard to keep that up” (Fig. 7, at 01:00). This insight can also apply to a realized Metaverse. A Metaverse built on trust, trust that one would not miss out or lose opportunities without persistent connection, should relieve pressure to connect, only encouraging people to engage when it feels right and appropriate to do so. The *Final Fantasy XIV* development team has also been open in how they communicate when their trust is put in jeopardy, such as when game congestion prevents players from logging in, when they push back the dates of previously announced updates, or even when they recall features that were poorly or improperly implemented. This in turn has been responded to by players who, rather than complain, often express their appreciation

for the development team's hard work and candor. This too could be applied to a Metaverse built on trust. A realized Metaverse will not be perfect from the outset, but open communication based on a mutual understanding that building and maintaining trust is fundamental will at least prevent it from crashing and burning from dissatisfaction and distrust alone.



Figure 7: "The BIGGEST Reason Gamers Prefer Final Fantasy XIV vs WoW" by Chad Thorsen | link: https://youtu.be/Edh90BG_WyM

Ultimately, I think whether trust will be regarded as core to the realization of the Metaverse will depend on the initial incentives and its early adopters. Financial incentives and tech enthusiasts seem the most likely answer; it will ostensibly be brought about in a capitalist system and tech enthusiasts and tech workers aspire to be on the bleeding edge of innovation. Then again, any other outcome could be just as likely given the nebulousness of predictions about what the Metaverse might offer. Further research might take a page from the path I have taken, noting what is missing, inadequate or lacking in the current online environment and exploring under what circumstances their manifestation in the Metaverse would attract newcomers. While there is already much research based on what already seems possible or liable to appear in the Metaverse, less is written about whether the desire for those functions will pan out. Before one

can say the Metaverse has arrived or succeeded, it is necessary to find out whether people want any part of it first.

The goal of this paper was to provide a window into ongoing discussions about metaverse development and function following a period of immense hype in the latter half of 2021. While the concept of the Metaverse has been around for decades and many have tried and failed to bring it about in one way or another over the years, there is a tangible momentum with big tech companies investing in Metaverse development and increased in-depth media coverage (Lee, 2021). Previous literature has focused on the potential functions or changes that would come from the adoption of a realized Metaverse. While I chose to focus on three aspects—social, retail and experiential—the Metaverse has myriad potential uses and functions that may or may not be incorporated once finally realized. And I should emphasize that the Metaverse will one day, in some form, inevitably be realized. Though one could say the hype might just be a product of major announcements in tech and media coverage, there is an underpinning desire for something better than what people have now. For me, the most obvious means for making that possible is centralizing trust, respect, and sincerity as fundamental to not only its framework but also its wider culture. Without trust and sincerity, the new methods of interaction posed by the Metaverse would be seen primarily as a risk and given how the current internet has a history of downplaying trust, that mindset is not unwarranted. Whatever the way forward, metaverse developers must grasp one fundamental thing: innovative and boundary-breaking ideas only go so far without the understanding of human need and desire to support them. Only when people feel their needs and desires are met will they feel confident enough to take the leap to find whether what rushes to meet them is a brave and sincere new world or the hard and unfulfilling feeling of disappointment.

Works Cited:

- Ayiter, E. (2019). Spatial poetics, place, non-place and storyworlds: Intimate spaces for metaverse avatars. *Technoetic Arts: A Journal of Speculative Research*, 17(1/2), 155–169. https://doi-org.proxy.library.georgetown.edu/10.1386/tear_00013_1
- Choi, H. & Kim, S. (2017). A content service deployment plan for metaverse museum exhibitions—Centering on the combination of beacons and HMDs. *International Journal of Information Management*, 37(1), 1519–1527. <https://doi.org/10.1016/j.ijinfomgt.2016.04.017>
- Davis, A., Murphy, J., Owens, D., Khazanchi, D., & Zigurs, I. (2009). Avatars, People, and Virtual Worlds: Foundations for Research in Metaverses. *Journal of the Association for Information Systems*, 10(2), 90–117.
- Dionisio, J., Burns III, W., & Gilbert, R. (2013). *3D Virtual worlds and the metaverse: Current status and future possibilities*. *ACM Computing Surveys*, 45(3), 1- 38. <https://doi.org/10.1145/2480741.2480751>
- Gadalla, E., Keeling, K., & Abosag, I. (2013). Metaverse-retail service quality: A future framework for retail service quality in the 3D internet. *Journal of Marketing Management*, 29(13–14), 1493–1517. <https://doi-org.proxy.library.georgetown.edu/10.1080/0267257X.2013.835742>
- Lee, J. (2021). *A Study on Metaverse Hype for Sustainable Growth*. *International Journal of Advance Smart Convergence*. 10:3. 72-80. <http://dx.doi.org/10.7236/IJASC.2021.10.3.72>
- Lewis, J.D. & Weigert, A. (1985). Trust as a Social Reality. *Social Forces*, 63(4), 967–985. <https://doi.org/10.1093/sf/63.4.967>
- Morie, J. (2010). A (virtual) world without limits: aesthetic expression in Second Life. *Journal of Gaming & Virtual Worlds*, 2(2), 157–177. https://doi.org/10.1386/jgvw.2.2.157_1
- Rivu, R., Zhou, Y., Welsch, R., Mäkelä, V., & Alt, F. (2021). When Friends Become Strangers: Understanding the Influence of Avatar Gender on Interpersonal Distance in Virtual Reality. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 12936, 234–250. https://doi.org/10.1007/978-3-030-85607-6_16