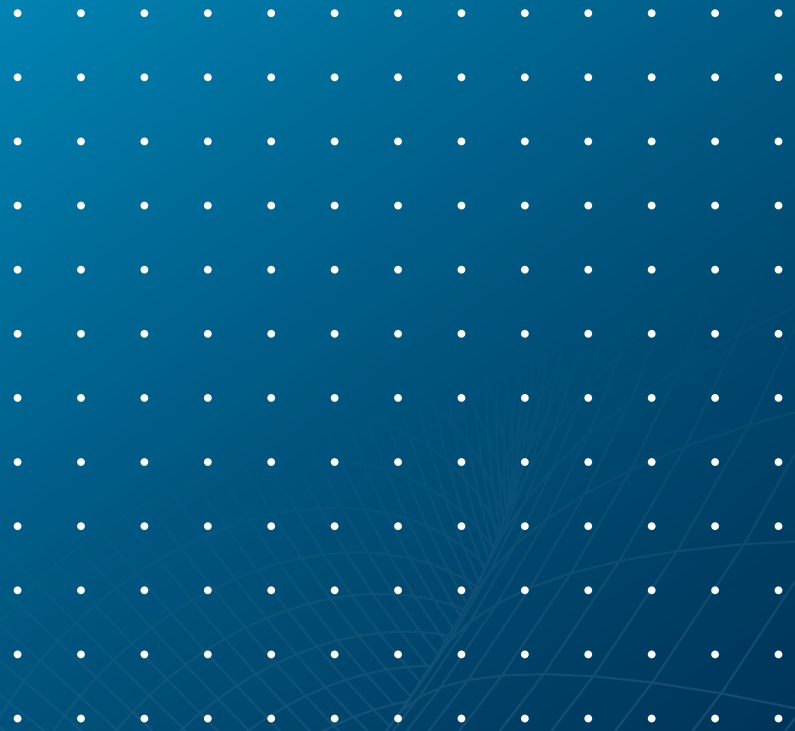


A QUESTION OF **VALUE**: ASSETS IN THE

METAVVERSE





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FOREWORD

By Daniel Ryan and Andrea Cardani

The metaverse—the three-dimensional digital representation of the physical world—may prove to be an integral part of the next generation of online connectivity. It presents astonishing commercial potential within web 3.0, the iteration of the World Wide Web in which networks are decentralised and users control their own data.

Meta, led by arguably the most high-profile metaverse enthusiast, Mark Zuckerberg, has estimated that the metaverse could contribute more than \$3 trillion to global GDP by 2031¹ and coined it “the successor to the mobile internet”. Some commentators go even further, placing this figure at \$5 trillion by 2030.²

From nonfungible tokens to generative artificial intelligence, web 3.0 has topped headlines in recent years, and the metaverse is just one of a series of developments with the potential to disrupt how we work and connect.

But with any new opportunity comes potential risk, and capitalising on the opportunities presented by the metaverse will not be easy. What is more, this valuable digital world has the potential to be as litigious, if not more, than the physical one. How is ownership of a digital asset decided? How is intellectual property (IP) protected in a borderless, dynamic, open-source landscape?

Litigation relating to activity and assets in the metaverse is accelerating already. More such proceedings, including commercial disputes, can be expected in the years ahead as the marketplace matures.

At the same time, regulation in this field is playing catchup, and legal firms, market regulators and courts globally are discussing how best to protect asset owners in the metaverse. Key challenges

include overseeing IP rights in the virtual world, the anonymity the metaverse affords participants in its marketplace and the difficulty of determining which courts would have jurisdiction in cases not bound by any one geography.

As global experts in damages and valuation, BRG professionals have explored the issue of asset value in the metaverse, including through drawing on the insights of leading legal experts currently focusing on the metaverse and dematerialised assets.

This first report offers a primer on the legal, economic and social implications of valuations in the metaverse. Further reports will take a closer look at the concept of asset valuation in the metaverse (particularly with regards to virtual real estate), market and public sentiment around these new concepts, and commercial and legal implications across the metaverse and web 3.0 more broadly.

We hope these insights will help advance industry understanding and expand the burgeoning debate around this wide-ranging topic.

We thank our contributors to date and look forward to continuing to engage with the industry as we uncover further challenges and opportunities pertaining to this area.

¹ Edward Bowles, “Economic Opportunities in the Metaverse: A Policy Approach”, Meta (December 2, 2022). <https://about.fb.com/news/2022/12/economic-opportunities-in-the-metaverse/>

² McKinsey & Company, *Value creation in the metaverse: The real business of the virtual world* (June 2022). https://www.mckinsey.com/~media/mckinsey/business_functions/marketing_and_sales/our_insights/value_creation_in_the_metaverse/Value-creation-in-the-metaverse.pdf

DEFINING THE METAVERSE

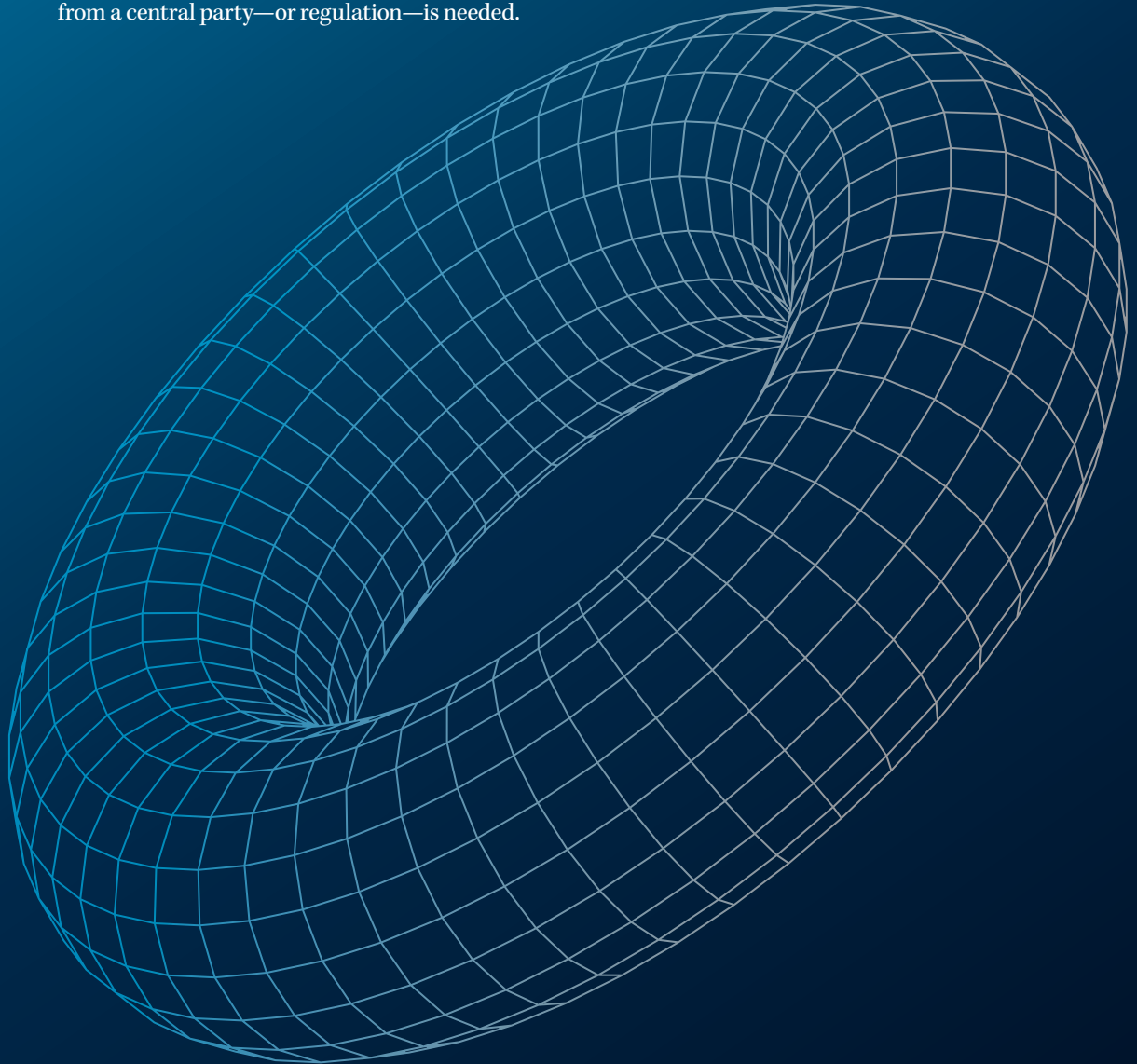
Law firm Reed Smith defines the metaverse as “a space where you can interact with virtual objects in real life and with real-time information”.³ For the purposes of this research, a holistic view and broader definition of the term metaverse is being adopted, taking into consideration digital assets more generally, regardless of the platform which may be operating a specific metaverse.

EXISTING LEGAL FRAMEWORKS

Legal considerations have always been of paramount importance when appraising asset value. The valuation of assets in the metaverse presents an interesting new challenge.

The inherent paradox of decentralised environments is that to unlock their value, effective oversight from a central party—or regulation—is needed.

Ongoing discussion exists regarding the existing legal frameworks which may be applicable to dematerialised assets. BRG professionals spoke with various experts on the topic to explore the current, existing legal frameworks which could be applied.



³ Reed Smith, *Guide to the Metaverse – 2nd Edition* (2022).
<https://www.reedsmith.com/en/perspectives/metaverse/2022/08/what-is-the-metaverse>

Defining jurisdiction

Determining the jurisdiction and, by extension, applicable laws that oversee a contract between parties is one of the most commonly raised challenges by legal professionals in relation to assets in the metaverse.

In the physical world, when no applicable tools are available, disputes typically are resolved based on international rules pertaining to the location of the transaction. Juliette Asso, counsel at Lalive, remarks that in the metaverse, however, with most transactions occurring online, locating parties can be challenging. If a transaction is executed on the blockchain, no central party has a holistic overview of the information.

Elizabeth Chan, a senior lawyer at Allen & Overy, states, “This becomes more complex when we factor in jurisdiction. Should disputes be raised in the jurisdiction in which you’re using the intellectual property [IP] or where the servers are based? IP law is very different across jurisdictions, and the remedies can vary”.

In such instances, courts can consider factors such as the registered seat of the company or the location of its servers. But there are significant limitations, as some users run their decentralised environments without a single central server that controls all the nodes of the blockchain underpinning a metaverse.

Disputes relating to assets in the metaverse are complex also because IP law and the potential response to litigation varies greatly across jurisdictions, with some judicial systems offering advantages over others—and in the case of novel dematerialised assets, many additional legal questions remain.

Asso suggests that having an international convention to harmonise the rules would be beneficial, while also recognising that such an agreement will not be easy to achieve: “There are bound to be situations with some jurisdictions taking a different view”, she says.

“Should disputes be raised in the jurisdiction in which you’re using the IP, or where the servers are based? IP law is very different across jurisdictions, and the remedies can vary”.

Elizabeth Chan, Senior Lawyer at Allen & Overy

“The IP, contract or regulatory issues arising in a metaverse are closely related to those that lawyers advising the video game sector have been dealing with previously. There is no vacuum”.

Sophie Goossens, Partner at Reed Smith

Applicability of existing copyright and trademark laws

Legal experts agree that, to some extent, the established legal frameworks governing the ownership of IP through copyright and trademarks apply to assets in the metaverse.

Sophie Goossens, a partner at Reed Smith, draws similarities between advising a video game company and a metaverse platform provider. “The IP, contract or regulatory issues arising in a metaverse are closely related to those that lawyers advising the video game sector have been dealing with previously. There is no vacuum”, she says.

According to John Groom, a partner at Baker McKenzie, the ownership of assets in the metaverse is often stipulated in “a relatively straightforward license agreement between the user and the service provider” which also impacts the valuation of assets, with the service provider setting the price of the assets it hosts. By extension, this means that the participants of a particular metaverse may not actually own the digital assets they think they own.

Groom also highlights that there have been instances of platform providers changing their license terms overnight, from a restrictive license to an open-source license. Increasingly, courts are seen to successfully leverage existing laws to penalise this type of aggressive anti-consumer behaviour.

Tom Ara, a partner and global co-chair of DLA Piper’s Media, Sport and Entertainment sector, says that users looking to engage in any metaverse activity should ensure they clearly understand the platform’s terms of use, what rights they have, what dispute resolution mechanisms exist and how they can assert protections if needed. These protections extend to other participants in the metaverse and the platform itself.

Ara says that by virtue of participating in a platform, users often may have signed on to a particular dispute resolution procedure that does not truly align with their desirable framework: “There is no universal metaverse law at the moment, there is no single ‘Metaverse Corp’, and each metaverse has a separate set of rules. The laws of the local jurisdiction that the participants are in will apply, notwithstanding. Such types of disputes have yet to be resolved”.

Experts agree that protecting real-world IP in the digital sphere can be challenging.

Disputes between platform operators and users can arise in relation to trademark infringements relating to the use of IP; namely, relating to IP which may originate in the physical world but is used in the digital world.

Groom notes that some metaverse participants have already spotted the opportunity to exploit someone else's IP in relation to nonfungible tokens (NFTs). As a novel development, NFTs in many cases were not considered at the time the original copyright protecting the asset was created. Courts have begun stepping in to clarify that exploiting this IP is not an acceptable behaviour.

An example is Hermès' landmark MetaBirkin case win against artist Mason Rothschild in February 2023. Rothschild began selling digital rendering of fur-covered Birkin bags as NFTs in November 2021. When Hermès issued a cease and desist the following month, the artist argued in an initial statement that "these images, and the NFTs that authenticate them, are not handbags; they carry nothing but meaning".⁴ A New York court disagreed. A federal jury trial concluded that Rothschild had violated the French luxury brand's trademark rights.

"A key aspect of trademark law is around the specification of the goods and services that are being registered, and entities can now register against the metaverse, but their goods and services description has to be specific enough to make it clear that they have been registered for such intended use", says Groom. "Courts have clarified that in the instances where IP rights have been engaged by an unrelated person minting NFTs, they will intervene to protect the rights holder".

Legal definition of dematerialised assets

Dan Perera, a partner at HFW, raises questions regarding what an asset purchase in the metaverse really means. Owning title in intangible property is not recognised as law in all jurisdictions, and the interpretation will also vary from one platform to another. "One needs to consider the overlay of platform terms versus national law. While a platform may suggest you get total 'ownership' of a particular property, under some national laws there can be no such thing because the jurisdiction does not recognise intangible assets as a specie of property. You have a potential dispute waiting to happen, and in many jurisdictions there are no obvious answers as of yet", says Perera.

Regulators globally have started to consider the suitability of existing legal frameworks for assets in the metaverse. They recognise that while the metaverse marketplace is still nascent in economic terms, the existing law is not properly equipped for the diverse developments that may occur in the virtual world. Groom highlights that the United Arab Emirates, and more specifically Dubai, is the only jurisdiction globally that has dedicated regulation in place overseeing digital assets.

Ben Allgrove, a partner and chief innovation officer at Baker McKenzie, suggests that there will be inconsistency over time in terms of how courts approach such cases. "What we are likely to see in the initial stages is lower-level courts potentially identifying dematerialised assets as property. Nevertheless, on appeal, higher courts in jurisdictions like the UK, US, Western Europe or Australia will likely highlight the need for legislative change".

Allgrove also points out further reasons that complicate assigning an established physical-asset label—such as property or bankruptcy—to dematerialised assets in the event of litigation. For example, in the case of a lost password, the dematerialised asset cannot be accessed. "At the hands of the exchange such assets have no value, and the password is personal to the individual, so a number of things would require legislative reform to achieve clarity", says Allgrove.

Goossens also raises concerns regarding digital-asset ownership qualifying as property, while simultaneously recognising that attributes exist which may lead courts to interpret it as such. "Data in its most basic form is information. Information, just like ideas, is free flowing and cannot be owned. NFTs do not change this but are a clever way of encapsulating something that is almost as valuable as ownership: contractual rights against a party".

⁴ Michael Bacina, Steven Pettigrove, Jake Huang, Lola Hickey and Luke Misthos, *Blockchain Bites: Kraken avoids crack down after SEC settlement, Developers' duties back on trial with Tulip action, Dubai releases virtual asset regulations, Hermes wins NFT infringement lawsuit*, Piper Alderman (February 2023). <https://www.lexology.com/library/detail.aspx?g=ee1ba17b-b184-4009-9c34-54c14143e36d>

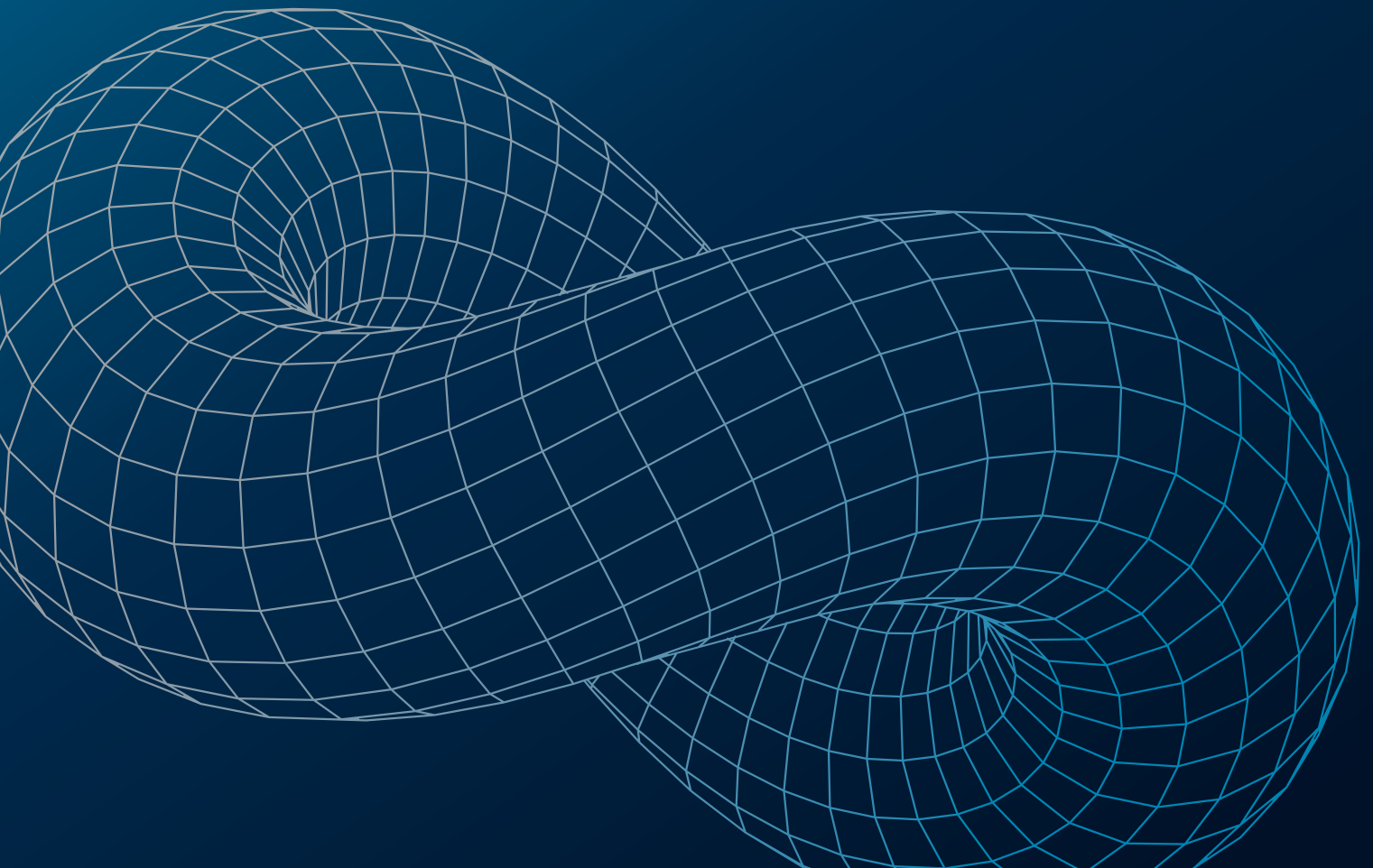
TRADITIONAL ECONOMIC MODELS AND ASSET VALUATION IN THE METAVERSE

The economic models for asset valuation in the metaverse have not yet been properly theorised, as the nature of the metaverse can make it challenging to apply traditional economic thinking. Further, the values at stake among users may also be disputable when not dealing wholly with monetary assets. That said, some key considerations should be captured when dealing with valuation of dematerialised assets.

Infinite potential supply of assets

The classic law of supply and demand in the physical world generally stipulates that prices will rise if demand exceeds supply. In traditional terms, scarcity and the exclusionary element is where IP creates value. In the metaverse, however, a platform operator could decide to alter and increase the supply, changing the underlying value of a product sold. Investors in dematerialised assets residing in the metaverse may expect that the service provider hosting the platform will maintain certain product characteristics, including scarcity, as the platform develops.

With respect to NFTs, Goossens says that this assumed level of trust corresponds to investing in assets in the physical world. “When collectors are acquiring limited-edition sneakers, they rarely receive any guarantee that the manufacturer of the sneakers will not release another series at a later date. There is a level of faith and trust required in the manufacturer to complete any investment-based purchase. One must be confident that the manufacturer is not falsely advertising the limited nature of the collection”.



“We have recently seen a highly volatile episode in terms of digital-asset value in the metaverse”.

John Groom, Partner at Baker McKenzie

Metaverse as a marketing tool

Groom points out that, following the 2021 NFT trading boom which bears attributes of a market bubble, we’re gradually seeing the metaverse market settle. “We have recently seen a highly volatile episode in terms of digital-asset value in the metaverse. Particularly in NFTs, significant sums of money were spent on digital artwork, with this value attributed by users, often through auctions. Today we are seeing significantly less interest in NFT artwork as investment play, with the market settling around unlocking the value of the metaverse for branding and marketing, primarily”.

Numerous initiatives are under way to identify and unlock features of existing physical products in virtual environments, directly and indirectly contributing to the value of both the physical assets and their digital twins in the metaverse.

Examples include car brands, such as Hyundai, enhancing the customer purchasing experience by allowing users to trial a vehicle in the metaverse. This strengthens the sense of proximity between the brand and its consumers.

Several food chains are experimenting with the metaverse to enhance customer experience by enabling users to personalise their order digitally, which can then be delivered in the physical world.

Luxury brands have been trialling increasing the accessibility of their products for customers, often in the hopes that after trying an item in a virtual environment consumers might be compelled to complete a purchase in the physical world.

While such initiatives have an impact on the value of assets—both dematerialised and physical—some industries and products are better suited to the metaverse. “Everyday fashion and consumables are directly linked to the real world, and opportunities for virtual experiences may be limited. There is less value to be found from a burger in the metaverse as opposed to a limited-edition pair of sneakers; it is a very different value proposition. We increasingly see brands tie the two together to generate additional experiences—such as brand-sponsored concerts in the metaverse. Giving users access to exclusive areas is another part of the value conversation”, highlights Groom.

Ara mentions that questions remain around how customers will react to metaverse experiences in the long term—whether they will drive purchasing decisions and, by extension, have significant impact on the value of assets. “Some dematerialised assets do not even exist in the real world, and there may potentially be users who own a digital limited-edition sneaker who do not own any products of that brand in the real world. At the same time, having a burger in the metaverse versus the physical world is a vastly different experience, and one that your avatar may want to participate in”.

Interoperability and achieving critical user mass

The estimates as to how many metaverses—or platforms in the metaverse—currently exist vary greatly, with some suggesting the number of the virtual worlds available and currently developing may be in the tens of thousands. As is typically the case in any fledgling industry, the vast majority are unlikely to survive as standalone platforms. These will either be acquired and incorporated by larger competitors or will discontinue activities, having failed to achieve critical mass and meet the operational costs involved.

Asso says that in the event a particular platform fails to generate momentum, the value of the assets hosted on that platform will be sustainable only if the user can protect its ownership rights and move its assets to other platforms. As such, the interoperability between metaverses and next steps in its development is a pressing question in the context of metaverse economics.

The value of the metaverse and its assets can be expected to increase with growing user participation. Asso points to cryptocurrencies as an example: “The pricing of cryptocurrencies has been driven by the exuberance of actors in this new type of investment, even though questions remain around the value of such assets in the long run, or indeed if there is any fundamental value at all”.

Ensuring interoperability and compatibility among platforms will be crucial for asset transfer from one platform to another. According to Asso, in addition to legal considerations, there will likely be technological challenges to achieving this. “Right now, each platform technically has its own technology, both in terms of hardware and software, and achieving interoperability will be key in order for the metaverse to become the new internet. We are in the very early stages”.

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Juliette Asso, Counsel at Lalive

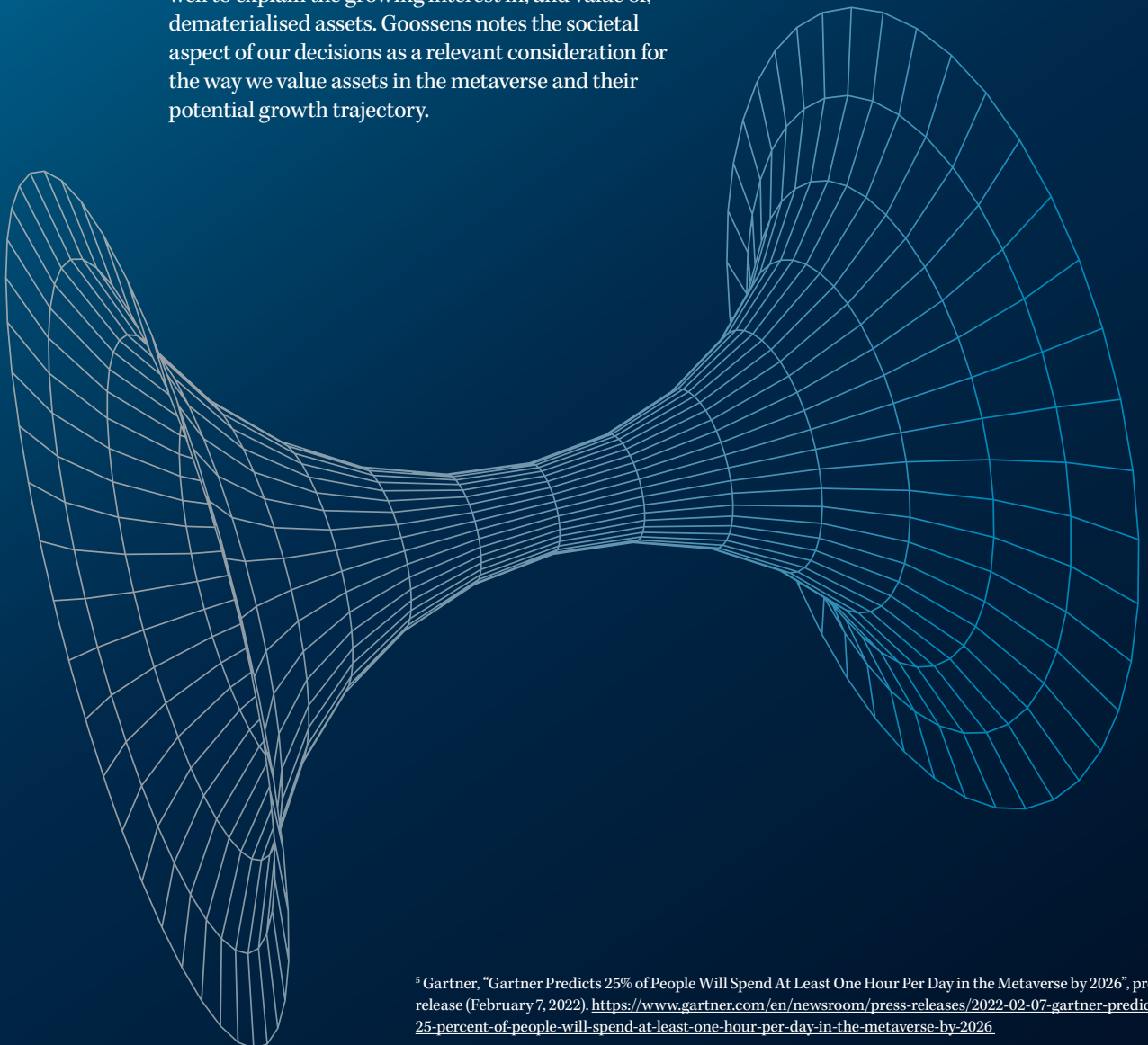
SOCIAL CONSIDERATIONS

While estimates of active metaverse users vary greatly, with some anticipating active users to be in the hundreds of millions, analysts predict that one in every four people will use the metaverse for at least an hour a day by 2026.⁵ Overall, this alternative virtual world looks very different today if compared to even a decade ago, when it was used primarily in the context of gaming or among a specific social group, described by some contributors as revolutionaries looking to operate outside of established norms.

Today, Asso says, some users of decentralised metaverses might be characterised as “anarchists” to a degree; those who do not see the value in adhering to established law or contractual requirements, with many believing that blockchain is an effective replacement to any central oversight. “However, if a user invests without a contract and the platform takes the decision to shut down, what avenues are users left with to protect their rights? Once there are sufficient losses, we may see people change their minds”, says Asso.

Some core behavioural economics principles serve well to explain the growing interest in, and value of, dematerialised assets. Goossens notes the societal aspect of our decisions as a relevant consideration for the way we value assets in the metaverse and their potential growth trajectory.

“The endowment effect is a phenomenon that has been studied in behavioural economics and psychology. The endowment effect occurs when we attribute greater value to things we own than to things we do not own. We overestimate their real-market value, and as a result we demand much more to give these things up than we would be willing to pay to acquire them. What is more, we do not even need to actually own the object. It just needs to feel like we do. This is called psychological ownership or quasi-ownership. It is enough to *feel* a sense of ownership and possession, which is exactly what an NFT delivers”.



⁵ Gartner, “Gartner Predicts 25% of People Will Spend At Least One Hour Per Day in the Metaverse by 2026”, press release (February 7, 2022). <https://www.gartner.com/en/newsroom/press-releases/2022-02-07-gartner-predicts-25-percent-of-people-will-spend-at-least-one-hour-per-day-in-the-metaverse-by-2026>

LOOKING AHEAD

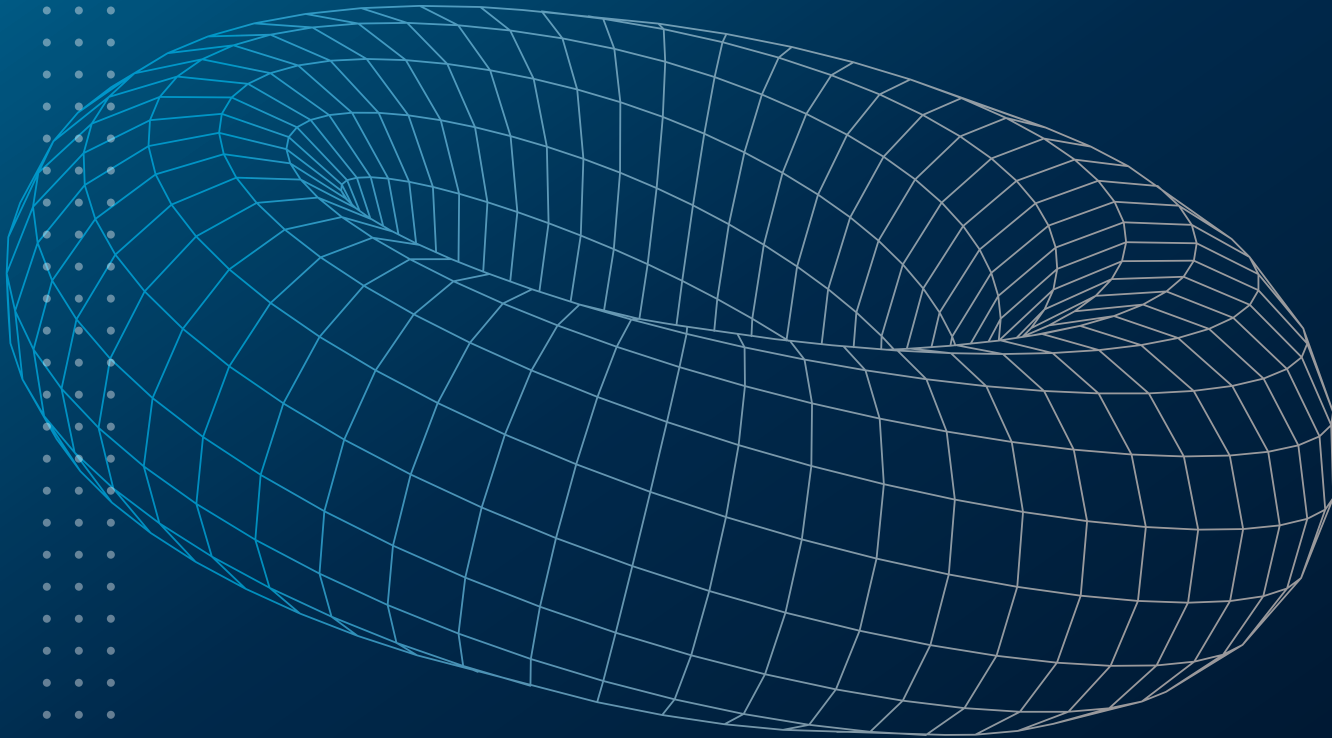
Experts agree that participation in the metaverse will only accelerate and the value of digital assets is going to become an increasingly important question.

Amid rising adoption rates, little question remains regarding the metaverse's capacity to create value for its users. Evidencing the value of such assets will continue to be challenging but not impossible, using established tools based in the physical world. That said, the ability to understand the dynamics of dematerialised assets will be of fundamental importance for those embarking upon asset valuation in the metaverse.

These questions of value can be explored from both an economic and a legal standpoint, with one such example being the alleged scarcity of goods. A metaverse platform could potentially alter and increase supply, thus changing the value of an asset. From an economic standpoint, this introduces considerations about the ease with which such models can be manipulated in the metaverse; from a legal view, the question of applying tools used in commercial litigation in the physical world and translating them into the metaverse is an interesting one.

As we consider what might be next for dematerialised assets, it is safe to anticipate significant consolidation of platform providers in the short to mid-term. According to Asso, the metaverse platform which will succeed in becoming the dominant player will be the one which can best address protecting user investments and IP assets. "The platforms which endeavour to have a broad appeal will need to adapt to have a lawful dispute-resolution mechanism to protect people and their assets".

Perera believes that, as user interactions with metaverse-based products and services grow, this space will see a vast number of disputes, arbitration and litigation in the next few years. "There will be arguments over just about every issue you can imagine, including infringement of IP rights and copyright, depending on the jurisdiction. We are only seeing the tip of the iceberg now, having gone through the first round of claims. These anticipated IP issues can be expected to have a sudden and very sizeable impact on the value of assets in the virtual world".



"There will be arguments over just about every issue you can imagine, including infringement of IP rights and copyright, depending on the jurisdiction".

“Current seven-year-olds interact with technology completely differently to the older generation. For the latter, anything that requires wearing bulky technology to facilitate access to alternative universes is going to be a harder sell”.

Ben Allgrove, Partner and Chief Innovation Officer at Baker McKenzie

With the regulatory frameworks overseeing dematerialised assets evolving rapidly, legal considerations will continue to be at the core of any continued conversation. As an example, Goossens highlights the recent update to the Safe Harbour regulation in Europe, which directly impacts metaverse platform operators, stipulating higher regulatory scrutiny and much wider due diligence obligations for technology providers. “It will be interesting to see how the web 3.0 ecosystem is going to adapt to the Digital Services Act that has recently been adopted in Europe and similar texts that are to be adopted in other jurisdictions in the near term”, says Goossens.

According to Groom, the valuation of metaverse assets is currently simple when compared to a potential setup in the future, whereby environments will become even more decentralised, with gatekeepers permitting users to broaden their commercial relationships. “This will result in companies looking to set up metaverses having to confront questions around digital identity, digital ownership and how users will interact and trade”, says Groom.

Generational change is another key consideration. The younger generation will be much more comfortable with the requisite technology that enables access to the metaverse, which may impact participation. According to Allgrove, “Current seven-year-olds interact with technology completely differently to the older generation. For the latter, anything that requires wearing bulky technology to facilitate access to alternative universes is going to be a harder sell”.

Finally, looking at the evolution of the World Wide Web offers an important lesson. Early internet enthusiasts had long touted its potential, but decades passed before the general population accepted it as a valuable tool. Now it is virtually impossible to imagine the world without the internet, and the technology providers currently dominating the web space have been present from the beginning.

It is not possible to say which metaverse will emerge as dominant, and there may be a long way to go until we see a wholesale adoption of the metaverse. The development of the internet would seem to suggest that you have to be in it to win it. Early adopters of the metaverse may see great success, but only with appropriate regulatory frameworks, high adoption rates and robust valuation methodology. The future remains to be seen.



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