Insurance in Metaverse: A Universe of Possibilities

Metaverse is Broad Enough

Metaverse is a broad enough vision to accommodate all the ideas, imaginations, dreams, and aspirations people and organizations have about what it should end up looking like. Most certainly when the Wright brothers dreamt about flying their vision didn't include jet airplanes, rockets that can go to outer space, or drones for commercial, military, recreational, and other uses Yet the world of flight that we know today came to be - a product of many, many different ideas, dreams, and imaginations.

The Metaverse will continue to be shaped and formed, and will continue to evolve. The vision of having, and being in a virtual world - a parallel reality if you will, is too exciting and compelling to dismiss. Even with the limitations of today's most advanced technologies, people and organizations were able to still create a working version of Metaverse and enable people to experience it.

The Internet is teeming with new articles, blogs, online discussions and debates on whether or not Metaverse is dead. It's akin to debating whether the world of flight is dead simply because of the early setbacks and failures experienced by those before the Wright brothers.

Note well that the underlying technologies, which include what is now being hyped as Web 3.0, will continue to be advanced and evolved. They will lead to the creation of more advanced technologies that will deliver a higher level of experience in Metaverse, as well as make transitioning back and forth between the physical and virtual world more seamless.

What Exists in Metaverse Today?

Figure 1 provides examples of the 'assets' that exist in Metaverse today. These assets are best categorized as *Virtual Assets, Personal Virtual Assets, Digital Assets, and Digital Business Property or Commercially-owned Digital Assets* because of the nature of who owns them as well as how they are utilized.

One can quickly grasp that these assets were created for many different reasons, and are utilized for a myriad of purposes. And who's to say which asset is more important than another? The house and barn created by an 8 year old in Minecraft is as valuable to him as the first virtual reality Gucci purse is to Gucci, and the first Metaverse bank lounge to be created is to JP Morgan Chase Bank.

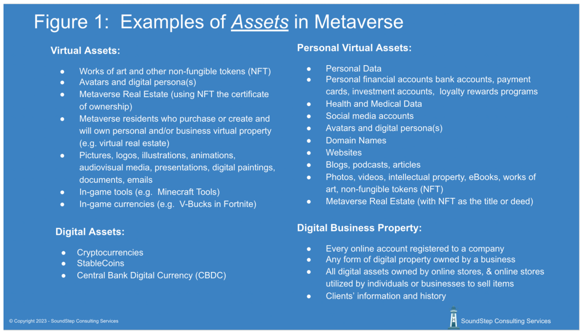

Figure 1: Examples of *Assets* in Metaverse

Risks in Metaverse

Where there are things of value there are risks. This is true in Metaverse as well. In Figure 2, the risks associated with each type of Metaverse asset are provided. There has been more than enough news on fraud and theft activities relating to cryptocurrency companies, cybercrimes, ransomware, and theft of virtual works of art to prove that unfortunately these risks do exist in both the physical and virtual worlds.

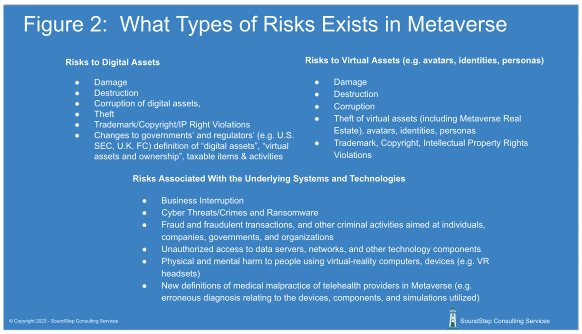

Figure 2: What Types of Risks Exists in Metaverse

Insurance is Needed in Metaverse

Where there are risks of financial loss, insurance is needed. And where insurance is needed, insurance companies serve as the provider of products and services that focus on *prevention and protection.*

Any digital asset and any virtual asset can be destroyed, damaged, stolen, held as ransom, copied or altered without permission, made inaccessible, lost, corrupted accidentally, and be subjected to all other intentional or unintentional acts that lead to loss of value and financial loss. This is similar to assets in the physical world. The types of losses and liabilities in Metaverse will be similar to those faced in the physical world by individuals, and faced by companies, organizations, and governments. Any online activity, personal, social, business, etc., is exposed to loss of value and financial loss.

Insurance is Already in Metaverse

Insurance has and always will serve as a *Critical Enabler.* Most of the advances that nations, societies, business, organizations, and individuals have made were backed (i.e. guaranteed or underwritten) by insurance companies. It's fascinating that during the peak of the Metaverse hype, every time a company or a celebrity or an affluent individual created something, or held an event in Metaverse news reporters announced its "presence or arrival in Metaverse." Contrary to common belief among management consultants and industry analysts that Insurance had not yet entered the virtual world, Insurance was already in Metaverse. Practically all the technology companies and businesses involved in the creation of Metaverse, and in the creation of the virtual businesses, buildings, stadiums, and auditoriums had and still have business insurance. Therefore, even before the first virtual insurance *structure* was created in Metaverse insurance was already fulfilling its role as a *critical enabler for innovation, growth, and exploration*.

Valuation of Metaverse Assets

Given the digital and virtual assets provided in Figure 2, the challenge of all those involved with the Metaverse assets is determining their worth. One can certainly take a broad brush and simply state that the worth of most of these assets is derived from the context in which they are used. Another approach would be to define their worth based on their rarity, novelty, or uniqueness. Certainly, one can also dive right into traditional methods of asset valuation in the physical world, for example, market-based, or income-based, or asset-based, or network-based, or cost of production-based, and use one or more of them to estimate the value of each asset.

Not at all an easy task. What is the value of a well-known professional artist's first digital painting in the virtual world? Should it be valued according to the total number of online viewers that it generates per day? If so, how will an unknown 11 year old's first digital painting be valued if it generates more online viewers per day than the painting from the well-known artist?

If both paintings were sold, how can the buyers be assured that they're purchasing the originals and not illegal copies (fakes)? How can they prevent loss of value because fake copies are generating more viewers?

Valuing digital and virtual assets is a challenging task in Metaverse. Cryptocurrencies have proven that, and so have the Bored Ape, and the first Gucci bag NFTs. And if these assets are difficult to assign a financial value to begin with, how then can an insurer assign a replacement value? How will an insurer create a policy where the insured item could change in value several times during the day? Will the insurance buyer be willing to purchase a policy that also has premiums that change several times during the day?

What is an Insurable Item?

The elements that constitute an insurable risk according to the Casualty Actuarial Society are presented in Table 1. Certainly, the element or criterion termed 'Predictable' remains challenging in the world of digital and virtual assets. However, prevention and protection products and services are needed in the virtual world just as they are required in the physical world if commerce is to grow.

Table 1: Seven Elements of Insurable Risks[1]

Criterion	Criterion Type	Detail
Fortuitous	Actuarial	Timing and location of future events must be uncertain and accidental.
Measurable	Actuarial	Losses must be well-defined and verifiable upon occurrence.
Independent	Actuarial	There must be weak or no correlation within a portfolio of insureds.
Market- Bearable	Actuarial	Maximum possible losses in an accident year from the insured event must not be excessive for insurance markets to absorb.
Predictable	Actuarial	Ideally, costs must be estimable, which requires a sufficient number of insureds across a sufficiently large number of historical events to be used as sample data.
Fair	Economic	There should be no potential for adverse selection or moral hazard in the policy portfolio, and the contracts should not be unfairly discriminatory to individual insureds.
Affordable	Economic	The transfer price must be attractive to both the insurers and the insureds.

Note: 1 - Source:

SoundStep Consulting Services

What Activities are Going On in Metaverse?

What started as a place for gamers has turned into a virtual world with robust activities including:

- Buying land to create homes, virtual stores, and office buildings
- Visiting virtual shopping centers and showrooms and experiencing immersive commerce
- Selling and buying online clothing and accessories for their avatars
- Creating auditoriums, sports stadiums, and buildings to promote their business in the physical world and make their presence known in Metaverse
- Investing in virtual workplaces and homes for public and personal use and amusement
- Investing in collectibles, digital are, and many other non-fungible items
- Creating education and learning classrooms and providing immersive virtual training experiences
- Creating and utilizing avatars and personas to help with employee onboarding, customer service, sales,

and conducting visitor tours and virtual meet and greet sessions
- Watching concerts and performances
- Following sports and entertainment celebrities
- And many others
- And, of course, gaming continues to thrive

What Insurance Products Are Relevant in Metaverse

As Metaverse evolves and goes through several transformations the types of activities in Metaverse will also continue to evolve. Insurance will continue to play its role as provider of prevention and protection products and services, and as a critical enabler. And insurers will also evolve their business in Metaverse.

It's important to keep in mind that there are Insurance products and services in the physical world that will remain relevant in Metaverse. They will have to be adapted to Metaverse and the commercial, social, and individual activities that occur there. However, for the most part, the underlying prevention and protection approaches to creating products to safeguard against risks will remain the same.
The next three articles in this series on Insurance in Metaverse will each cover a specific line of insurance business:
- Property Insurance
- Liability Insurance
- Wealth Management

The intent in providing these next articles is to motivate insurance leaders and managers, business innovators, and technologists to think about growth and innovation in Metaverse.