

MARK VAN RIJMENAM

Step into the
METAVVERSE

How the Immersive Internet Will
Unlock a Trillion-Dollar Social Economy

FOREWORD BY JAMIE BURKE

WILEY

Praise for *Step into the Metaverse*

“Mark has created a comprehensive introduction covering the history, the current state and a look into the future of the metaverse. This book is a fantastic dive straight down the rabbit hole whilst wearing a jet pack, and you’ll come out the other side fully able to work out what it means for you, and your company or organisation.”

—**Paul Hamilton**, Ogilvy Managing Director Growth & Innovation and
Founder of metaverse design agency vTogether

“I’ve been obsessed with the Metaverse since I first read Snow Crash many years ago. I’ve written thousands of words on the Metaverse, work in the industry, built VR experiences, and write a weekly newsletter covering the topic... and yet I learned so much from Mark’s book. There were still whole aspects of the Metaverse I hadn’t considered. Even if you think you’re educated on the topic, pick up the book. You’ll come away from it filled with new things to research and explore, new connections you hadn’t made in your mind yet.”

—**Daniel Sisson**, Writer, consultant, and XR developer

“Van Rijmenam provides an extremely thorough explanation of the many facets of the metaverse. If you’re just starting to learn about the concept or you are already well-versed in some of its pieces but want to see the 10,000-foot gestalt, this book will be illuminating.”

—**Rabindra Ratan**, Associate Professor and researcher of metaverse technologies (i.e., avatars, online game4s, VR) since 2005

“A comprehensive and candid coverage of the opportunities and challenges posed by the metaverse and Web 3. A must read for entrepreneurs and business leaders.”

—**Avinash Kaushik**, Founder & CEO,
Waka Metaverse Suite

“*Step into the Metaverse* is a timely book as Web3 unfolds into a third dimension that promises new ways to interact, collaborate, and engage with other individuals, products, services, entertainment and more.”

—**Raghu Bala**, CEO, NetObjex

“[Mark van Rijmenam’s] illuminating book on the beginnings of the metaverse is a light in the darkness for the curious and the bold.”

—**Matthew Brewbaker**, CEO of VEU Inc./Enterverse

“Van Rijmenam takes us on a journey through the state of the art in the metaverse, exploring both the myriad opportunities presented by this evolution of cyberspace, as well as threats to its potential, including a lack of standardisation and regulation. This nuanced exploration of the fledgling industry is a must-read for anyone interested in the space, demonstrating The Digital Speaker’s deep knowledge as one of its first inhabitants.”

—**Sam Johnston**, investor and CEO at Acumino

“In *Step into the Metaverse*, Mark van Rijmenam takes a comprehensive view of the converging forces that will fuse and someday become a future paradigm for human growth, prosperity and existence. That is, unless we f* it up.”

—**John Gaeta**, Creator, Inventor, Executive

“A comprehensive tour of vital contemporary metaverse discussions!”

—**Neil Trevett**, President, The Khronos Group

“Van Rijmenam provides an extensive exploration of the metaverse. He surfaces timely questions of ethics and sovereignty. At this moment, while our next digital reality is still being constructed, this discussion is critical.”

—**Tiffany Xingyu Wang**, President & Co-Founder, Oasis Consortium

“Dr. Mark van Rijmenam does a masterful job sharing a promising vision of the nascent metaverse while also being pragmatic about the challenges and gaps in existing solutions.”

—**Alec Lazarescu**, Founder, VerseTech Metaverse

“The next chapter of human existence is being formed right now, and as you ‘step into the metaverse’ you’ll fully understand the power of the convergence of technology, consumer trends, brands and reinvention of personal self expression.”

—**Justin W. Hochberg**, CEO & Founder, Virtual Brand Group

Step into the Metaverse

*How the Immersive Internet Will
Unlock a Trillion-Dollar Social
Economy*

Mark van Rijmenam

WILEY

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Published by John Wiley & Sons, Inc., Hoboken, New Jersey.
Published simultaneously in Canada.

978-1-119-88757-7

978-1-119-88758-4 (ebk.)

978-1-119-88759-1 (ebk.)

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Library of Congress Control Number: 2022934259

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*To all creators and creatives
of the open metaverse*

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About the Author

Dr. Mark van Rijmenam is The Digital Speaker. He is a future tech strategist who thinks about how emerging technologies change organizations, society and the metaverse. Dr. Mark van Rijmenam is an international keynote speaker, 4x author and entrepreneur. He is the founder of Datafloq, and he hosts the *Between Two Bots* podcast with Dan Turchin, covering the cultural, technological, and ethical implications of artificial intelligence, technology and the metaverse. He holds a PhD in Management from the University of Technology Sydney. His research was on how organizations should deal with big data analytics, blockchain and AI.

The Digital Speaker is available for in-person keynotes as well as holographic presentations, and Van Rijmenam's avatar delivers talks in virtual reality. He is a recognized speaker by the Professional Speaker Association Australia, and he is a member of the Global Speakers Federation. He is the publisher of the 'f(x) = e^x' newsletter, read by thousands of executives, on the future of work and the organization of tomorrow. The Digital Speaker has spoken in 20 countries across the globe and collectively inspired over 100,000 managers, directors, and C-level executives.

Foreword

Science-fiction stories such as *Snow Crash* or *Ready Player One* have described the metaverse as a virtual world of unlimited potential for entertainment and value extraction. In the metaverse depicted in these books, a centralized entity controls the metaverse, including all data, digital assets, and the people entering it. This is a dystopian future that by no means is impossible to happen in the real world, given that we have already built a centralized, closed, proprietary, and extractive internet. The current Web is governed by shareholder supremacy instead of user centrality, and we all have become addicted to “free” access to these platforms.

The downside of all these “free” services has been the degradation of privacy and the lack of control over our own data and identity. That is why I started Outlier Ventures in 2014, because I felt the need for a different story. It is a story where end users can regain control over their digital lives, driven by the convergence of technologies such as blockchain, crypto, artificial intelligence, and mixed reality, among others. Over the years, we have invested in dozens of companies that are

building Web 3.0 technologies across all three key layers of Web 3.0 innovation: infrastructure, middleware, and applications.

Web 3.0 technology will enable a decentralized, permissionless, open digital economy centered around the user and identity and data portability. It will allow us to create a fairer, more inclusive internet. It is vital that we embrace this paradigm shift toward decentralization, especially now that we are at the dawn of the metaverse, or the next iteration of the internet.

If Web 2.0 and the social Web enabled data harvesting at a large scale, imagine what can happen in an immersive digital environment. The possibilities to collect and analyze our data will grow exponentially, enabling corporate or state surveillance at unprecedented levels. That is why we need an open metaverse, owned and controlled by users instead of a select group of tech elites.

When I first heard about *Step into the Metaverse*, I appreciated the vision of Mark van Rijmenam to write a blueprint for an open metaverse. The metaverse will unlock an entirely new economy, where the lines begin to blur between the physical and digital worlds, or our virtual lives and physical lives. Looking at the metaverse from an economic perspective raises important questions about how inclusive it is and who can participate in the digital economy and who cannot. Van Rijmenam does an excellent job discussing how we can ensure an open metaverse economy, where interoperability of digital assets, a self-sovereign identity, and cryptocurrencies play a vital role.

Web 3.0 technologies are vital for an open metaverse, and the companies we are supporting at Outlier Ventures are all contributing to this. In an open metaverse, everyone can finally contribute to and benefit from the first truly universal and permissionless economy humankind has ever known. In *Step into the Metaverse*, Mark van Rijmenam succinctly explains how we can build this immersive internet that can deliver magical digital experiences while incorporating a fully open economic system, enabling the interoperability of digital assets and changing our society from one of value extraction to one focused on value creation.

—Jamie Burke
Founder & CEO
Outlier Ventures

Preface

On October 28, 2021, the digital world stopped when Mark Zuckerberg announced that he was pivoting Facebook from a social network to the metaverse—the future of the internet. At the same time, he claimed the next iteration of internet and rebranded Facebook to Meta. Although Zuckerberg said all the right things—we need an open, interoperable* metaverse powered by the users—few believe him. In fact, there was a Forrester survey that showed 75 percent of the 700 respondents not trusting Zuckerberg with building the metaverse.¹ Research by WSJ showed that of the 1,058 US internet users interviewed, 72 percent do not trust Facebook much/at all. This matches my own simple survey on LinkedIn, where 78 percent of the 469 people indicated that they do not trust Zuckerberg with building the next iteration of the internet.² Time will tell how successful he will be, but if users and content creators can choose between a world owned and controlled by one person or a world owned and controlled by those creating it, I think I know the answer.

*Interoperability is a crucial aspect, and I will discuss it in-depth. It basically means that you can take your data and digital assets from one platform to another, something that is not possible today.

In the past months, I have gone down the rabbit hole of the metaverse. As part of my research for the book, I have spoken with almost 100 creators and creatives all involved in building the metaverse and another 133 completed a long survey about the metaverse. They are the pioneers of this new internet, and they are all building an open, decentralized, inclusive, and interoperable metaverse.

I hope you will enjoy this journey as much as I did uncovering this magical world where we are only bound by our own creativity. In this book, I will share my vision for the metaverse, what it can become, and how it will change our identity as well as how we play, socialize, shop, and work. If we manage to develop an open metaverse, the trillions of dollars generated will be shared with all creators and creatives. But beware, there are dangers lurking on the road ahead that we need to think carefully about to avoid making the same mistakes as we did when building Web 2.0 or the social internet. I realize that every chapter of this book can be an entire book by itself as there is so much happening when it comes to the metaverse, and the world is constantly changing. However, I tried to keep it brief while covering as much as possible. I will start with offering a glimpse of what the future might look like when the metaverse is here, in 2032. Enjoy!

Introduction

On November 13 and 14, 2020, American rapper, singer, and songwriter Lil Nas X, also known as Montero Lamar Hill, appeared on the virtual stage on Roblox, the global gaming platform especially popular among children. As a first for Roblox, the concert attracted an incredible 33 million attendees, enjoying a unique performance inside the virtual world.³ For Lil Nas X, who is often regarded as a trailblazer, the virtual concert provided a unique opportunity to connect with millions of his fans when physical shows were not possible due to the pandemic. While in-person concerts are capped by the capacity of the stadium and the laws of physics, anything is possible at a virtual show to wow fans, and they can offer a magical experience. Lil Nas X debuted his new single *Holiday* during the concert, and by all measures, the virtual show was a massive success. It generated a lot of publicity for both Roblox and the rapper, launching a new entertainment format for Roblox and generating almost \$10 million in virtual merchandise such as digital costumes, accessories, and avatar skins, which users could purchase using the in-game currency Robux.⁴

Lil Nas X appeared as a larger-than-life digital twin and transported users to four different themed worlds, from the Wild West to a Wintery snow-filled world. Roblox's users regarded the unique experience well. Though some children would have wanted to watch the show alongside their friends, it was impossible to bring together all 33 million attendees on one server due to the current hardware constraints. Above all, it would have been utterly chaotic. Hence, players saw only around 50 other attendees watching the live performance, making it feel a bit empty. Apart from the occasional glitches expected from such a novel experience, the concert was a blazing success.

Less than a year later, in October 2021, Decentraland organized not just one concert but an entire, four-day metaverse festival with 80 different artists.⁵ Decentraland is a fully decentralized 3D virtual world controlled by a decentralized autonomous organization (DAO) where users can build their own unique digital experience and interact with others. The biggest drawcards for the virtual festival were Deadmau5, a Canadian electronic music producer and DJ, and Paris Hilton. Roblox and Lil Nas X targeted its young players, while the Metaverse Festival was focused more on the tech-savvy crypto community. Users could purchase digital merchandise using the in-game's crypto MANA, such as digital wearables for their avatars,⁶ and all attendees received a nonfungible token (NFT)* in their wallet as a *Proof of Attendance*.⁷

When you started reading this book, you might have wondered why does a business book on the metaverse start with a fictional story and discussing two virtual events? Am I in the right place? Well, yes...you certainly are. The two concerts, and the many other concerts that have taken place in games such as Fortnite,[†] show that the lines of the real and

*We will discuss nonfungible tokens in-depth, but to give you a head start, *nonfungible* means that these tokens, which are (digital) representations of (digital) assets similar to how casino chips represent money, are nontradeable. This then means that one nonfungible token cannot be exchanged for another nonfungible token because they do not hold the same value. Casino chips or dollar bills are fungible; a one-dollar chip or one-dollar bill can be exchanged for another one-dollar chip or one-dollar bill, and you still have exactly the same thing. A Pokémon Go card is nonfungible, because one card can be more valuable than another and exchanging it means you will have something different with a different value.

[†]For those unfamiliar with Fortnite, it is an online video game developed by Epic Games and released in 2017. It is a so-called *Battle Royale Game*, where players fight each other to become the last player standing. It offers different game modes that enable users to not only fight each other but also watch concerts, build an island, or socialize.

virtual worlds are starting to become intertwined experiences working in tandem. The fictional story shows what the metaverse can become, and it won't be long before we live in such a future. In its most basic form, the metaverse is where the physical and the digital worlds converge into a *phygital* experience, augmenting both the virtual and the physical worlds. As we will discover, the metaverse will radically change our society and offer experiences that until recently would have seemed magical. The first glimpses of the metaverse can already be experienced, and people around the world are living, experiencing, and exploring it. In the coming decade, the metaverse will come alive, and it won't be too long before unique hybrid experiences will become a (virtual) reality.

Welcome to the Metaverse

The rise of these massive interactive live events (MILES) is a first indication of where the internet is heading and the opportunities that come with the next iteration of the World Wide Web. Who would have thought a few years ago that 33 million people could attend a concert at the same time? All could experience it from the best possible vantage point and sharing that experience with friends who are scattered across the globe, creating collective memories in times when physical connections were not possible. Online entertainment and socializing in virtual gaming environments are very normal for Generation Z (those born between mid-to-late 1990s and 2010) and especially Generation Alpha (those born after 2010), even before the pandemic hit.

Already, Generation Alpha, the first generation to be born entirely in the 21st century, will have a completely different perspective on the (digital) world than previous generations. These kids are born in an age when the iPad was introduced, Facebook became the dominant social network, and massive multiplayer online games (also known as MMOs) attract millions of players. You might be familiar with the 2011 video of a one-year-old baby easily navigating an iPad but struggling with a paper magazine because she couldn't pinch and zoom. To her, the magazine was broken.⁸ Although Gen Alpha is, of course, also very familiar with physical artifacts such as children's books or coloring books, the fact that

these children can so easily navigate the digital realm from an early age is an indication what we can expect as their brains are wired for the digital world from the start.

Ten years later, the baby has grown up in a world where the internet is everywhere, always available at the push of a button, and online interactions are as normal as physical interactions. She looks at the world from a completely different perspective than Millennials, let alone the Baby Boomers who currently run the world. As such, she feels very comfortable immersing herself in a virtual world with endless possibilities and opportunities, despite all the problems that come with that, as we will see later in the book. To her, the metaverse has always been here, and the more advanced our (digital) technologies will become and the more the physical and the digital merge, the better she will be able to navigate this so-called phygital world.

One of the amazing new experiences that the metaverse has brought already is these massive interactive live events. To Generation Alpha, these MILEs offer substantial benefits over real-world concerts. First, they are easy to attend. Children do not need to ask for permission from their parents because they don't have to go anywhere. They can attend from the comfort of their home. Second, they can appear at the concert in their favorite outfit or character, using the avatar as an extension of their real-world personality, creating the ability for the ultimate self-expression. If your child feels like going to the concert like a unicorn, they can, and it probably doesn't cost the world to be a unicorn either. Next, their friends from around the world will also be at the concert. Note here that Generation Alpha has friends from all over the world from the start. They have made close friendships with people they might have never met in real life and probably never will meet physically. To them, globalization is not something that is bad, but an opportunity to meet new people and learn more cultures, albeit completely virtually. Finally, they will have front-row seats at the concert, even if they happen to be late for the show. In fact, they can stand next to their favorite singer while he or she is performing, taking a screenshot of the experience and sharing it with their friends who could not be there. Once the concert is over, your children are already home in time for dinner. The best thing is that next week, they can go to another concert, without paying \$100 for

an entry ticket that allows them to see their favorite artist from afar in the physical world. For many children, the virtual concerts offer as good an experience or even a better experience than traditional physical concerts.

The metaverse will provide benefits like these interactive concerts and many more as portrayed in the fictional start that will be hard to ignore for both consumers and organizations. The metaverse offers a new way of doing business, connecting with customers, and collaborating with colleagues. As we will see, those companies who have already stepped into the metaverse are already benefiting from it, creating increased brand loyalty, optimizing product design and creation processes, becoming more sustainable, and generally increasing their bottom line. Similar to those companies who were first to adopt the internet when it appeared in the 1990s and those companies who were first to venture onto social media when it appeared in the late 2000s, those companies who have already entered the metaverse will reap the benefits from this new trillion-dollar social economy that will be created this decade.

However, as we will also see, it is not business as usual in the metaverse. Yes, the immersive internet is another channel that you need to master as an organization, but it is a channel that requires your full attention. It will require significant up-front investments, trial and error, and strong connections with your community. After all, designing a series of nonfungible token (NFT) collectibles related to your brand or creating an immersive digital version of your headquarters for your customers to explore during the pandemic is a lot more capital- and resource-intensive than creating a social media campaign. In addition, “datafying” processes and embedding operating equipment with sensors to create digital twins (virtual representations of physical processes or assets) that will provide valuable insights to constantly monitor a remote production facility and continuously improve its output is easier said than done. Finally, moving from Zoom or Teams to a virtual reality meeting room where employees from around the world can come together, collaborate, and spend potentially even more time in the virtual world requires a significant change in employee behavior. As we know, building the technology is the “easy” part, while changing user or employee behavior is a different ballgame.

Of course, for the metaverse-natives (Generation Alpha and, to a lesser extent, Generation Z), embracing the metaverse is easy. The challenge lies with the older generations who are not accustomed to an omnipresent immersive internet and persuading them that embracing virtual and augmented reality offers new opportunities, including amazing experiences.

This book aims to help you understand the metaverse, what it is, how it will work, how you can benefit from it, and how we should build it. Of course, no book on the metaverse is complete without referencing its origin. The metaverse is a term coined by novelist Neal Stephenson in his famous 1992 novel *Snow Crash* (Bantam Books, 1992). The novel defines the metaverse as a place where people use virtual reality headsets to interact in a digital game-like world. The novel has enjoyed cult status, especially among Silicon Valley entrepreneurs, and HBO is turning the book into a series. The same applies to the book *Ready Player One* (Crown Publishing Group, 2011) by Ernest Cline, which was turned into a movie by Steven Spielberg in 2018, where the protagonist depicts the metaverse as a “virtual universe where people go [...] for all the things they can do, but stay for all the things they can be.”⁹ Both sci-fi books see the metaverse as a digital universe that we interact with using virtual reality. This falls short of the actual metaverse that is being constructed at this moment, where virtual reality is only one channel to interact with the metaverse. In addition, both authors depict the metaverse as commercially owned and as a way to help people escape the dystopian reality of the future world. While this is certainly a possibility for our own future, we do have a chance to prevent a dystopian future where a small elite controls the metaverse and our planet is distraught by climate change. It will be a long and challenging fight—those in power generally are very reluctant to relinquish it to the community—but one we cannot afford to lose. If anything, the dystopian future as described by Stephenson and Cline is not something to look forward to, so we should ensure we build an open, decentralized, and community-driven metaverse and fix the mistakes of Web 2.0.

With this book, I aim to give you the tools to create an open metaverse so that we avoid ending up in a worse version of today. I hope it will help you navigate the immersive internet, and, more importantly, it will discuss how we can build a metaverse that is open, inclusive, decentralized,

and not controlled by Big Tech.* After all, we should avoid making the same mistakes as we did when building Web 2.0.

When Sir Tim Berners-Lee invented the Web, he envisioned it to be decentralized and open, with data to be controlled by the user, but we ended up with silos controlled by Big Tech.¹⁰ Now that we are entering the next phase of the internet, and with the technology ready, we can fix what we did wrong. After all, a closed metaverse controlled by Big Tech or the state will very likely result in a dystopian nightmare that we should avoid at all costs, as we will see.

We will also discuss what can go wrong in the metaverse. Not to scare you from entering the metaverse, but just as cybercriminals are active on the current internet, hackers and scammers will also constantly patrol the metaverse, on the prowl for their next victim. The metaverse will be hacked, and everyone must be aware of how the metaverse can damage society, organizations, and individuals. With more and more devices connected to the internet—it is expected that by 2030 there will be 125 billion devices connected to the internet, with 7.5 billion internet users—there will be ample opportunities for cybercriminals to hack you, your business, and the metaverse, inflicting damages totaling \$10 trillion, already in 2025.¹¹ As described in the fictional story, it will be relatively easy for cybercriminals to pretend to be someone else in the metaverse; if someone looks like your sister and sounds like your sister, we are quickly to believe that she is your sister. But even this problem is relatively small compared to a metaverse flooded by harassment and toxic recommendation engines that create immersive filter bubbles, further dividing and polarizing society and harming individuals.

The first chapter will dive into what the metaverse is and could become because a shared understanding of this new concept is important if we all want to benefit from it. What are the characteristics of the metaverse, and how do these impact our experience? We will begin our journey at the start of the dotcom bubble when the internet arrived for the first time. Web 1.0 allowed personal computers to connect, and the internet arrived in our living room, but only sometimes would you go on

*In this book, the term *Big Tech* refers to Facebook (Meta), Amazon, Apple, Microsoft, and Alphabet, as well as the Chinese counterparts Alibaba, Baidu, and Tencent.

the internet. Web 2.0 arrived with the smartphone, although there is no set date when exactly the mobile internet started. It brought the internet closer to us, allowing us to be always online, but we still have to make an effort to “go on the internet,” as in getting your phone or opening your laptop. The next iteration of the internet will be an internet that is always there. It is always on, and you are always connected to it, potentially even when asleep, e.g., your Apple Watch tracking your sleep. It will be ready to interact with whenever you want or need to.¹²

This immersive internet requires new hardware solutions, as without augmented reality (AR) and virtual reality (VR), we will remain observers instead of active participants of this virtual world. We will discuss what AR and VR are, where we are now, and where we need to go before it becomes mainstream and the physical and digital worlds truly converge. We will also dive into the key characteristics of the open metaverse and how we can create a metaverse that delivers the most value to society.

Then, in Chapter 2, we will explore how we can achieve an open metaverse that empowers its users instead of enslaving them and what the benefits of such a metaverse will be to society.

In Chapter 3, we will explore the rise of avatars and digital humans—2D or 3D representations of our identity in the digital world—and how these digital identities will redefine what it is to be human. We will investigate how avatars will change our identity and why reputation will become even more important in the virtual world. Of course, avatars cannot walk around the metaverse naked, so digital fashion and digital products will explode in the coming years, offering brands a new approach to connecting with their customers in ways that are sustainable and environmentally friendly.

Once we understand who we can be in the metaverse, we will discover what we can do in the metaverse in Chapter 4. Humans have always tried to escape reality, be it using story telling around a fire to reading a book, but now for the first time, we can create our own space and invite anyone from around the world to join and have a social experience away from daily life. Of course, users who prefer a solitary immersive experience can also find that in the metaverse. There will be millions of metaverse spaces similar to the current internet, and knowing your way around the metaverse will improve your experience. Therefore, we

will dive into how to traverse the metaverse and have an immersive experience while listening to music, gaming, playing sports, shopping, and learning.

Of course, the metaverse will not only be for fun. For organizations, it will mean serious business. Increasing brand loyalty, developing digital twins, collaborating in virtual reality—the future of work will revolve around the metaverse. Chapter 5 will discuss how brands can step into the metaverse, including numerous examples of brands who have already ventured into it, and what brands can do to become successful in the metaverse. Chapter 6 will explore how location data and the Internet of Things (IoT) will be the driving force to propel homes, offices, factories, supply chains, and entire cities into the metaverse. Although many enterprise metaverse environments will be closed walled gardens to provide privacy and security, the consumer version of the metaverse will work only if the metaverse is an open and inclusive space controlled by users instead of Big Tech. Zuckerberg might have claimed the metaverse with his rebranding to meta, but he should never own and control it.

In Chapter 7, we will cover the economics of the metaverse, including nonfungible tokens. Already in 2021, there were multiple million-dollar digital real estate deals and exchange of digital assets, and that is just the beginning. With an infinite supply of digital land across various metaverse spaces, you would expect low prices, but that is not what is happening. Prices are at an all-time high, and the more the metaverse is in the news, the more this will probably continue. However, there is a caveat: this early gold rush will most likely, and should not, continue if we want to ensure the metaverse is inclusive and reduces inequality instead of enlarging it. How does digital real estate work, how does it impact the metaverse economy, and is it a good thing? What other aspects of the metaverse define how the economy will work? To understand how the economy of the metaverse will work, we will take a deep dive into NFTs: what they are, how they work, why they are so important, what the challenges are of NFTs, and why the current hype of selling JPEGs for millions of dollars is important, though not where NFTs' true value lies.

Finally, before finishing the book with a look into the future of the metaverse in Chapter 9, we will explore the dark side of the metaverse.

Similar that the existing Web has a Dark Web, the metaverse will inherently come with negative aspects that harm citizens, organizations, and societies. What are these problems, and more importantly, how can we prevent them from happening? We will discuss the dangers and ethical challenges of the metaverse, the most likely (mental) health impact on its users and the numerous privacy and security dangers. The metaverse will be fun and useful, but only if we build it right. Chapter 8 will discuss how to go about this and how we can fight back to keep the metaverse a pleasant environment that does not further destabilize society but drives humanity forward.

Our society and what it means to be human will change drastically in the coming years. We are at the cusp of building an alternate reality that is not bound by the laws of physics and where anything is possible. In this world, magic will become a reality. I hope that this book will give you a complete understanding of what the metaverse can become, how you as a consumer can enjoy it, and how organizations can benefit from it, without harassing and following those same consumers as organizations do on the Web today. If we get it wrong and don't learn from our mistakes, the dystopian metaverse portrayed by Neal Stephenson in his novel *Snow Crash* will become a reality. However, if we build it right, a world of abundance is upon us. Let the journey and magic begin; let's step into the metaverse.

Praise for **Step into the METAVERSE**

"In *Step into the Metaverse*, Mark van Rijmenam takes a comprehensive view of the converging forces that will fuse and someday become a future paradigm for human growth, prosperity and existence. That is, unless we f* it up."

—John Gaeta, Creator, Inventor, Executive

"Van Rijmenam provides an extensive exploration of the metaverse. He surfaces timely questions of ethics and sovereignty. At this moment, while our next digital reality is still being constructed, this discussion is critical."

—Tiffany Xingyu Wang, President & Co-Founder, Oasis Consortium

"A comprehensive tour of vital contemporary metaverse discussions!"

—Neil Trevett, President, The Khronos Group

"Dr. Mark van Rijmenam does a masterful job sharing a promising vision of the nascent metaverse while also being pragmatic about the challenges and gaps in existing solutions."

—Alec Lazarescu, Founder, VerseTech Metaverse

"The next chapter of human existence is being formed right now, and as you 'step into the metaverse' you'll fully understand the power of the convergence of technology, consumer trends, brands and reinvention of personal self expression."

—Justin W. Hochberg, CEO & Founder, Virtual Brand Group

An insightful and eye-opening peek into the future of the internet

Step into the Metaverse: How the Immersive Internet Will Unlock a Trillion-Dollar Social Economy is a startlingly incisive and thought-provoking exploration of how the digital world, as we know it, will fundamentally change as the metaverse comes into its own. Poised to impact the everyday experiences of people, companies, and societies around the world, the metaverse offers us the opportunity to be who we want to be and where we want to be, all at a moment's notice. A fascinating read you won't be able to put down, *Step into the Metaverse* belongs in the hands of executives, managers, and other business leaders who play a role in digital transformation or execution. It's also an invaluable resource for anyone interested in the future of technology, the internet, and social interaction.

Mark van Rijmenam, PhD, is The Digital Speaker. He is a future tech strategist who thinks about how emerging technologies change organisations, society and the metaverse. Van Rijmenam is an international keynote speaker, 4x author and entrepreneur.

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