The Metaverse

Metaverse masters? Expect the unexpected.

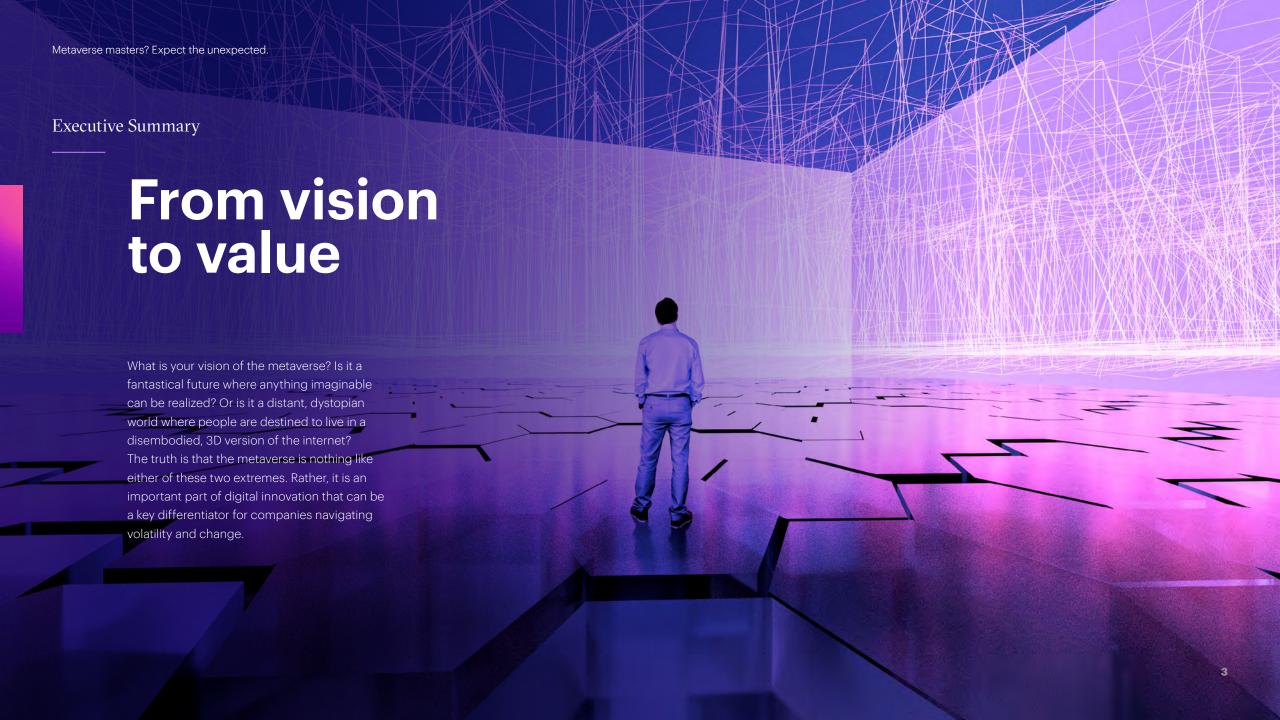
Growth markets racing ahead

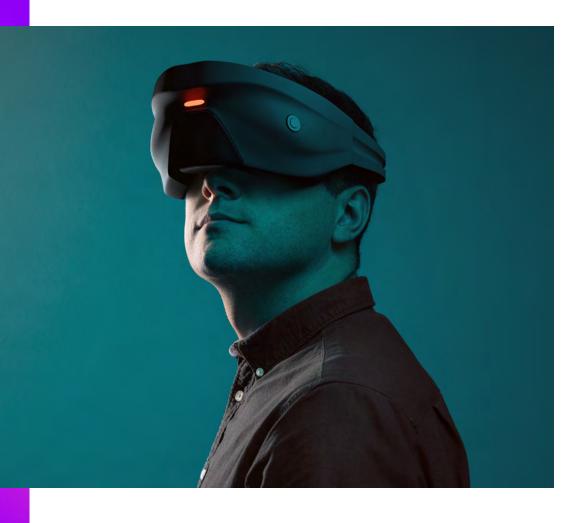


Contents

From vision to value	The Metaverse Continuum	Growth markets— the fulcrum of metaverse- action	Customer metaverse: Community and communication	Enterprise metaverse: Connection and collaboration	Industrial metaverse: Consistency and control	Early enthusiasts	Building better opportunities for better value	Conclusion
3	5	6	8	11	13	15	19	20

-





Understanding the potential of the metaverse is crucial for companies because it is nothing short of the next evolution of the internet. Just as we predicted in 2013 - that every company will be a digital company - we expect the metaverse to open bold new opportunities for customers, enterprises, and industries alike. The most successful organizations will be those that understand how the metaverse can change what is possible and be leveraged to address emerging business needs (See our thought leadership on **Total Enterprise Reinvention**). Contrary to common perception, the metaverse means so much more than virtual reality (VR) headsets. At Accenture, we see the metaverse as a continuum: one that touches all aspects of business in every industry, transforming the way companies interact with customers and employees, run operations, and produce goods and services. The enabling technologies span the familiar and the futuristic, from cloud and artificial intelligence (AI) to blockchain, digital twins, edge, and technologies that have yet to

be invented. As these technologies evolve and converge, two areas of opportunity arise - the Internet of Place and the Internet of Ownership.

In the Internet of Place, physical and virtual realms seamlessly integrate allowing people to socialize, trade and learn in new ways.

Organizations are leveraging virtual platforms to create new avenues for customer engagement and interaction through product demos, immersive socializing, and gaming, among others.

The Internet of Ownership, on the other hand, helps individuals navigate the metaverse, allowing them to bring their identities, objects, and money from place to place in the digital world. The Internet of Ownership is informed by a cultural movement called Web3, where decentralization, blockchain, and tokens provide users with a level of privacy and interoperability that is not possible in the internet's current iteration.

The Metaverse Continuum

Our **Total Enterprise Reinvention** report, launched at the World Economic Forum Annual Meeting in 2023, shows that companies must continuously reinvent their businesses and set new performance frontiers for themselves and their industries. That frontier is likely to include the metaverse however it evolves. Just as it is impossible to imagine a business without a website today, having a presence on the metaverse may become de rigor.

The metaverse continuum will not only change how companies interact with their customers and what products or services they choose to offer, but how work is performed within a company, how things are made or distributed, and how the entire business is run (See Figure 1). While each of these aspects is interconnected and mutually reinforcing, they are useful to explore because of the distinct value of each.

Figure 1: The metaverse continuum will transform all parts of the business





Growth markets— the fulcrum of metaverse-action

At this stage, the question on everyone's lips is, which businesses are most actively turning their vision of the Internet of Place and Internet of Ownership into value for customers, employees, and their industries?

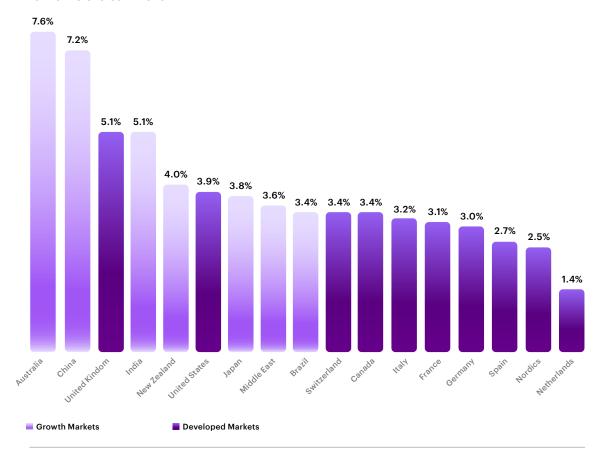
Our analysis shows that companies in Europe and North America are behind large companies in Asia, Latin America, the Middle East, and Africa. A region we refer to as growth markets.

In Accenture's Business Trends Surveyⁱⁱ, companies in growth markets expected 5.6% of revenue in 2025 to come from new products, services, or business models related to the metaverse. This compares to 3.4% and 3.8% in Europe and North America, respectively (See Figure 2).

Seven out of the top 10 countries that were optimistic about revenues from metaverse opportunities are also from growth markets, including Australia and China, where the expected percentage of revenue from the metaverse (7.6% and 7.2% respectively) is almost double that of Europe and North America.

Figure 2: Executives across growth markets expect metaverse initiatives to drive a higher share of revenues in the next 3 years

Median revenues executives expect from new products, services or business models related to the metaverse in 2025



Source: Accenture Research

To better understand how companies in growth markets are embracing the metaverse, we analyzed metaverse and Web3 initiatives being executed by the five largest companies with headquarters in these regions, across five industries:

- Automotive
- 2. Banking
- 3. Hi-tech
- 4. Retail
- 5. Software and platforms

These industries were chosen because their executives were seen to be the most enthusiastic about generating revenues from metaverse-related products, services, and business models in the Accenture Business Trends survey cited above.

The initiatives were broadly categorized under the two areas of opportunity (Internet of Place and Internet of Ownership) and the three value segments – customer, enterprise, and industrial metaverse. Some leading examples are illustrated in Figure 3.

Figure 3: Metaverse initiatives are evenly distributed across industries within the growth markets (Reference for each example in Figure 3 is cited on Page 22)

Banking

The Agricultural Bank of China (ABC) has issued the first agricultural mortgage on a blockchain, to prevent land being used as loan collateral multiple times'.

Retail

Internet of Ownership

Internet of Place

JD.com's tech arm, JD Technology announced that the company will offer free non-fungible token (NFT) badges to users registered for the company's annual tech summit JD Discovery (JDD)".

Automotive

2500 employees of **Toyota Systems** took part in a large-scale pilot project for the development of a digital currency for Toyota. Participants have been able to exchange digital currency on bonus points or gifts from the directory^{III}.

Banking

Industrial and Commercial Bank of China (ICBC) has launched its own enterprisegrade blockchain platform - ICBC Seal Chain, for fintech innovation and development of technologies in areas such as big data, 5G, Al and blockchain^{IV}.

Retail

Mitsubishi Logistics has built blockchain tracker for drug deliveries, that allows clients to track shipments and be assured of product condition through the entire journey^v.

Software and Platforms

Baidu launched an AR platform, DuSee that allows users to interact with computer generated visuals through smartphones. It helps convert flat pictures into 3D graphics^{VI}.

Retail

During COVID, **Woolworths** introduced virtual beauty offerings (Virtual Try On and Virtual Consultations) to deliver an unmatched online customer experience, that connects customers virtually to the store and offers exciting, unique and differentiated shopping experience^{VII}.

Automotive

Nissan has adopted XR Trainer for Smart Factory Initiative to boost productivity and meet net zero emissions by 2050^{VIII}.

Hi-Tech

Samsung has developed industry's first next-generation graphics DRAM technology-GDDR6W Graphics Memory, that helps create immersive and true-to-life metaverse experiences^{IX}.

Automotive

Toyota has created the 'TILT Labs' to evaluate innovative ideas and apply at their plants for process improvement. AR/VR technologies are leveraged to resolve designing and engineering related issues^x.

Customer Enterprise Industrial

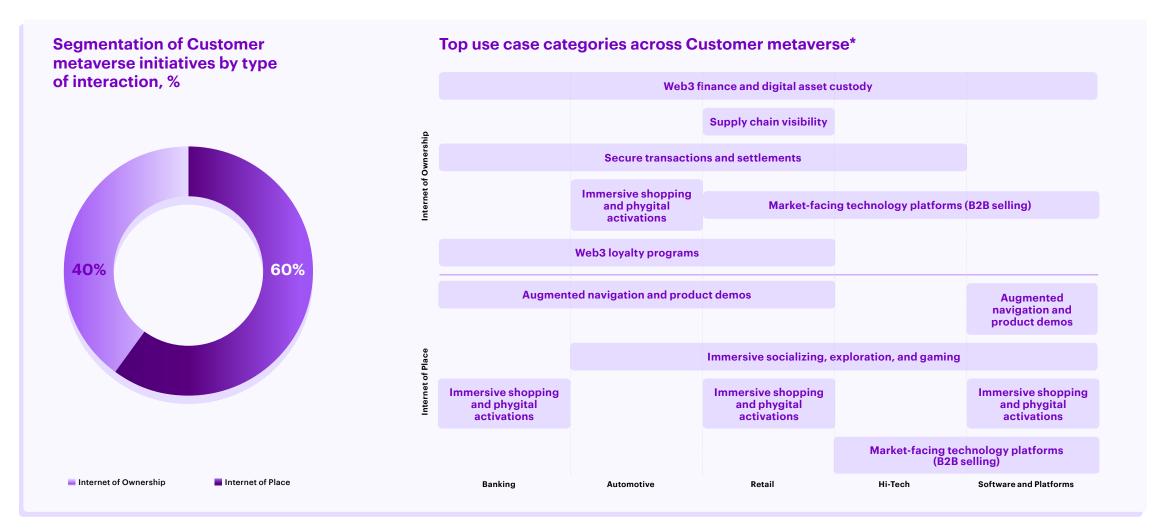
Customer metaverse: Community and communication

The largest companies across the five industries in the growth markets are most active in the customer metaverse compared to the industrial and enterprise segments. The customer metaverse segment includes all activities directed towards community building, engagement, marketing, and sales, not only for end consumers but also encompassing B2B negotiations and selling.

Drilling down into the customer metaverse use cases, we found that 40% focused on the Internet of Ownership while the remaining 60% prioritized the Internet of Place (See Figure 4).



Figure 4: Segmentation of customer metaverse use cases



Source: Accenture Research

^{*8} use case categories identified in the customer metaverse segment.



As highlighted in Figure 3, the automotive, retail, and banking industries account for diverse initiatives across both the Internet of Place and Internet of Ownership segments in the customer metaverse.

Automotive companies in our sample are exploring use cases around augmented navigation and product demos. For example, Toyota has launched the Toyota Accessory Augmented Reality program that helps customers to visualize and accessorize their vehiclesⁱⁱⁱ. Similarly, Nissan has unveiled its fully electric vehicle, Sakura Electric in the metaverse and offered customers virtual test drives, providing a unique and distinct experience^{iv}.

The five largest banks from growth markets, covered in our sample, are focusing on offering secure transactions and settlements, along with Web3 finance and digital asset custody. China Construction Bank enabled its domestic clients to engage in offshore investments via a

partnership with ADDX, a Singaporean financial company leveraging blockchain and smart contracts^v.

Retailers, such as China's JD.com, offered a combination of immersive shopping and Web3 assets like AR try-ons, 3D visualizations, and exclusive digital collectibles during 2022's Singles' Day sales^{vi}.

Thai real estate developer Magnolia Quality
Development Corporation (MQDC) has
seamlessly woven its values and culture into its
metaverse initiative—Idyllias—a classic example
of phygital activation.

MQDC's vision of the "Metta-Verse,"—a play on the Thai word for kindness or benevolence, is one where good deeds done in the virtual world have a positive impact on the real world as well—aligns with the company's vision of "wellbeing for all."

Residents of The Forestias, a real, on-ground intergenerational family community within a forested oasis of MQDC, have access to a corresponding virtual property in the Idyllias, the MQDC metaverse. MQDC plans to use Idyllias as a vehicle to help Forestias residents learn more about sustainability and bring initiatives to life in ways that will benefit them in the real world.

Idyllias also offers residents at The Forestias, an elevated smart home experience. It gives residents an unprecedented level of control over their environment by combining the power of digitally twinning their building information modeling (BIM) data with internet of things (IoT).

The company also aims to provide the best experience for its retail and commercial partners through virtual stores. In the Metta-verse' retailers will be able to set up phygital flagship stores^{vii} that could become global attractions, reaching many more customers than purely physical storefronts can.

Enterprise metaverse: Connection and collaboration

Companies in our dataset are largely focused on enterprise metaverse initiatives in immersive learning or training, augmented collaboration, and assisted operations and maintenance (See Figure 5).

In FY22, Coles Group onboarded over 45,000 new team members. To improve a connection to Coles' purpose and understanding of the breadth of its operations they wanted to explore how new team members could experience, and in turn truly connect with, Coles Group's purpose to 'sustainably help all Australians live happier, healthier lives.'

Together Coles and Accenture built the Coles-Metaverse, a 'farm-to-fork' immersive virtual reality experience for new team members. The experience brings the value chain of Coles and its strategy to life, allowing team members to interact with elements of the business strategy and offering access to lots of geographical locations in one virtual experience.

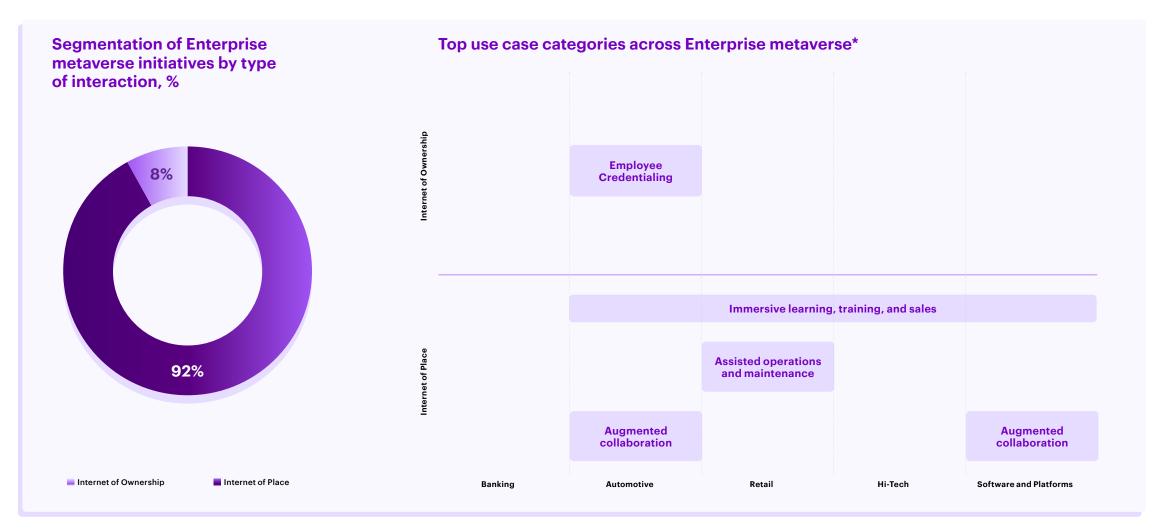
Coles plans to roll out this guided experience for new team members as part of their orientation, soon.

Accenture itself has been at the forefront of benefiting from initiatives in the enterprise metaverse. Over 185,000 of Accenture's new hires have experienced this firsthand on the Nth Floor, our custom-built metaverse. The feedback has been resounding, with participants giving the program a 93% favorability rating or an average score of 4.67 out of 5, compared to a pre-pandemic rating of 3.75.

The Nth Floor gives employees hands-on experience with exciting innovative technology, sparking their imagination and contributing to our innovation. For Black History Month in 2022, members of our African American Employee Resource Group even took on the role of metaverse creators, creating a virtual museum where they could invite colleagues to find out more about Black icons and the civil rights movement^{viii}.

Intended to augment rather than replace human interactions, Accenture's metaverse allows international teams to meet and interact in an authentic, realistic way without incurring travel costs, lowering barriers to informal, serendipitous interactions, regardless of location. Recently, the Nth floor allowed 150 managing directors in 25 separate locations to meet 'face-to-face' at their annual strategy meetingix.

Figure 5: Segmentation of Enterprise metaverse use cases



Source: Accenture Research

^{*4} use case categories identified in the enterprise metaverse segment.

Industrial metaverse: Consistency and control



The industrial metaverse holds huge appeal for companies that want to virtualize industrial systems to help realize operational benefits and supply chain optimization.

In the industrial metaverse, most use cases are focused on the Internet of Ownership, with emphasis on B2B tamper-proof transactions and settlements, launching in-house technology platforms, and tamper-proof supply chains (See Figure 6).

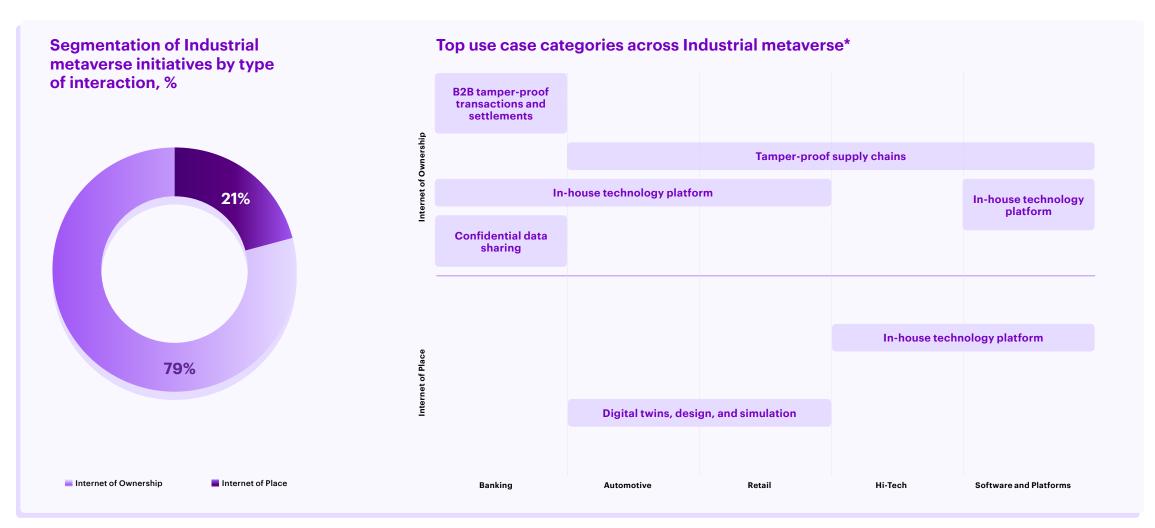
Within the Internet of Place, we see a heavy concentration of initiatives aimed at using digital twins, design, and simulation, followed by companies launching their in-house technology platforms for metaverse applications.

Hyundai's proposed first Meta-Factory, a digital twin of an actual factory, allows plant managers to troubleshoot and optimize operations without having to physically visit the plant. In line with the company's bold plans for the future of mobility, the factory will not only be used to test cars but flying cars and drones too^x.

In another example, JD.com is leveraging digital twins to simulate its supply chain and help increase decision-making efficiency by over 95%xi.

In the Internet of Ownership, activations focusing on B2B tamper-proof transactions and settlements have been a strong focus. For instance, the Bank of China has signed up for a new blockchain-based platform for trade finance, launched by China Banking Association to digitize transaction information between banks, starting with letters of credit and asset-backed securities^{xii}.

Figure 6: Segmentation of Industrial metaverse use cases



Source: Accenture Research *5 use case categories identified in the industrial metaverse segment.

The Metaverse

Early enthusiasts

Many metaverse and Web3 activation within industries in growth markets are supported by their enthusiastic consumers and governments.



Consumers in growth markets are typically younger, tech-savvy, digital natives who are already avid users of virtual goods and experiences. Accenture's latest digital commerce research shows that about 1.4 billion digitally native young consumers across the leading eight growth market countries will enter the market as potential customers over the next decade. More than 70% of these users are already using online payment methods and influencing purchasing decisions in their households. As such, they might be ready adopters of the metaverse in the next few years^{xiii}.

Moreover, in our 2022 Consumer Pulse Survey of over 11,000 people, we found that people in Brazil, Chile, China, India, Indonesia, Singapore, UAE, and Vietnam consistently outperformed those in more mature markets (Canada, France, Germany, Italy, Spain, Sweden, UK, US) when it came to leading virtual lives (see Figure 7).

Governments of some of the leading growth markets are willing to go a distance to make themselves attractive destinations for talent shaping the next iteration of the internet. In the past two years, UAE has unveiled its Dubai Metaverse Strategyxiv and launched the first metaverse shopping mallxv.

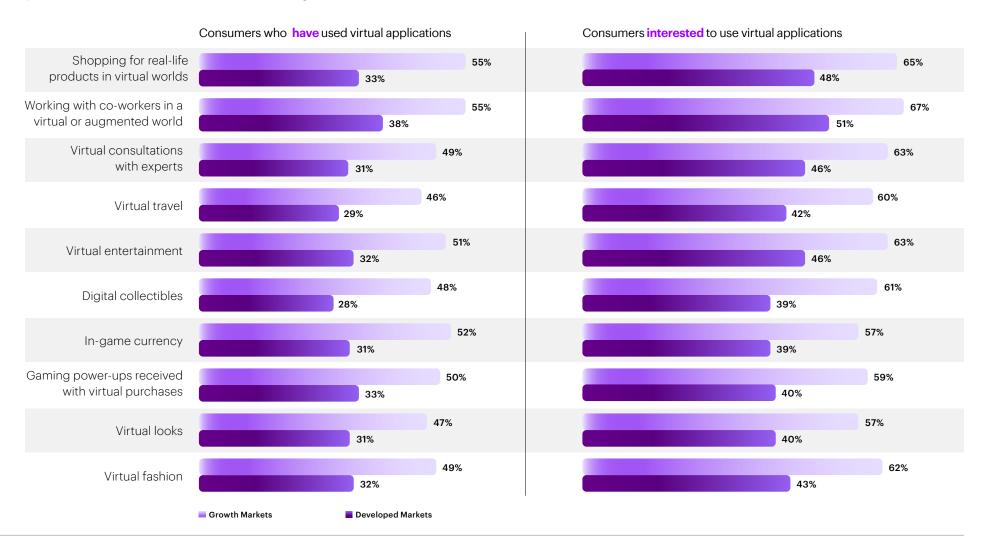
The force driving this ambitious vision is focused on the metaverse's potential value: The UAE expects the metaverse to support 40,000 jobs by 2030 and add \$4 billion to its economy^{xvi}. It is a strategy that is already working for them with the government already attracting more than 1,000 blockchain and metaverse companies to the area.

The strength of the metaverse among the early enthusiasts can be seen in the number of world firsts achieved across the five metaverse layers:

- 1. Experience
- 2. Economy
- 3. Digital Identity
- 4. Software and Platforms
- 5. Infrastructure and Network (See Figure 8)



Figure 7: Consumers outside Europe and USA are far more enthusiastic about leading virtual lives



N = 11,000

To unleash the full potential of the metaverse, however, governments, businesses, and customers need to be brought together in a wider ecosystem. Nations in the Asian region are paving the way here too.

For example, South Korea has committed to investing \$177 million into its domestic metaverse ecosystem*vii in the next five years. It plans to develop a metaverse platform for citizens to access public services and is also training the necessary talent through a metaverse academy and hackathons for students and start-ups*viii.

Similarly, Chinese tech companies like Tencent, Baidu, and Alibaba plan to develop technologies that will help them become leading participants in the metaverse ecosystem^{xix}.

Figure 8: Firsts for metaverse enthusiasts

(Reference for each example in Figure 8 is cited on Page 23)

Metaverse la	yers	Major developments				
Experience	Enabling people to express and engage in socially driven activities through physical and virtual content.	 During 2023's Chinese New Year festival, Alibaba's e-commerce app Taobao hosted the first metaverse livestream platform, 'Futuristic City', where users could explore, shop, watch livestreams, and purchase goods'. South Korea launched 'Metaverse Seoul,' the first city-backed public metaverse platform. It aims to improve efficiency in public administration services and tap into the opportunities of the virtual environment". 				
Economy	Empowering stakeholders to create digital assets that can be commercialized.	 UAE is planning to open a first-of-its-kind free zone for companies dealing in digital and virtual assets, to support businesses of the future. Several Japanese tech and finance giants have signed an agreement to create the Japan Metaverse Economic Zone, a multipurpose virtual universe that will allow them to share their technology and enable interoperability for users and developers across various platforms. 				
Digital Identity	Allowing the establishment of unique digital identities.	 Japanese entity, Shiseido launched the world's first AI-powered NFT (Non-Fungible Token) community program, 'AliveWithBeauty,' to drive stronger brand engagement with customers through innovation^v. ALARA X, a virtual influencer designed by Dubai's IAMX.Live, is one of the first celebrities of the metaverse, garnering over half a million followers in a short amount of time^{vI}. New Years' galas in China were the first ones to use virtual humans as hosts, musicians, and performers^{VII}. 				
Software & Platforms	Facilitating the creation of immersive content (spaces, assets) and for content to be built, owned, monetized, uniquely claimed, and carried throughout metaverse systems.	 Dubai is developing relevant Web3 technologies and related applications to establish new government work models and development in the crucial sectors including education, retail, tourism, healthcare, remote work, and legal domains^{VIII}. China launched the National Blockchain Technology Innovation Center to explore the technology and develop useful industrial applications. The center is led by the Beijing Academy of Blockchain and Edge Computing, an entity famous for developing the Chang'an Chain and backed by an ecosystem of 50 business corporations^{IX}. 				
Infrastructure & Network	Hardware, networking, and computing power are required to offer 3D spaces and varying levels of user immersion.	NTT DOCOMO (Japan) is collaborating with partners on various technologies including 5G, 5G's evolution, and key 6G technologies to enhance opportunities around the metaverse ^x .				

Building better opportunities for better value

The opportunities across the metaverse continuum must all be built on a foundation of trust, transparency, and inclusion. As we outlined in Building a Responsible Metaverse^{xx}, companies need to focus on six key areas:

- 1. Privacy by design and by default
- 2. The risks and rewards of tokenization
- 3. Interoperability
- 4. Digital safety
- 5. Sustainability
- 6. Identity and inclusion

Thoughtful and deliberate discussions on these topics are essential as the metaverse foundations are laid. Companies that want to succeed in the metaverse must not overlook these complex issues in the race to create customer and business value.

Early enthusiasts are leading the way on this front. Over the next five years, NTT Docomo plans to invest up to 600 billion yen (~\$4.6 billion) in Web3 technology including blockchain^{xxi}.

With an emphasis on further adoption of Web3 globally, NTT Docomo is working with Accenture to create ESG use cases, establish a secure technology platform and train Web3 talentxxii. While the initial implementation starts in Japan, the impact is expected to be global with companies across the world able to join the initiative and leverage knowledge from future development.

Gerando Falcões (GF) is a non-profit organization (NPO) committed to eliminating poverty in Brazilian favelas (Portuguese for slums). GF aims to transform communities into 'dignified, digital and developed environments,' where proper

housing, access to healthcare and education, women's autonomy, and more are possible and available to all.

GF recently launched FavelaX, an initiative in partnership with Accenture that brings hi-tech tools to turn favelas into innovation labs. In the first leg of this initiative, they named a poor community within the favelas 'Favela Mars' and chose it as the location to pilot a digitally transformed slum platform called Favela 3D.

To engage the younger audience, Accenture developed and launched the game Mission FavelaX, the first immersive experience of a non-profit organization in Latin America on Roblox. Players climb a six-floor rocket ship placed in the middle of a favela to learn about what life is like for the people living in these communities and the actions that can help improve themxxiii.



Conclusion

Navigating a prolonged state of disruption, companies must recognize and act on opportunities presented by the metaverse continuum. Doing so can help organizations and industries establish the new performance frontiers that are necessary to improve financials, achieve breakthrough innovation, enhance resilience, and create 360° value for all stakeholders.



Companies across growth markets have already started their journey into the metaverse continuum to reinvent their businesses and enterprise and their early efforts and results are highlighting scalable areas of opportunity and the benefits they bring.

To adapt learnings from the industries referenced above, companies must have the agility and strong digital foundation to iterate continuously on innovation. As the makeup of the metaverse continuum continues to shift and evolve, so must the businesses that want to succeed in leveraging it.

To achieve this, there are three rules that we must apply:

1.Be creative and keep it simple

Businesses should only develop metaverse experiences that are within their users' mental models. In practice, this means going back to the basics and building upwards. Creativity is still key because it is not about a lift-and-shift of current products and services. With this mindset, businesses can focus on the right metaverse strategies and operating models.

2. Start small and focused

Businesses should approach the metaverse with a rigorous, customer-focused mindset that services their needs artfully. They should also focus on understanding how to apply the metaverse to various parts of the business, ensuring innovation strategies are well-planned to avoid any potential waste of company time and finances.

3. Engage with early building blocks

Metaverse and Web3 ecosystems are rapidly developing and launching new opportunities for value generation. For businesses that continue to target the right areas quickly and thoughtfully, this continues to open new doors. Early engagement engenders true long-term trust with customers over time and grants an edge over the competition, but reckless engagement damages trust.

Sources for Figure 3

- Ledger Insights (2018), Chinese Bank issues blockchain farmer mortgages, available at: https://www.ledgerin-sights.com/china-agricultural-blockchain-mortgage/ and accessed on February 21, 2023
- Yuchuan Wang (2021), JD.com Offers NFTs Prior to JDD Based on Its Own Blockchain Engine, available at: https://jdcorporateblog.com/jd-com-offers-nfts-prior-to-jdd-based-on-its-own-blockchain-engine/ and accessed on February 22, 2023
- Helen Partz (2020), Toyota's IT arm works on digital token pilot with crypto exchange, available at: https://cointelegraph.com/news/toyota-s-it-arm-works-on-dig-ital-token-pilot-with-crypto-exchange and accessed on February 21, 2023
- IV CBNEditor (2019), ICBC's Blockchain Technology Platform Submits 41 Patent Applications, available at: https://www.chinabankingnews.com/2019/10/30/ icbcs-blockchain-technology-platform-submits-41-patent-applications/ and accessed on February 28, 2023
- Mitsubishi (2023), Mitsubishi Logistics builds blockchain tracker for drug deliveries, available at: https://asia. nikkei.com/Business/Technology/Mitsubishi-Logistics-builds-blockchain-tracker-for-drug-deliveries and accessed on February 21, 2023
- VI Yue Wang (2016), Baidu Releases Augmented Reality Platform -- Will It Be China's AR Leader?, available at: https://www.forbes.com/sites/ywang/2016/08/05/baidu-releases-augmented-reality-platform-will-it-be-chinas-ar-leader/?sh=14ec9c3316ce and accessed on February 27, 2023

- VII Woolworths (2021), Woolworths launches augmented reality beauty experiences first of its kind for a SA retailer, available at: https://www.woolworthsholdings.co.za/woolworths-launches-augmented-reality-beauty-experiences-first-of-its-kind-for-a-sa-retailer/ and accessed on February 27, 2023
- VIII Demond Cureton (2021), Nissan Adopts XR Trainer for Smart Factory Initiative, available at: https://www.xrtoday.com/mixed-reality/nissan-adopts-xr-trainer-for-smart-factory-initiative/ and accessed on February 27, 2023
- X Samsung (2022), A Bridge Between Worlds: How Samsung's GDDR6W Creates Immersive Metaverse Experiences with Powerful Graphics Memory, available at: https://semiconductor.samsung.com/newsroom/ tech-blog/a-bridge-between-worlds-how-samsungs-gddr6w-is-creating-immersive-vr-with-powerful-graphicsmemory/ and accessed on February 28, 2023
- Natasha Baccari (2022), Toyota's TILT Lab, available at: https://www.esi-group.com/blog/toyotas-tilt-lab, and accessed on February 28, 2023

Sources for Figure 8

- I Zihao Liu (2023), Alibaba's Chinese New Year Initiatives Reflect its Grand Metaverse Ambitions, available at: https://jingculturecrypto.com/alibabas-chinese-new-year-initiatives-reflect-its-grand-metaverse-ambitions/ and accessed on February 21, 2023
- II Cam Thompson (2023), South Korea Launches Metaverse Replica of Seoul, available at: https://www.coindesk.com/web3/2023/01/17/south-korea-launches-metaverse-replica-of-seoul/ and accessed on February 21, 2023
- III Khaleej Times (2023), UAE: New freezone announced; to be the world's first dedicated to digital and virtual asset companies, available at: https://www.khaleejtimes.com/uae/uae-new-freezone-announced-to-be-worlds-first-dedicated-to-digital-and-virtual-asset-companies and accessed on March 27, 2023
- IV Sergio Goschenko (2023), Japanese Tech and Finance Giants Launch Japan Metaverse Economic Zone, available at: https://news.bitcoin.com/japanese-tech-and-fi-nance-giants-launch-japan-metaverse-economic-zone/and accessed on March 7, 2023
- W Bethanie Ryder (2023), Shiseido Launches World's First Al-Powered NFT Community Program In Beauty, available at: https://jingdaily.com/exclusive-shiseido-worlds-first-ai-nft-community-beauty/ and accessed on March 7, 2023
- VI Khaleej Times (2023), Virtual influencer ALARA X joins the first celebrities of the metaverse, available at: https://www.khaleejtimes.com/kt-network/virtual-influencer-alara-x-joins-the-first-celebrities-of-the-metaverse and accessed on March 13, 2023

- VII JING CULTURE & CRYPTO (203), Virtual Humans Steal the Show At China's New Year's Galas, available at: https://jingculturecrypto.com/virtual-humans-steal-the-show-at-chinas-new-years-galas/ and accessed on February 21, 2023
- VIII Blockchain Council (2022), Dubai Metaverse Strategy Targets 40,000 Virtual Jobs In Five Years, available at: https://www.blockchain-council.org/news/dubai-metaverse-strategy-targets-40000-virtual-jobs-in-five-years/ and accessed on February 22, 2023
- Kevin Helms (2023), Chinese Government Launching National Blockchain Innovation Center, available at: https://news.bitcoin.com/chinese-government-launching-national-blockchain-innovation-center/ and accessed on February 22, 2023
- X Paul Lipscombe (2022), SK Telecom and NTT DOCOMO ink MoU to explore 6G and metaverse opportunities, available at: https://www.datacenterdynamics.com/en/news/sk-telecom-and-ntt-docomo-ink-mou-to-explo-re-6g-and-metaverse-opportunities/ and accessed on February 22, 2023

References

- Accenture (2023), Total Enterprise Reinvention, available at: https://www.accenture.com/content/dam/accenture/final/accenture-com/document/Accenture-Total-Enterprise-Reinvention.pdf and accessed on March 12, 2023
- ii Accenture Business Trends survey, conducted on 3,450 C-level executives across 22 countries and 26 industries during June 2022, to understand the importance of the key business trends.
- iii Mike Boland (2022), Case Study: AR Helps Customers Accessorize, available at: https://arinsider.co/2022/09/22/case-study-ar-helps-toyota-customers-accessorize/ and accessed on February 21, 2023
- iv Shakti Nath Jha (2022), Nissan Sakura EV unveiled in the metaverse: Virtual test drives open, available at: Nissan Sakura EV unveiled in the metaverse: Virtual test drives open | The Financial Express and accessed on February 21, 2023
- Shalini Nagarajan (2022), Singapore's ADDX and China Construction Bank Team Up, available at: https://blockworks.co/news/singapore's ADDX and China Construction Bank Team Up - Blockworks and accessed on February 21, 2023
- vi Doris Liu (2022), JD.com Embraces Metaverse to Bolster Singles' Day Luxury Shopping, available at: https://dcorporateblog.com/jd-com-embraces-metaverse-to-bolster-singles-day-luxury-shopping/ and accessed on March 2, 2023
- vii Bloomberg (2022), MQDC on its vision for Metaverse as the New Digital Transformation, available at: https://www.bloomberg.com/news/videos/2022-11-16/vision-for-metaverse-as-the-new-digital-transformation-video and accessed on March 3. 2023

- viii Laura Newpoff (2022), Here's how Accenture is manifesting the metaverse, available at: https://www.bizjournals.com/austin/news/2022/06/20/here-s-how-accenture-is-manifesting-the-metaverse.html and accessed on February 17,2023
- Accenture (2022), Going beyond with extended reality, available at: https://www.accenture.com/us-en/about/going-beyond-extended-reality and accessed on February 17, 2023
- Hyundai (2022), Hyundai Motor and Unity Partner to Build Meta-Factory Accelerating Intelligent Manufacturing Innovation, available at: https://www.hyundai. com/worldwide/en/company/newsroom/hyundai-motor-and-unity-partner-to-build-meta-factory-accelerating-intelligent-manufacturing-innovation-0000016780 and accessed on February, 22, 2023
- xi Vivian Yang (2022), Dr. Tao: JD.com to Build Capacities for Industrial Metaverse Focusing on Supply Chain, available at: https://jdcorporateblog.com/dr-tao-jd-tobuild-capacities-for-industrial-metaverse-focusing-onsupply-chain/ and accessed on February 21, 2023
- xii Yogita Khatri (2019), Chinese Bank Giants Tap Blockchain in Trade Finance Efficiency Boost, available at: https://www.coindesk.com/markets/2019/01/04/chinese-bank-giants-tap-blockchain-in-trade-finance-efficiency-boost/ and accessed on February 21,2023
- xiii Accenture (2023), The next billion Consumer, available at: https://www.accenture.com/content/dam/accenture/final/accenture-com/document/Accenture-Digital-Commerce-Report.pdf#zoom=40 and accessed on March 30, 2023
- xiv UAE (2022), Dubai Metaverse Strategy, Press Release, available at: https://u.ae/en/about-the-uae/strate-gies-initiatives-and-awards/strategies-plans-and-visions/government-services-and-digital-transformation/dubai-metaverse-strategy and accessed on November 26, 2022

- XV Gulf News Report (2023), Mall of the Metaverse: Dubai launches first virtual shopping mall, available at: https://gulfnews.com/business/retail/mall-of-the-metaverse-dubai-launches-first-virtual-shopping-mall-1.1676391694090 and accessed on March 7,2023
- xvi Leen Al-Rashdan (2022), Dubai's Metaverse Plan Targets 40,000 Virtual Jobs in Five Years, available at: https://www.bloomberg.com/news/articles/2022-07-19/dubais-metaverse-plan-targets-40-000-virtual-jobs-in-five-years and accessed on March 8, 2023
- xvii Jonathan Keane (2022), South Korea is betting on the metaverse and it could provide a blueprint for others, available at: https://www.cnbc.com/2022/05/30/south-koreas-investment-in-the-metaverse-could-provide-a-blueprint.html and accessed on March 2, 2023
- xviii Isa Muhammad (2022), South Korea Shares Blueprint
 Of Its Metaverse Ecosystem, available at: https://www.beyondgames.biz/19858/south-korea-shares-blueprint-of-its-metaverse-ecosystem/ and accessed on February 21 2023
- xix Mercy A. Kuo (2022), China in Blockchain, Web3, and the Metaverse, available at: https://thediplomat.com/2022/12/china-in-blockchain-web3-and-the-metaverse/ and accessed on March 13, 2013
- Accenture (2023), Building a Responsible Metaverse, available at: https://www.accenture.com/content/dam/accenture/final/capabilities/technology/technology-innovation/document/Accenture-Metaverse-Building-a-Responsible-Metaverse.pdf#zoom=40 and accessed on February 22, 2023
- xxi Nikkei (2022), NTT Docomo to invest \$4bn in Web3 using mobile infrastructure, available at: https://asia.nik-kei.com/Business/Technology/NTT-Docomo-to-invest-4bn-in-Web3-using-mobile-infrastructure and accessed on February 22, 2023

- xxii Accenture (2022), NTT DOCOMO and Accenture Collaborate to Accelerate Adoption of Web3, available at: https://newsroom.accenture.com/news/ntt-docomo-and-accenture-collaborate-to-accelerate-adoption-of-web3,htm and accessed on February 22, 2023
- xxiii Accenture (2022), Helping Brazil's slums tackle poverty; available at: https://in.accenture.com/growthmarkets/ 2site=1&blog=127&p=22604_3&referrer=mailer Helping Brazil's slums tackle poverty | Growth Markets (accenture.com) and accessed on August 3. 2022

References 24

Metaverse masters? Expect the unexpected.

Authors

Tejas Patel

Managing Director, Metaverse Continuum Business Group

Raghav Narsalay

Managing Director, Accenture Research, Accenture

Shruti Shalini

Senior Principal, Accenture Research, Accenture

Shweta Baidya

Principal, Accenture Research, Accenture

Disclaimer: This content is provided for general information purposes and is not intended to be used in place of consultation with our professional advisors. This document refers to marks owned by third parties. All such third-party marks are the property of their respective owners. No sponsorship, endorsement, or approval of this content by the owners of such marks is intended, expressed, or implied.

Acknowledgements

The authors would like to thank Rebecca Tan, Katie Burke, Louise Sabariaga, Tania Travaglini, Stephanie Thurlow, Krish Jhaveri and Piotr Pietruszynski for their research, editorial and marketing support towards this publication.

About Accenture

Accenture is a leading global professional services company that helps the world's leading businesses, governments, and other organizations build their digital core, optimize their operations, accelerate revenue growth, and enhance citizen services—creating tangible value at speed and scale. We are a talent and innovation-led company with 738,000 people serving clients in more than 120 countries. Technology is at the core of change today, and we are one of the world's leaders in helping drive that change, with strong ecosystem relationships. We combine our strength in technology with unmatched industry experience, functional expertise, and global delivery capability. We are uniquely able to deliver tangible outcomes because of our broad range of services, solutions, and assets across Strategy & Consulting, Technology, Operations, Industry X, and Accenture Song. These capabilities, together with our culture of shared success and commitment to creating 360° value, enable us to help our clients succeed and build trusted, lasting relationships. We measure our success by the 360° value we create for our clients, each other, our shareholders, partners, and communities.

Visit us at accenture.com

About Accenture Research

Accenture Research shapes trends and creates data-driven insights about the most pressing issues global organizations face. Combining the power of innovative research techniques with a deep understanding of our client's industries, our team of 300 researchers and analysts spans 20 countries and publishes hundreds of reports, articles, and points of view every year. Our thought-provoking research – supported by proprietary data and partnerships with leading organizations, such as MIT and Harvard – guides our innovations and allows us to transform theories and fresh ideas into real-world solutions for our clients.

For more information, visit accenture.com/research

Copyright © 2023 Accenture. All rights reserved.

Accenture, its logo, and New Applied Now are trademarks of Accenture.