

THE GATE TO **2050**

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ODDS:GATE

ABOUT THIS RESEARCH

This report, written by ALVA Research & Consulting and sponsored by Oddsgate, explores the main drivers of change set to reshape the future of the iGaming industry by 2050 and presents an image of the future of iGaming.

For further information on our interviewed experts, please refer to the Expert Bios Annex.

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iGAMING 2050

**OUR FOCAL ISSUE
AND TIME HORIZON**

iGAMING

(OUR FOCAL ISSUE)

The iGaming industry is a key place to observe as a source of innovation, but also as a place to act when creating futures due to its incredibly fast-paced nature.

A generic term used to define all things related to betting on the future outcome of a game, sport, or event online.

IT INCLUDES **ONLINE CASINOS**,
ONLINE SPORTS BETTING,
AND **ONLINE POKER**.

2050

(OUR TIME HORIZON)

Looking 25 years into the future is ambitious.

Over such a long timespan, our expectations become diffuse. The future of tech-enabled industries is particularly hard to strategically think about when the pace of change and innovation is so high. But that's what makes it inspiring: exploring the far future and creating it, together.

WHO'S IN 2050?

Baby Boomers (Born ~1946–1964)

The very few still alive will be in their late 80s and 90s, likely relying on advanced healthcare and longevity innovations.

Generation X (Born ~1965–1980)

In their 70s and 80s, they will be among the last working elders, possibly redefining retirement with extended careers.

Millennials (Born ~1981–1996)

In their 50s and 60s, this generation will hold leadership roles in politics, business, and science, making crucial decisions about climate, technology, and society.

Generation Z (Born ~1997–2012)

In their 30s through 50s, they will be at the peak of their careers, responsible for driving innovation and managing global challenges.

Generation Alpha (Born ~2013–2025)

Entering adulthood, they will shape the cultural, technological, and economic landscape of the second half of the 21st century.

Generation Beta (Born ~2025–2040)

The youngest, growing up entirely in a world defined by AI, climate policies, and post-digital realities.

OBJECTIVE

&
METHODOLOGY

Generate an
evidence-based
**‘Image of the
Future’** for the
iGaming industry
in **2050**

Going forward, **people and technology** will keep driving transformation across all areas of life, impacting how we:

WORK

RELAX

LOVE

EAT

SLEEP

Anticipating possible future scenarios helps us **manage anxiety**,
on a personal level, and **navigate ambiguity**,
on an industry level.

HOW DO WE MAKE OUR **IMAGE OF THE FUTURE** EVIDENCE-BASED? WE...

GATHER

insights on which directions the world is moving towards;

GENERATE

a probable image of the future for the iGaming industry in 2050;

SHARE

this image of the future to spark conversations and actions shaping the future.

GATHER:

WHERE DO WE LOOK?

OUR THREE PILLARS:

1

Literature
Review

2

Additional
Desk-Based
Research

3

Semi-
Structured
Expert
Interviews

While our focus is on the future of iGaming, gathering complete, varied, and relevant information also requires considering the future of the world at large.

Therefore, some of our sources are generalist, while others are industry-specific or industry-adjacent.

This information-gathering process forms the foundation of our Horizon Scanning.

GENERATE:

USING WHAT METHOD?

After gathering relevant insights, we have to organise them into a snapshot of a future that is plausible, probable and internally coherent.

We must identify areas of both consensus and dissensus among experts and explore how these areas interact within the iGaming industry of 2050.

OUR METHODOLOGY

Business Scenario Planning:
the “**To The Best Of Our Knowledge Today**”
approach

THIS ORGANISATION OF
**FUTURE-ORIENTED
INFORMATION** RESULTS IN
OUR IMAGE OF THE FUTURE.

THE BUSINESS SCENARIO PLANNING METHOD (BSP)

The BSP method, developed by ALVA, helps deal with the visionary-realistic paradox by offering the simplicity and clarity of a single image of the future, while still transparently exploring the uncertainty that comes with exploring the future.

It applies a “to the best of our knowledge today” approach that is not meant to emulate business as usual but rather identify patterns of change and provisional knowledge about the future.

IN OTHER WORDS, WHAT IS THE
FUTURE THAT WE COLLECTIVELY
ANTICIPATE IN THE **PRESENT**?

SHARE:

WHY AND HOW?

WHY?

To effectively put an Image of the Future to use, we must remain agile and adaptable, proactively continuing our horizon scanning efforts.

This will help guide a future-proof organization that is aware of possible futures, conscious of plausible futures, and prepared to navigate probable futures, all while striving toward the preferable future.

HOW?

By consistently thinking about the future, stakeholders in the iGaming industry will be better prepared to face it – and, most importantly, to shape it.

However, the future is never created by one agent alone. By sharing a collective image of the future, we gain new perspectives and insights.

GATHER: HORIZON SCANNING

KEY CONTEXTUAL AND TRANSACTIONAL VARIABLES

THE NEAR FUTURE AT A GLANCE

Online gambling in **Oceania** is expected to reach USD 11.39bn in 2024.

(Statista, 2024)

Online gambling in **Latin America** is expected to quadruple in size and reach USD 6.75bn by 2027.

(Vixio, 2023)

Africa has a growing online gaming market, expected to have reach USD 1.85bn in 2024.

(Statista, 2024)

The **global annual revenue** for iGaming is projected to reach USD 153bn by the end of the decade in 2030.

(Grand View Research, 2023)

Revenue of online gambling in **Europe** is expected to show an annual growth rate (CAGR 2024-2028) of 4.72%, resulting in a projected market volume of USD 56.45bn by 2028.

(Statista, 2024)

The **Chinese** iGaming market is estimated to reach USD 15.7bn by 2028.

(MENAFN, 2024)

Global revenue from the global iGaming sector across all products is projected to grow to USD 249.4bn by 2029, representing a five-year compound annual growth rate of 10.6% on the estimated total for 2024.

(H2 Gambling Capital, 2024)

Brazil's National Games and Lotteries Association projected that online betting will generate around USD 3bn in tax revenue by 2025. The total tax burden on betting companies will reach 36%, including a 12% tax on gross income. This regulatory shift is set to create 60,000 new jobs across various sectors.

(ANJL, 2024)

CONTEXTUAL

(driving forces / megatrends)

Social
Technological
Economic
Environmental
Political

CONTEXTUAL VARIABLES

These variables influence the entire context in which the industry operates — global drivers that will shape the world and, consequently, impact iGaming.

iGAMING
IN **2050**

TRANSACTIONAL

(key factors for the industry)

Industry Clients
Payment Systems
Industry Players
Industry Suppliers
Industry Regulation

CONTEXTUAL VARIABLES

ECONOMIC

- C10.** Globalisation?
- C11.** New market hierarchy
- C12.** Global debt levels
- C13.** Knowledge and sharing economy
- C14.** Global investment in the green transition

SOCIAL

- C1.** Demographic change
- C2.** Social disparities
- C3.** Migration
- C4.** Identity and cultural diversity
- C5.** Global health crises

ENVIRONMENTAL

- C15.** Climate change and biodiversity loss
- C16.** Energy transition
- C17.** Urbanisation and mobility

TECHNOLOGICAL

- C6.** Tech transformation and convergence
- C7.** Race for innovation
- C8.** Health & biotech
- C9.** Humans/machines

POLITICAL

- C18.** Political (dis)order
- C19.** Risk and (in)security

SOCIAL

CONTEXTUAL VARIABLES

DEMOGRAPHIC CHANGE

SOCIAL VARIABLES

C1. Demographic change

C2. Social disparities

C3. Migration

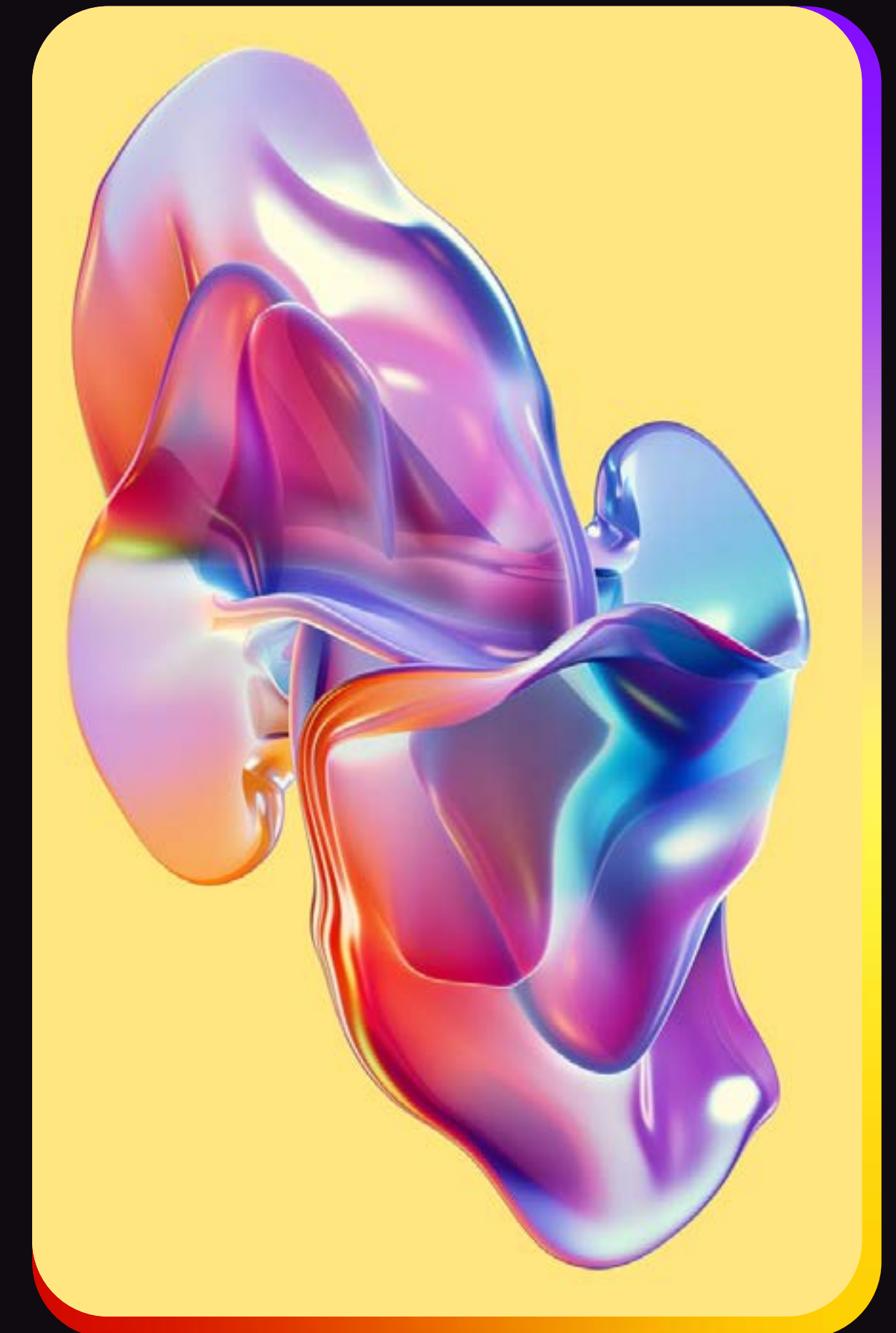
C4. Identity and cultural diversity

C5. Global health crises

While the world population is set to continue growing, the current working-age demographic group is set to shrink.

Population aging is a global trend that cannot be undone. It arises from the ongoing demographic shift – characterized by longer life expectancies and smaller family sizes – that is occurring even in nations with younger populations.

This continued aging of the population is largely due to improvements in healthcare, leading to longer (healthier?) lives for many people.



SOCIAL DISPARITIES

SOCIAL VARIABLES

C1. Demographic change

C2. Social disparities

C3. Migration

C4. Identity and cultural diversity

C5. Global health crises

The concentration of wealth persists, widening the gap between the ultra-rich, middle class, poor and extremely poor, while intensifying conflicts and social tensions. Frequent cycles of rising unemployment further exacerbate the situation.

Corporate social responsibility and the sharing of corporate value – viewing companies as central drivers of social and environmental impact – emerge as efforts to mitigate disparities

and promote a more equitable and sustainable environment, particularly from a long-term, intergenerational justice perspective.

MIGRATION

SOCIAL VARIABLES

C1. Demographic change

C2. Social disparities

C3. Migration

C4. Identity and cultural diversity

C5. Global health crises

The redistribution of the world's population is expected to continue in 2050. Most migrants are not refugees or asylum seekers, but rather relocate for economic or educational reasons.

However, the number of climate refugees is projected to sharply increase, reaching as many as 1.2 billion people by 2050, according to one forecast by the Institute for Economics and Peace (2020).



IDENTITY AND CULTURAL DIVERSITY

SOCIAL VARIABLES

C1. Demographic change

C2. Social disparities

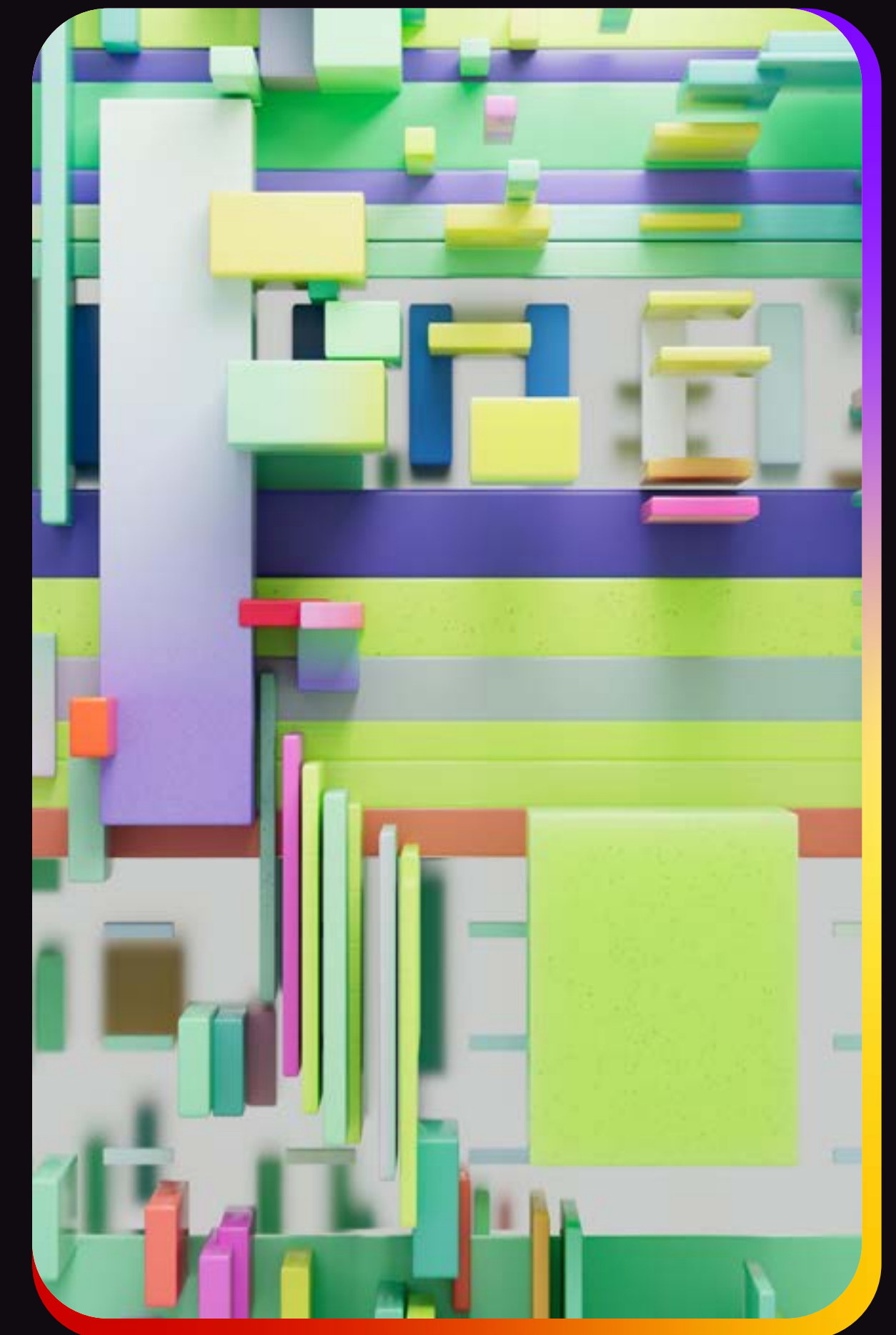
C3. Migration

C4. Identity and cultural diversity

C5. Global health crises

New generations are shaping the present and future with unique expectations and ambitions. The transformation of the idea of “identity” and the increase in cultural diversity are giving rise to greater complexity. On the flipside, a visible return to traditionalism from several corners of society emerges as a counter movement.

Greatly transformed by the impacts of social networks, relationships are changing, evolving towards a logic of many weak, loose relationships, and few strong, closer relationships.



GLOBAL HEALTH CRISES

SOCIAL VARIABLES

C1. Demographic change

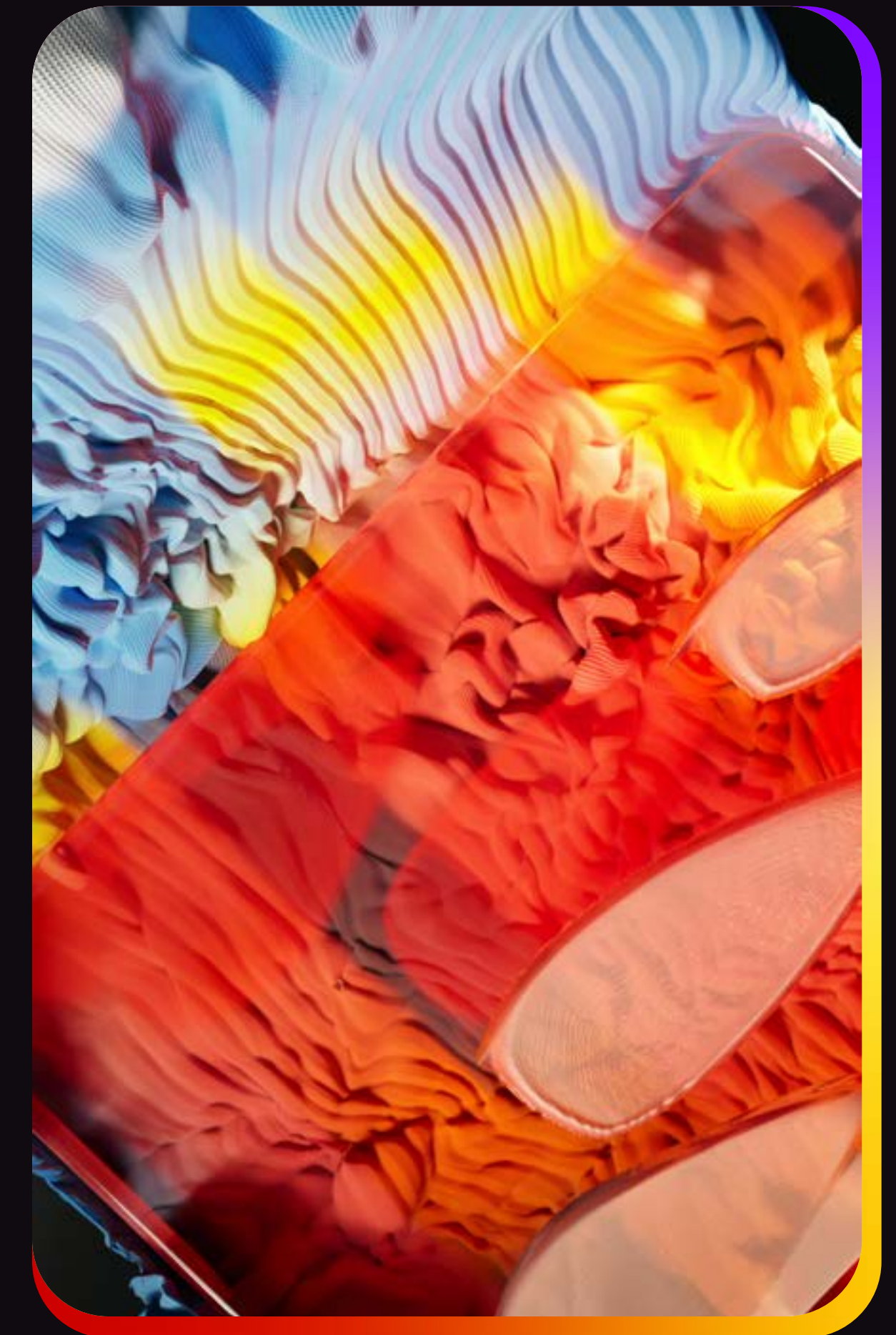
C2. Social disparities

C3. Migration

C4. Identity and cultural diversity

C5. Global health crises

Health challenges are expected to proliferate in the future. As the population lives longer under worsening climatic conditions, healthcare inequalities will become more pronounced, epidemics will dominate governmental agendas, and new technologies will aim to radically reshape this reality. Healthcare and caregiving are set to play a central role in shaping the future.



TECHNOLOGICAL

CONTEXTUAL VARIABLES

TECH TRANSFORMATION AND CONVERGENCE

TECHNOLOGICAL VARIABLES

C6. Tech transformation and convergence

C7. Race for innovation

C8. Health & biotech

C9. Humans/machines

The acceleration of AI and technological convergence will revolutionise our daily lives, presenting both significant opportunities and unique risks. Digital networks and new media will be omnipresent, while frontier technologies have the potential to transform personal interactions and business models.

AI in particular will profoundly reshape the economy and society, impacting core processes such as production, authorship, and decision-making. The global debate around its regulation and use will continue to evolve.

While AI and Big Data exponentially increase our capacity for understanding and action, they also raise concerns about a society that becomes increasingly “less human” and the vulnerability of critical infrastructures. As technology permeates every aspect of life, technological risks are equally widespread, with the potential for massive disruption.

RACE FOR INNOVATION

TECHNOLOGICAL VARIABLES

C6. Tech transformation and convergence

C7. Race for innovation

C8. Health & biotech

C9. Humans/machines

As it becomes increasingly clear that technology will be a primary driver of economic growth and political influence, countries will compete for innovation by investing heavily in R&D, educational institutions, and incentivising companies that reinvest profits into research. This momentum will also drive many countries to invest in domestic production of key components for tech products.

Meanwhile, developing countries lacking the resources to bridge the innovation and technology gap will fall further behind in a world increasingly dominated by machine intelligence.



HEALTH & BIOTECH

TECHNOLOGICAL VARIABLES

C6. Tech transformation and convergence

C7. Race for innovation

C8. Health & biotech

C9. Humans/machines

In response to the global health crises of the future, biotech will expand and revolutionise healthcare, offering great possibilities and presenting complex challenges. From the development of modified and synthetic organisms to editing the human genome, the range of medical applications is vast, including the improvement of human capabilities and the fight for active and healthy longevity.

At the same time, smart and sustainable materials, such as bioplastics, are emerging as innovative solutions to environmental problems. New foods, such as functional and genetically modified foods, challenge traditional concepts of food production. These innovations lead to the convergence of traditionally separate markets – such as food, pharmaceuticals and cosmetics – accompanied by an intensification of rivalry and competition.

HUMANS / MACHINES

TECHNOLOGICAL VARIABLES

C6. Tech transformation and convergence

C7. Race for innovation

C8. Health & biotech

C9. Humans/machines

The rapid advancement of innovation and cutting-edge technology is bound to face pushback and resistance, particularly from those who feel their jobs or individual freedoms are threatened by the convergence of humans and machines. At the same time, while regulation and law-making will struggle to keep pace with the speed of new tech developments, humans may quickly become enamored with the promises of these technologies. Both of these reactions carry societal drawbacks.



ECONOMIC

CONTEXTUAL VARIABLES

GLOBALISATION?

ECONOMIC VARIABLES

C10. Globalisation?

C11. New market hierarchy

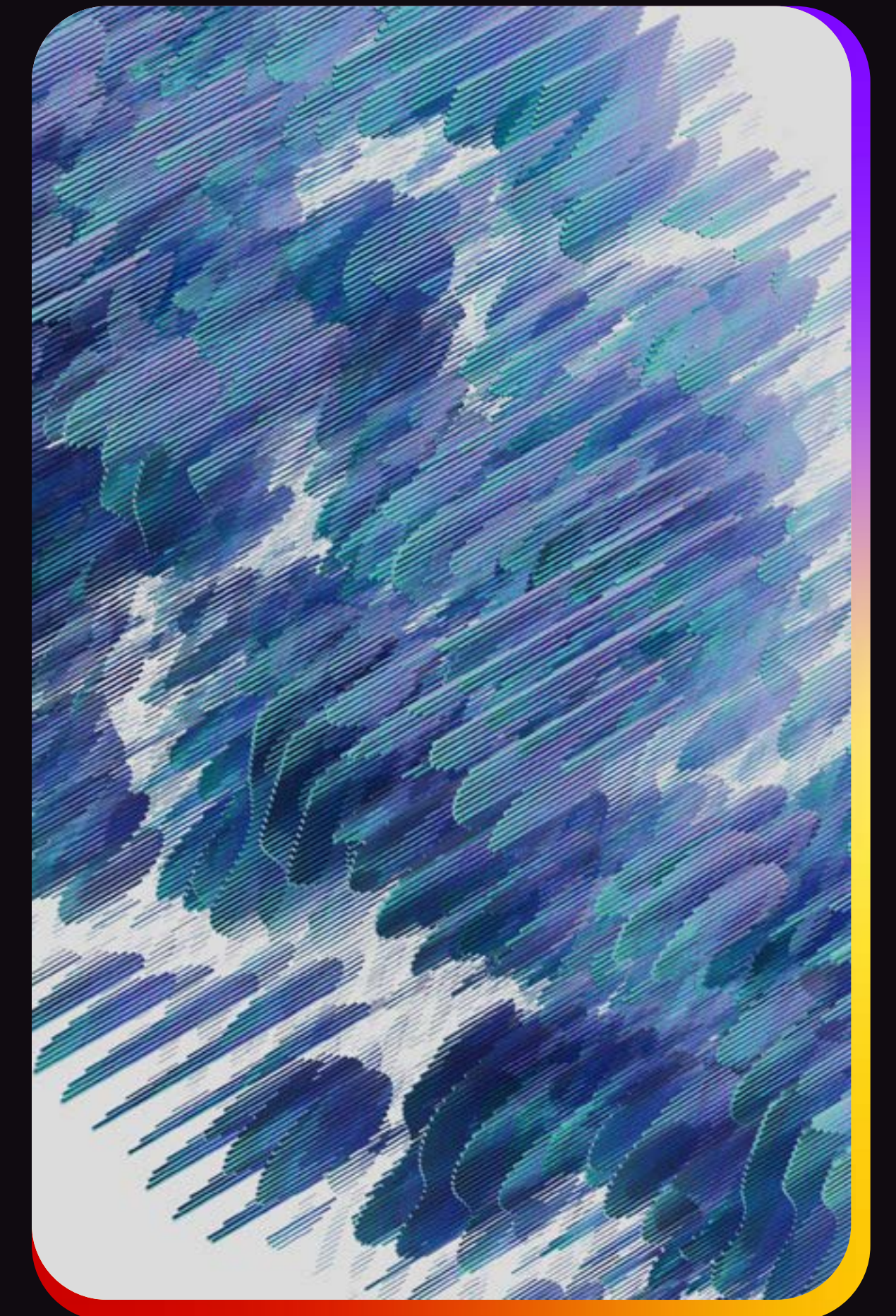
C12. Global debt levels

C13. Knowledge and sharing economy

C14. Global investment in the green transition

While it may be tempting to assume that the unprecedented rate of globalisation seen in the mid-2000s will continue indefinitely, evidence suggests that globalisation has slowed since the 2008 financial crisis.

The already high level of global trade tensions, along with geopolitical tensions, sustainability concerns, and shifting perceptions of what products hold the most strategic value (are tech components the “new oil”?), indicates that we should not expect a nearly fully globalized world by 2050.



NEW MARKET HIERARCHY

ECONOMIC VARIABLES

C10. Globalisation?

C11. New market hierarchy

C12. Global debt levels

C13. Knowledge and sharing economy

C14. Global investment in the green transition

The economic hegemony of the “Western world,” consolidated throughout the 19th and 20th centuries, is fading – along with its dominance over political and cultural norms.

Unprecedented growth in various Asian markets, led by China, alongside projected expansion in Global South economies beyond 2050, suggests we must move beyond the traditional focus on Western markets as primary growth targets. Instead, we should prioritize a deeper understanding of the markets poised to lead the future economy.



GLOBAL DEBT LEVELS

ECONOMIC VARIABLES

C10. Globalisation?

C11. New market hierarchy

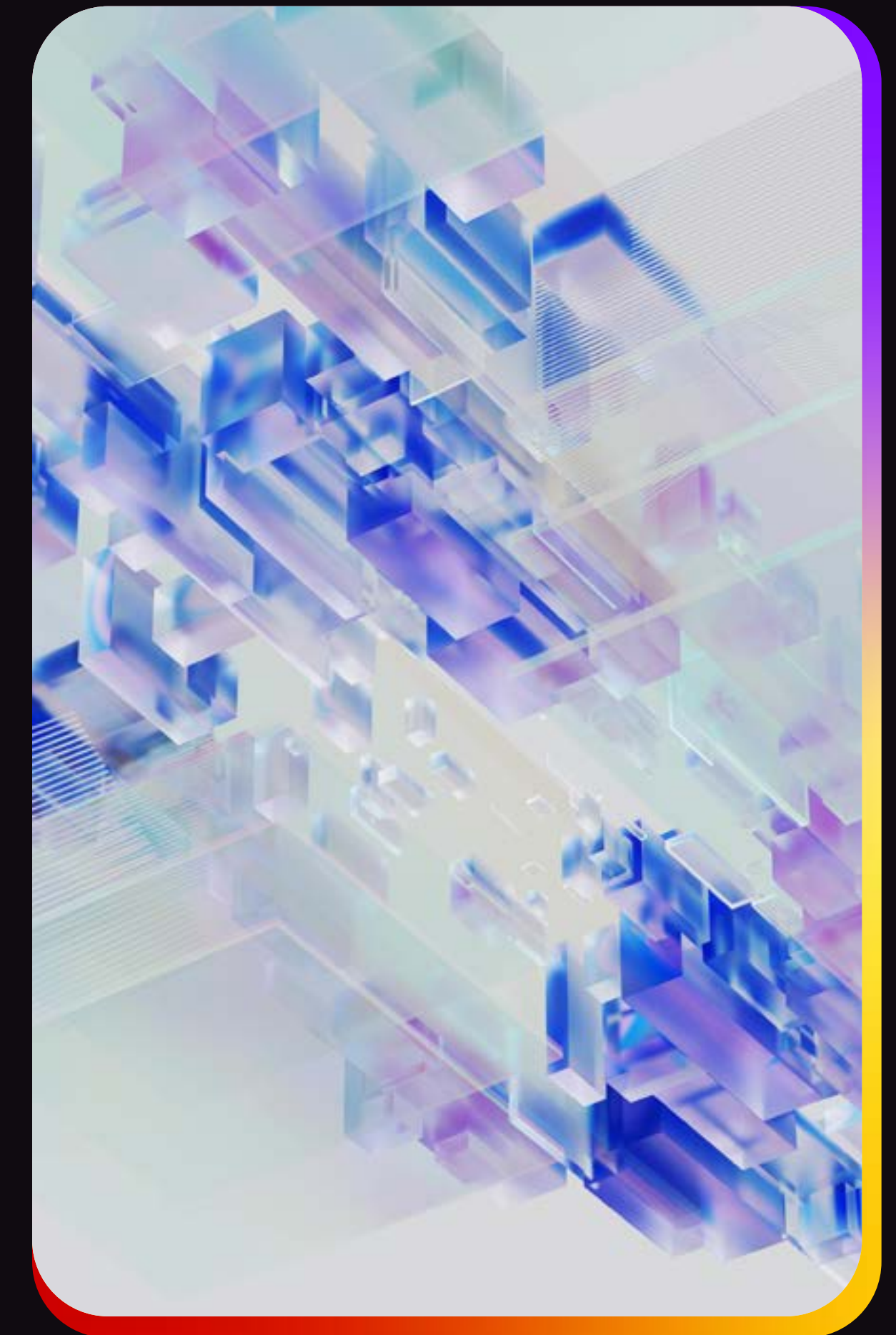
C12. Global debt levels

C13. Knowledge and sharing economy

C14. Global investment in the green transition

Global debt – both governmental and private – has risen dramatically and is unlikely to decline significantly in the next two decades.

In particular, following the 2008 financial crisis and the COVID-19 pandemic, governments borrowed heavily to maintain economic stability and social cohesion, funding national fiscal incentives, infrastructure projects, and social initiatives



KNOWLEDGE AND SHARING ECONOMY

ECONOMIC VARIABLES

C10. Globalisation?

C11. New market hierarchy

C12. Global debt levels

C13. Knowledge and sharing economy

C14. Global investment in the green transition

The knowledge and sharing economy is reshaping the world of work, driven by higher education levels, lifelong learning, and the growing recognition of innovation as a key competitive advantage.

This transformation is fostering a global knowledge-based workforce – often referred to as the creative class – while expanding opportunities for collaboration and online learning, breaking down geographical barriers.

As digital goods and services derive their value primarily from data, knowledge, and creativity, new business models and connection-driven markets are emerging. These trends fuel the rise of the platform economy and collaborative consumption, leveraging economies of scale but also posing risks of market dominance and potential abuses of power.

GLOBAL INVESTMENT IN THE GREEN TRANSITION

ECONOMIC VARIABLES

C10. Globalisation?

C11. New market hierarchy

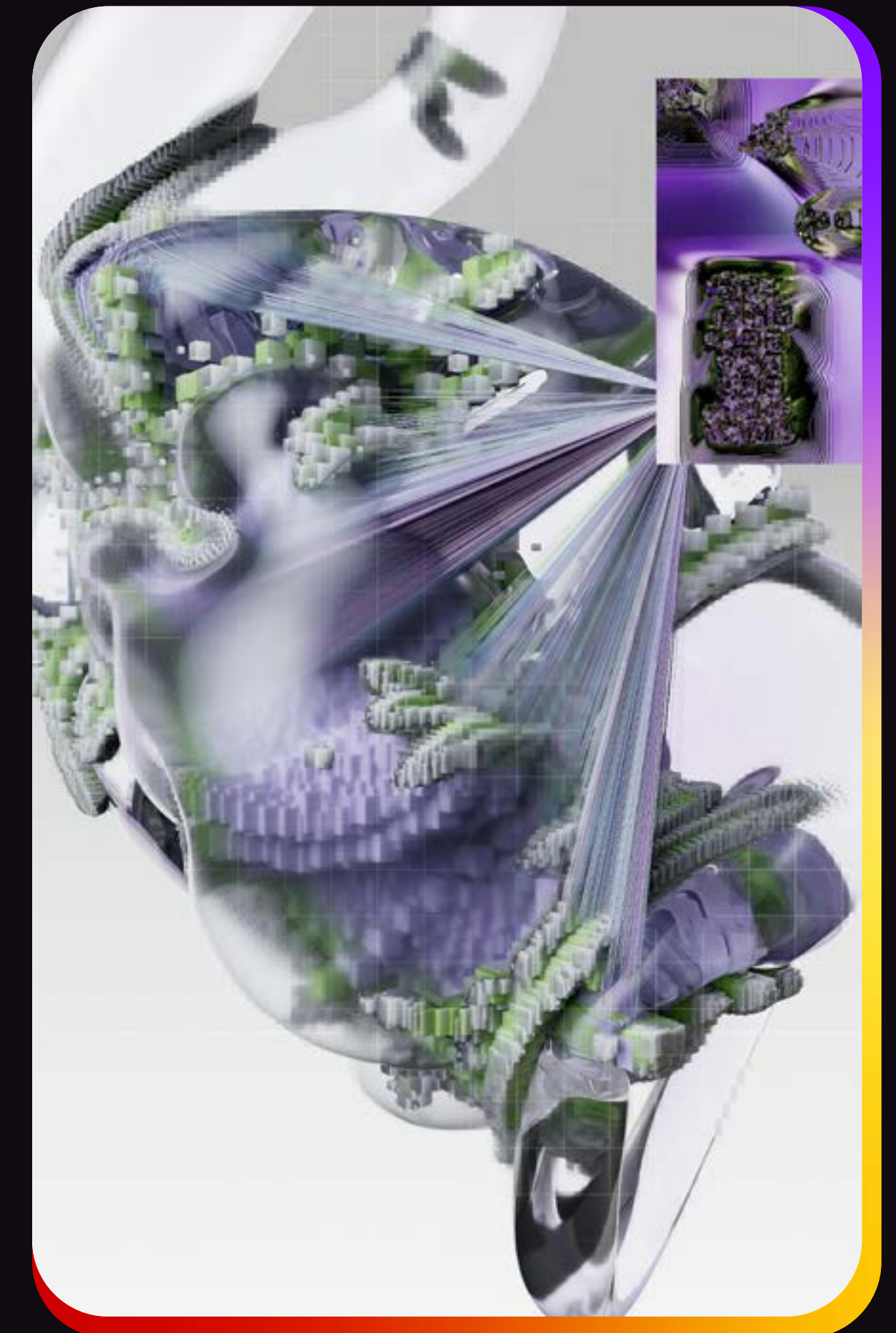
C12. Global debt levels

C13. Knowledge and sharing economy

C14. Global investment in the green transition

The goal of achieving Net Zero by 2050 has always been ambitious, yet current sustainability policies fall far short of making it a reality.

A major challenge is the substantial investments required to implement the measures needed for a net-zero future. Even if this target is unlikely to be fully met, progress remains essential. As a result, we must anticipate a significant increase in global investment in the green transition



ENVIRONMENTAL

CONTEXTUAL VARIABLES

CLIMATE CHANGE AND BIODIVERSITY LOSS

ENVIRONMENTAL VARIABLES

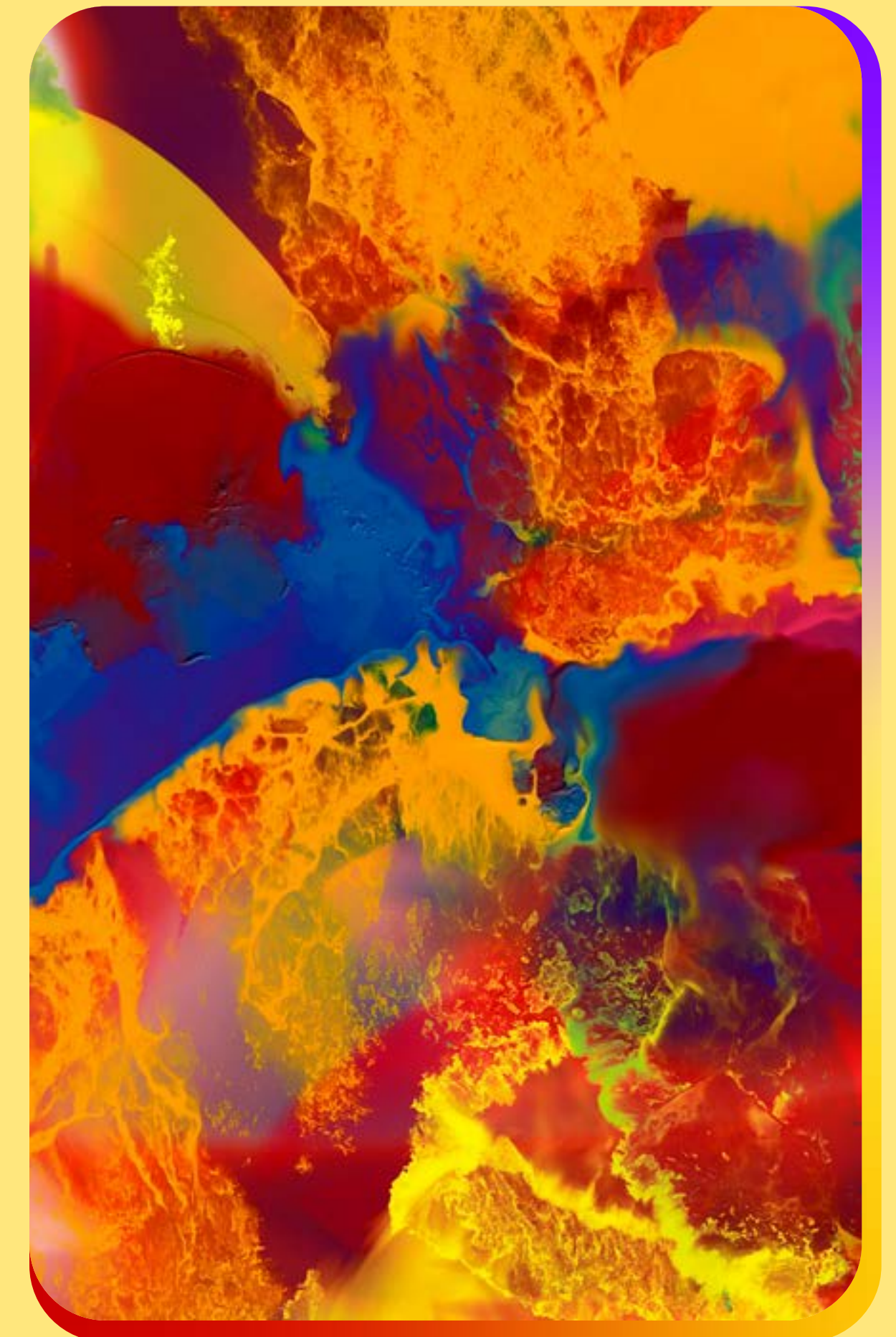
C15. Climate change and biodiversity loss

C16. Energy transition

C17. Urbanisation and mobility

Climate change is an undeniable reality, and its impacts will likely be even more pronounced by 2050. Simultaneously, biodiversity loss is expected to accelerate, affecting our lives and economies in ways that may be deeper and more far-reaching than they initially appear: more than half the world's GDP is dependent on nature.

While investment in the green transition can help mitigate or slow these trends, much remains to be done — and further intensification of adverse phenomena is inevitable.



ENERGY TRANSFORMATION

ENVIRONMENTAL VARIABLES

C15. Climate change and biodiversity loss

C16. Energy transition

C17. Urbanisation and mobility

Massive governmental and private investments are being directed toward renewable energy and more sustainable practices. However, fossil fuels are still expected to play a very significant role in the global energy mix by 2050.

While the share of energy from renewables will continue to grow, this transition is also reshaping the demand for raw materials — introducing new challenges along the way.



URBANISATION AND MOBILITY

ENVIRONMENTAL VARIABLES

C15. Climate change and biodiversity loss

C16. Energy transition

C17. Urbanisation and mobility

The exponential growth of megacities and global cities will bring unprecedented economic and political power, but also significant challenges, such as pollution and the pressure of maintaining critical infrastructure.

The ongoing revolution in mobility presents potential solutions to some of these challenges. By leveraging electric mobility and integrating these systems into smart cities that adopt a holistic approach to urban resources, we can create more sustainable and efficient urban environments.



POLITICAL

CONTEXTUAL VARIABLES

POLITICAL (DIS)ORDER

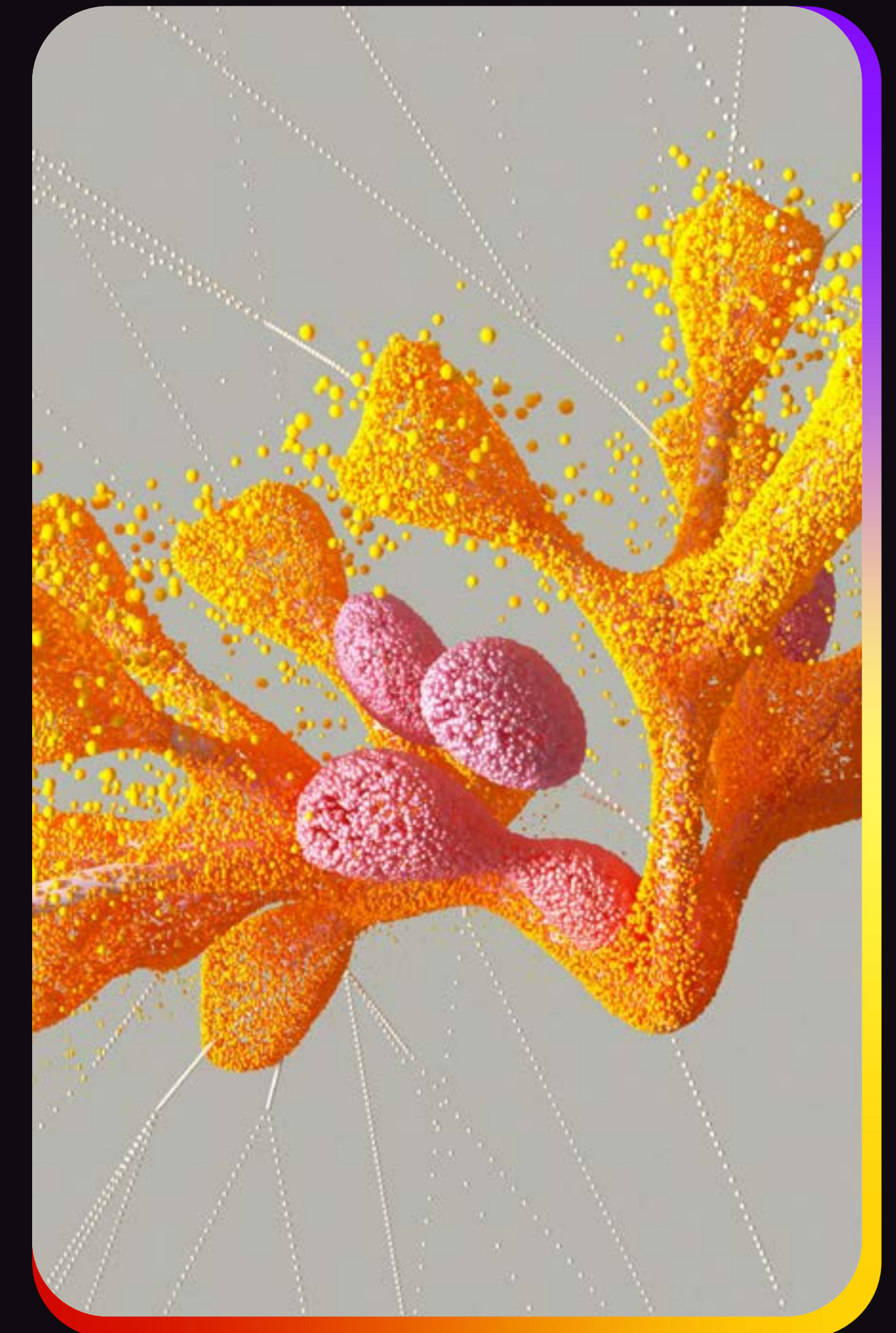
POLITICAL VARIABLES

C18. Political (dis)order

C19. Risk and (in)security

Recent global shocks to the geopolitical order have revealed a shift in the sources of power, moving beyond economic and military influence to include technological and informational power, which is expected to become increasingly relevant in the future.

One of the most noticeable consequences of this shift is the global movement away from liberal democracy, which may intensify by 2050.



RISK AND (IN)SECURITY

POLITICAL VARIABLES

C18. Political (dis)order

C19. Risk and (in)security

While perceptions of security and risks vary by region and time horizon, a global rise in uncertainty has been evident over the past two decades and is likely to continue growing by 2050.

The primary perceived risks for the next 10 years are geopolitical, economic, and environmental. However, the increasing likelihood of technological risks emerging and potentially surpassing these should also be considered.



CONTEXTUAL

(driving forces / megatrends)

Social
Technological
Economic
Environmental
Political

**iGAMING
IN 2050****TRANSACTIONAL**

(key factors for the industry)

Industry Clients
Payment Systems
Industry Players
Industry Suppliers
Industry Regulation

**TRANSACTIONAL
VARIABLES**

These variables are specific to the future of iGaming. While similar factors may exist in other industries, these choices reflect iGaming's unique portfolio of clients, suppliers, and other stakeholders.

TRANSACTIONAL VARIABLES

T1. Global rivalry...

T2. ...Local offerings

T3. Breach of security

T4. Blockchain as infrastructure

T5. Invisible interface

T6. XG

T7. AI as the exponential multiplier

T8. 404 Personalisation not found

T9. Wanna meta-meet?

T10. The ABCs of CRM

T11. e-Pay me!

T12. Retention is the new black

T13. Wiggle room

T14. Armchair sports

T15. Harmonised regulation?

T16. Compliance is cool

T17. Responsible gaming

T18. Can you bet on anything?

T19. Workforce in flux

T20. Here we are now,
entertain us

T21. Looking beyond
carbon

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GLOBAL RIVALRY...

By 2050, the iGaming market will likely reach a stage of full global saturation and maturity. With technological advancements accelerating growth, new entrants may find it difficult to penetrate a highly competitive and consolidated landscape.

Emerging markets in Africa and South America, which are now experiencing rapid growth, will likely stabilize, leaving limited space for expansion.



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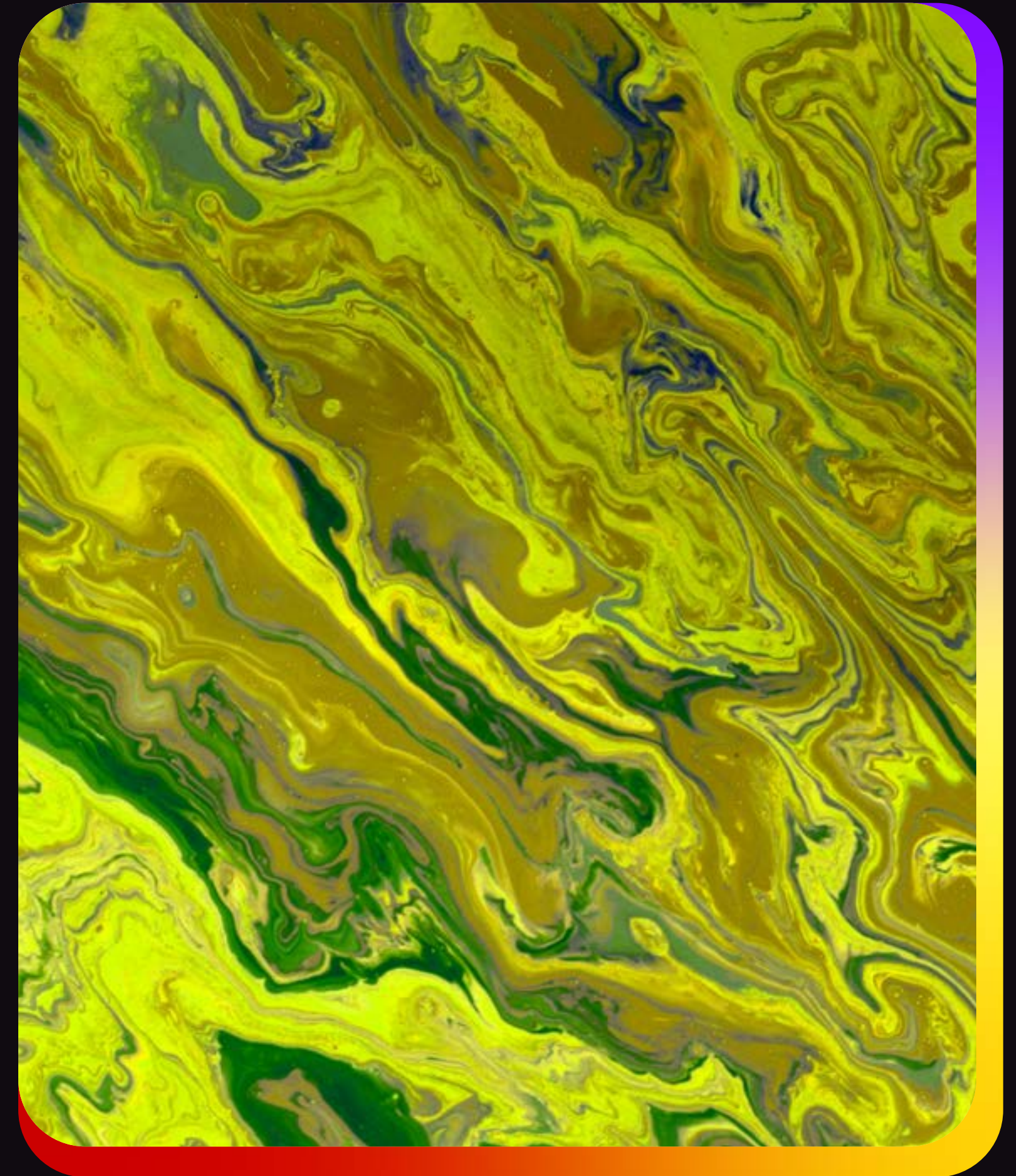
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...LOCAL OFFERINGS

Localisation will become a key differentiator for iGaming platforms.

AI-driven analytics will tailor game offerings and marketing strategies based on players' cultural preferences, languages, and regional trends. Multilingual, AI-supported customer support will further enhance player satisfaction.



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BREACH OF SECURITY

Cybersecurity will evolve significantly, with quantum computing and AI combating sophisticated threats.

Anti-bot measures will include advanced behavioural analysis and decentralized verification systems.



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BLOCKCHAIN AS INFRASTRUCTURE

Blockchain will likely underpin most iGaming platforms, ensuring transparency, fairness, and security.

SMART CONTRACTS WILL MANAGE
**PAYOUTS, COMPLIANCE, AND
GAME MECHANICS**, REDUCING
OPERATIONAL COMPLEXITY.

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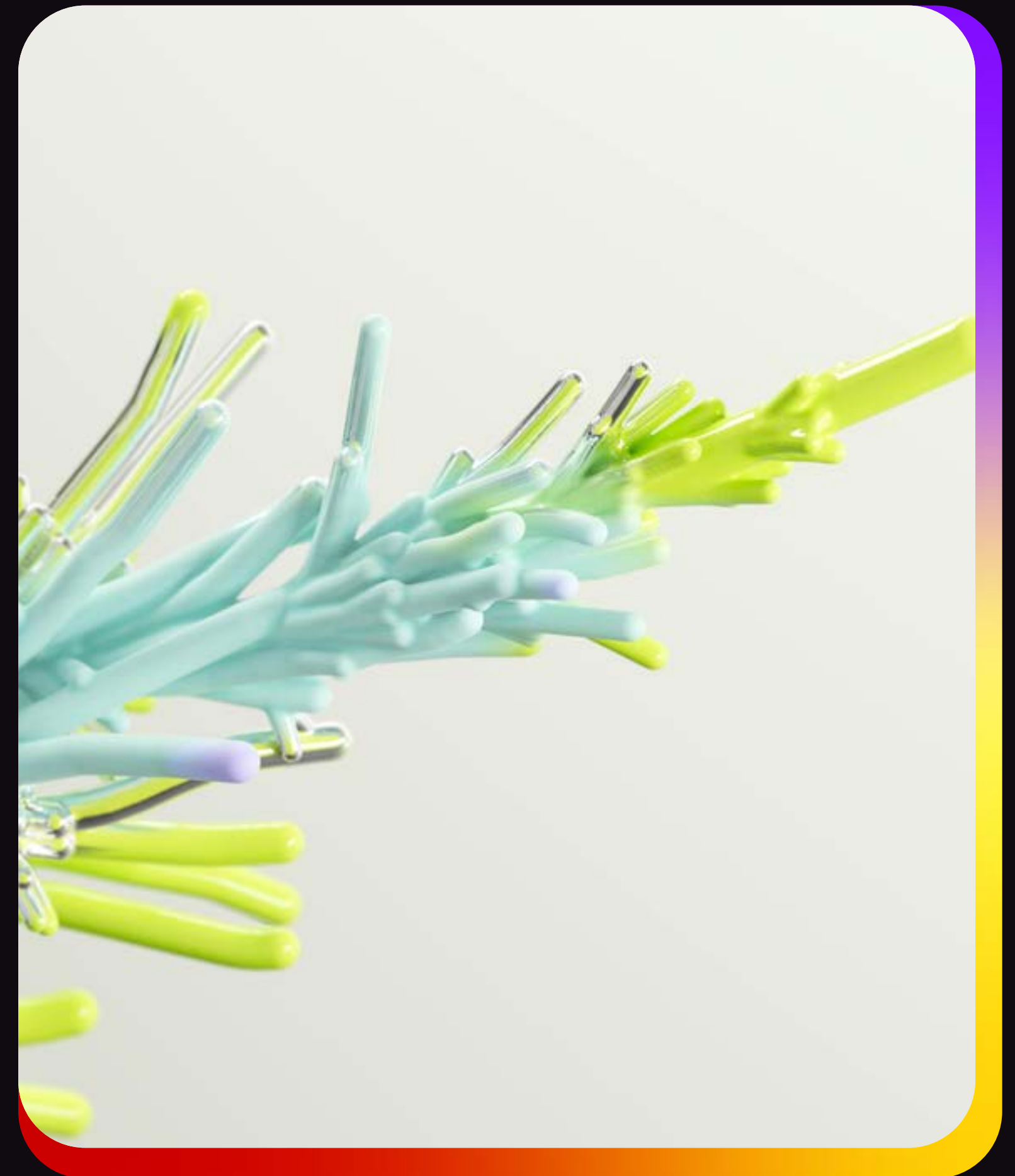
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INVISIBLE INTERFACE

Wearable devices could become integral to gameplay. Virtual Reality (VR) and Augmented Reality (AR) will enable hyper-immersive gameplay, including virtual casinos, sports betting arenas, and live dealer experiences in fully interactive environments.

Biotech may bring biofeedback-driven games that adapt to players' physiological responses, creating more immersive and personalized gaming experiences.



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XG

Given the historical pace of cellular network advancements, we could be operating on 6G or 7G networks by 2050.

This will provide the high-speed connectivity required for advanced iGaming applications: seamless gameplay across devices, real-time interactions in VR and AR environments, holographic streaming of live events...



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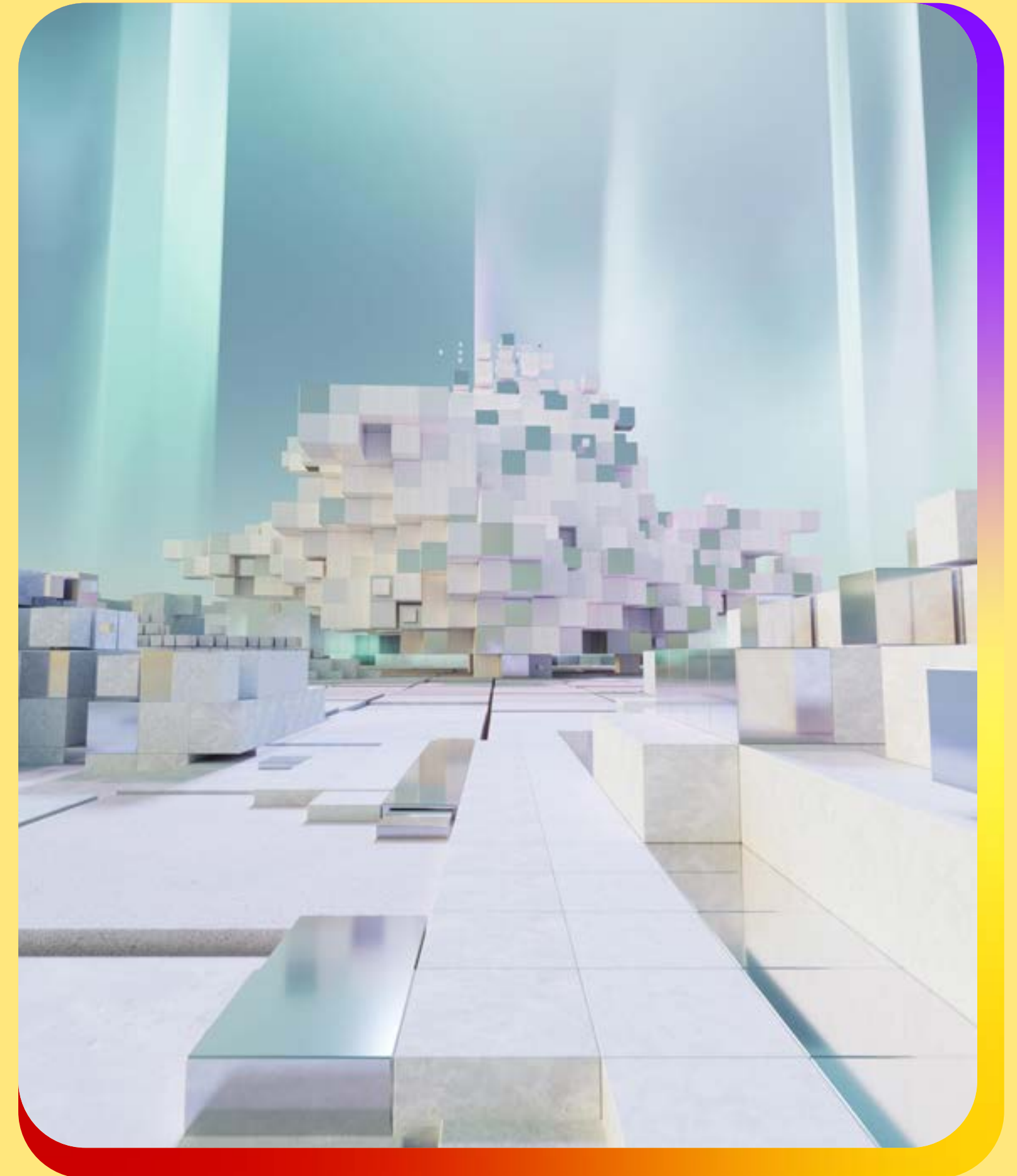
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AI AS THE **EXPONENTIAL** **MULTIPLIER**

AI will simplify the creation of iGaming platforms by automating game development, marketing, compliance, and operations, drastically reducing barriers to entry.

By reducing both the knowledge and funds necessary to create an iGaming platform, this may lead to a proliferation of small, low-cost and low-margins operators.



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404 – PERSONALISATION NOT FOUND

Personalisation will reach unprecedented levels, with AI tailoring player experiences, from dynamic game recommendations to personalized marketing, bonuses, and even real-time interactions based on behavioural data.

AS PLAYERS COME TO EXPECT AND SEEK OUT THIS **PERSONALISATION**, ANY IGAMING PLATFORM NOT DELIVERING IT WILL BE **LEFT BEHIND**.

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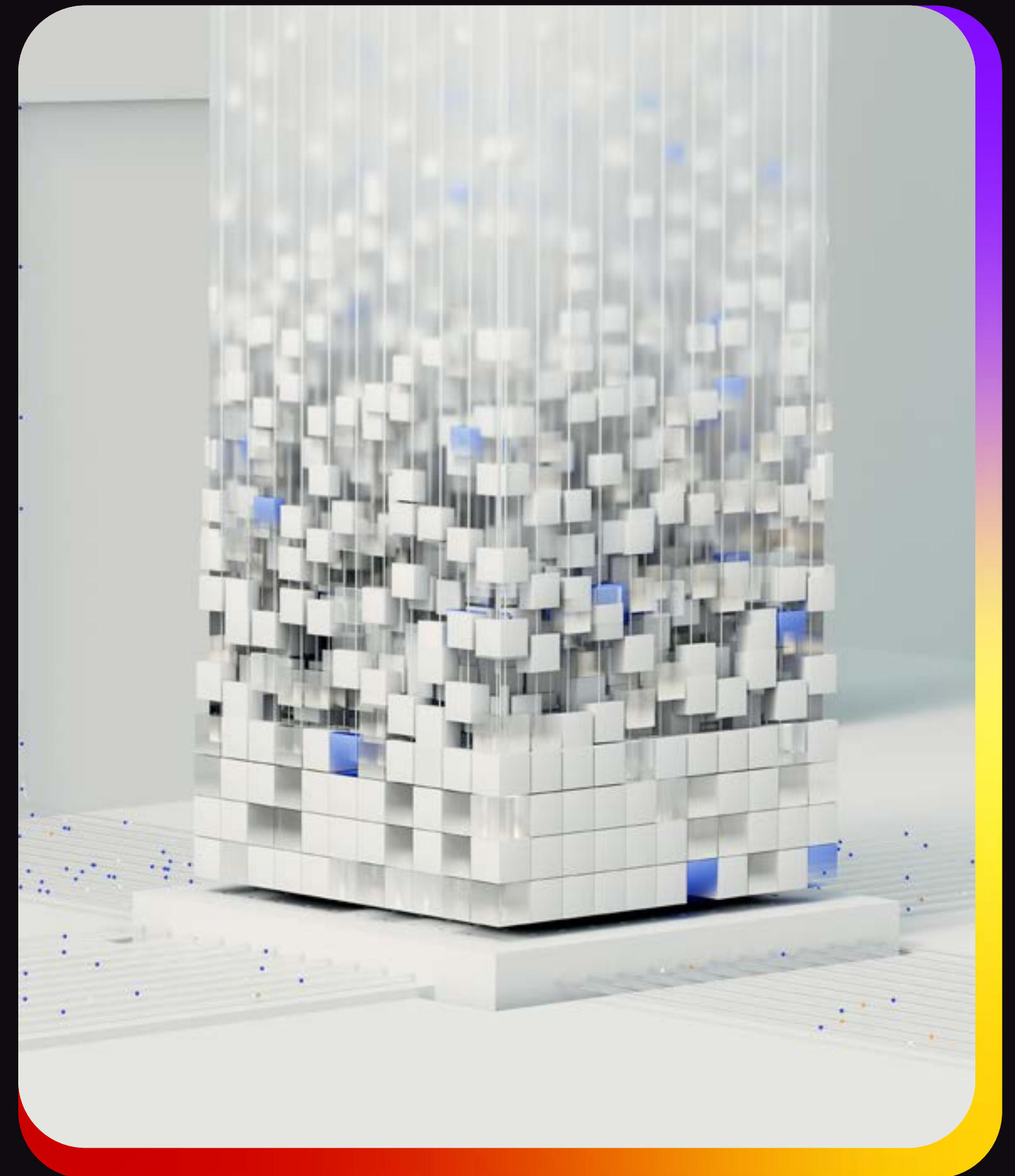
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WANNA **META-MEET?**

The metaverse will revolutionize iGaming, creating immersive 3D environments where players can bet but also socialize, compete, and explore.

Virtual poker rooms, betting arenas, and e-sports stadiums will thrive within interconnected metaverse ecosystems.

Socially, these spaces will become hubs for community building, blending gaming with social interaction.



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THE ABCS **OF CRM**

The Customer Relationship Management (CRM) of the future will likely be AI-driven, predictive, and hyper-personalized, focusing on long-term player retention through tailored engagement strategies.

AI-powered marketing strategies will revolutionise player acquisition and retention.



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EPAY ME!

Cryptocurrencies and central bank digital currencies (CBDCs) are likely to become the preferred payment methods in iGaming.

INSTANT, SECURE TRANSACTIONS WILL
SIMPLIFY CROSS-BORDER
PAYMENTS, WHILE CRYPTO REWARDS
ENHANCE PLAYER LOYALTY.

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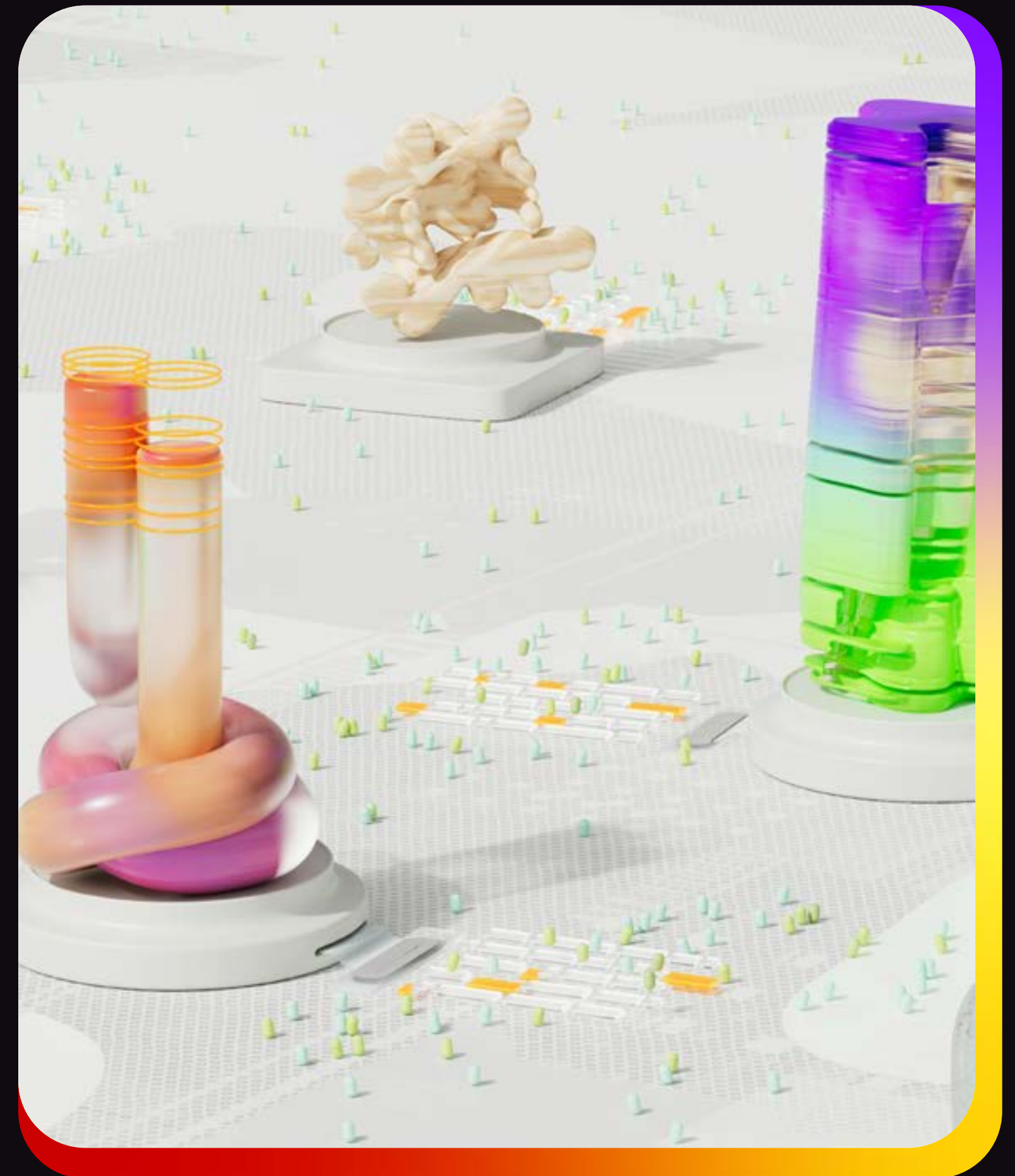
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RETENTION IS THE NEW BLACK

The proliferation and subsequent saturation of the industry, enabled by AI-powered platforms, will mean retention becomes more vital than ever.

Lifetime value per player can increase through improved retention strategies, including personalized offers, loyalty programs, and seamless user experiences. This focus on value creation is what will bring sustained profitability in a saturated market.



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WIGGLE ROOM

While barriers to entry may decrease by 2050, this also means the strategic space to turn into a top player and obtain organic growth will dwindle.

The iGaming industry will see continued mergers and acquisitions (M&As) as companies consolidate to compete globally, focusing on acquiring innovative startups and expanding into new verticals.



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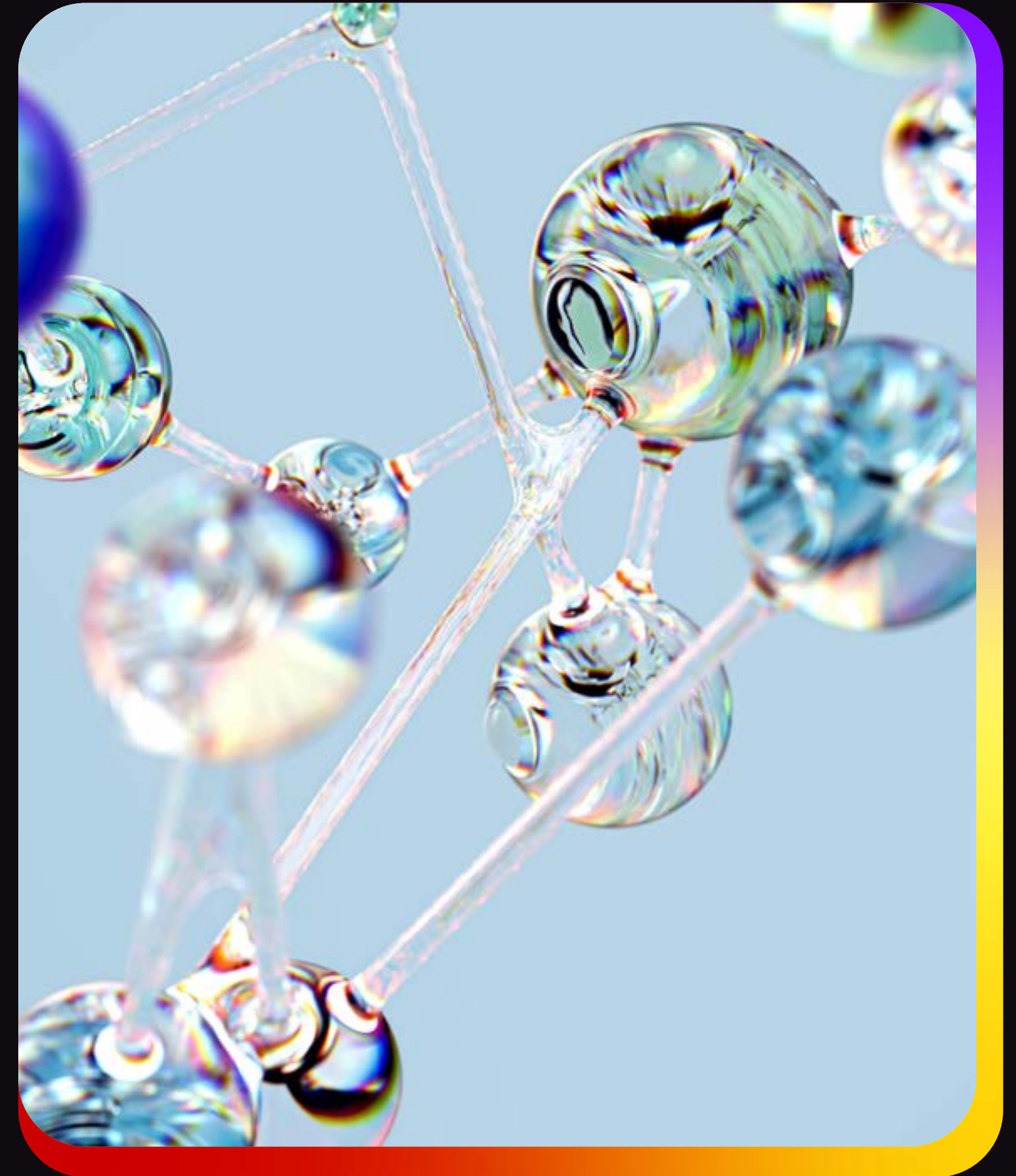
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ARMCHAIR SPORTS

The popularity of e-sports and fantasy sports will continue to rise, integrating AR/VR experiences, live holographic tournaments, and even real-time betting.

This boom in popularity means e-sports and fantasy sports are likely to become integral to iGaming platforms, attracting massive audiences and driving increasing amounts of betting interest.



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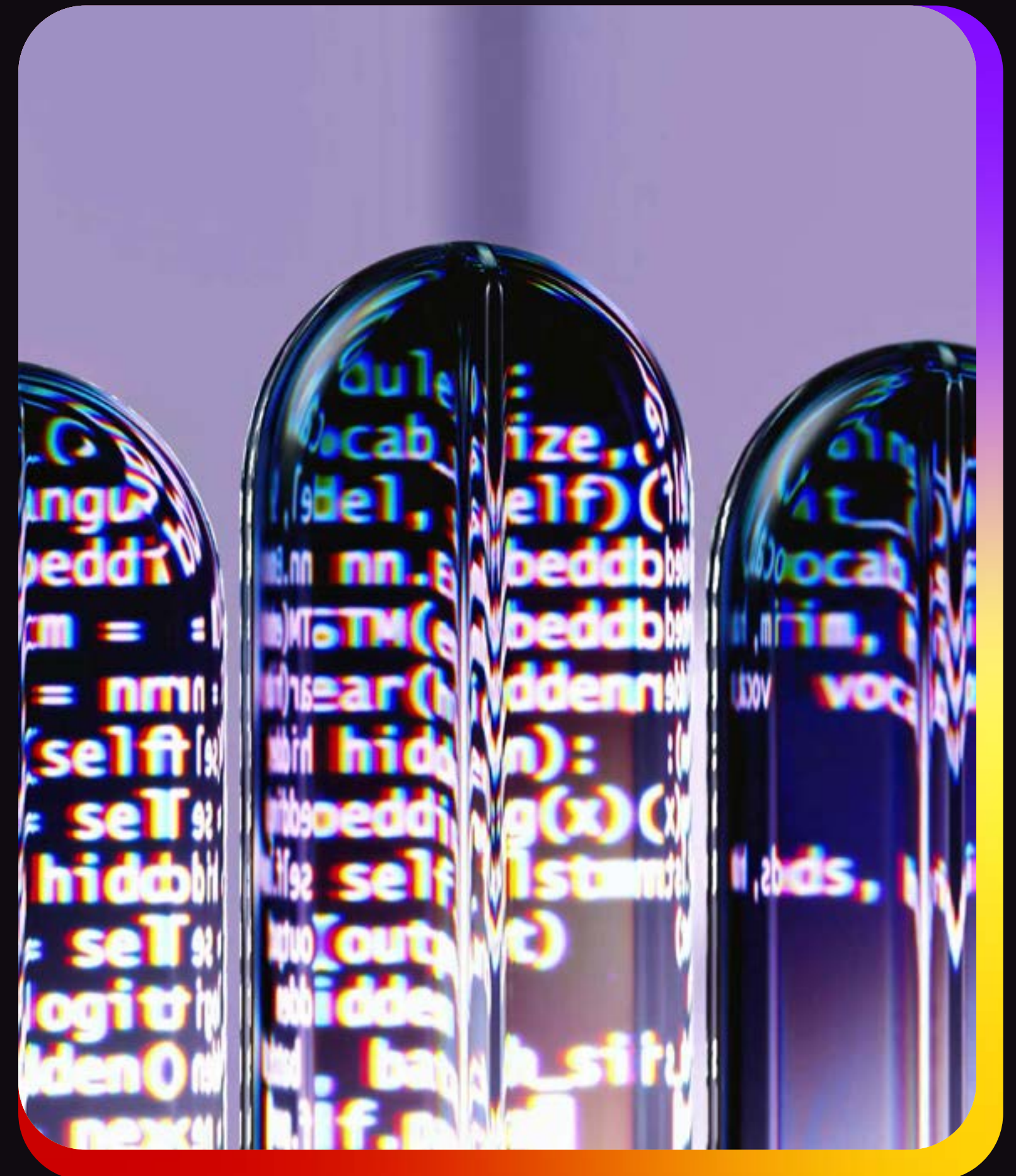
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HARMONISED REGULATION?

While an increased regulation of the industry is undeniable, its harmonisation in the future is not so crystal clear.

As different countries have different pre-existing gambling laws, additional contributing factors (such as national lotteries), and unique internal challenges, political interest in harmonizing regulation may not materialize.



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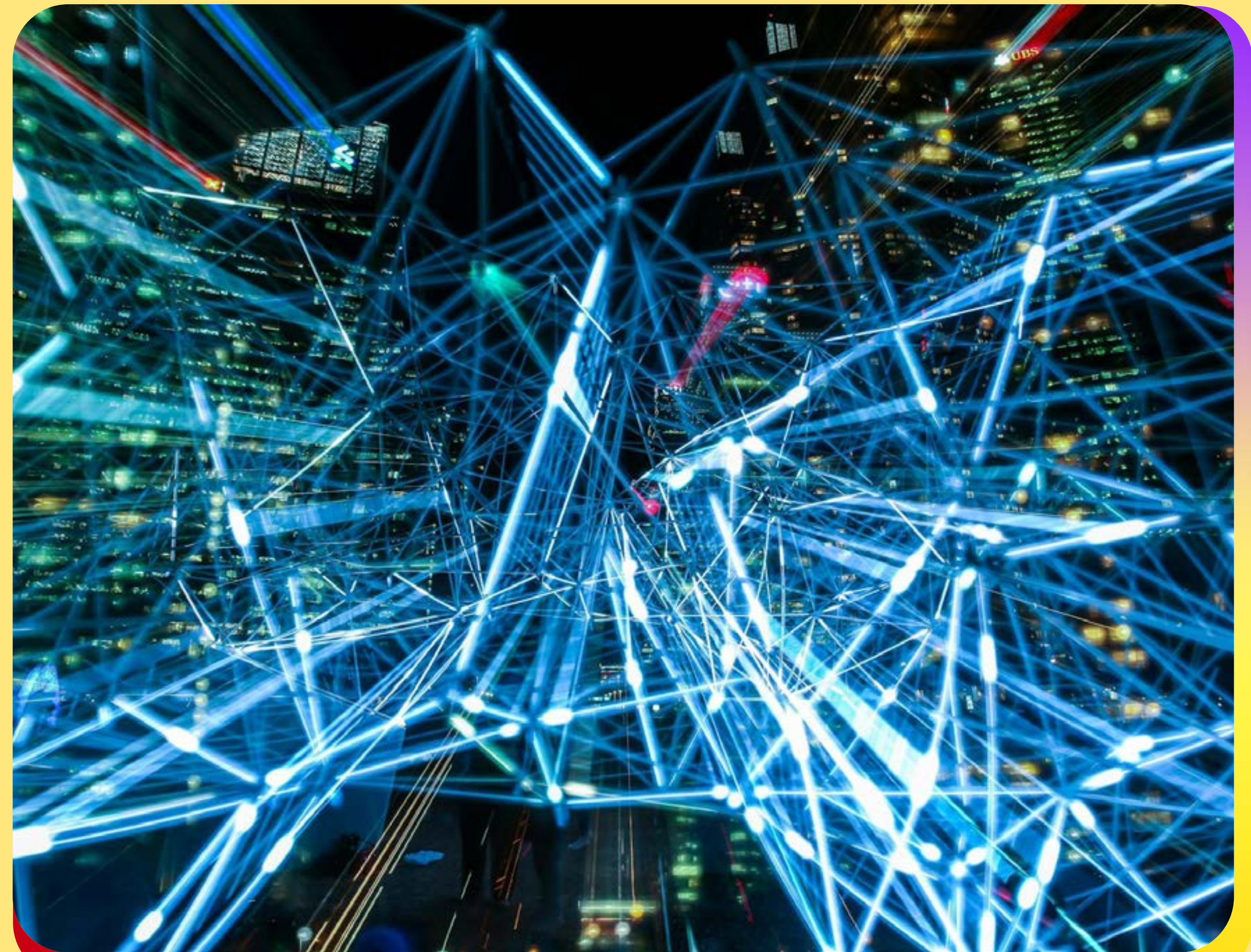
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COMPLIANCE IS COOL

Compliance: all the cool kids will be doing it.

Automation will dominate compliance processes in 2050, using AI and blockchain to ensure real-time reporting and adherence to dynamic regulatory changes. Companies will deploy predictive algorithms to pre-empt violations and avoid fines, which are currently already decreasing.



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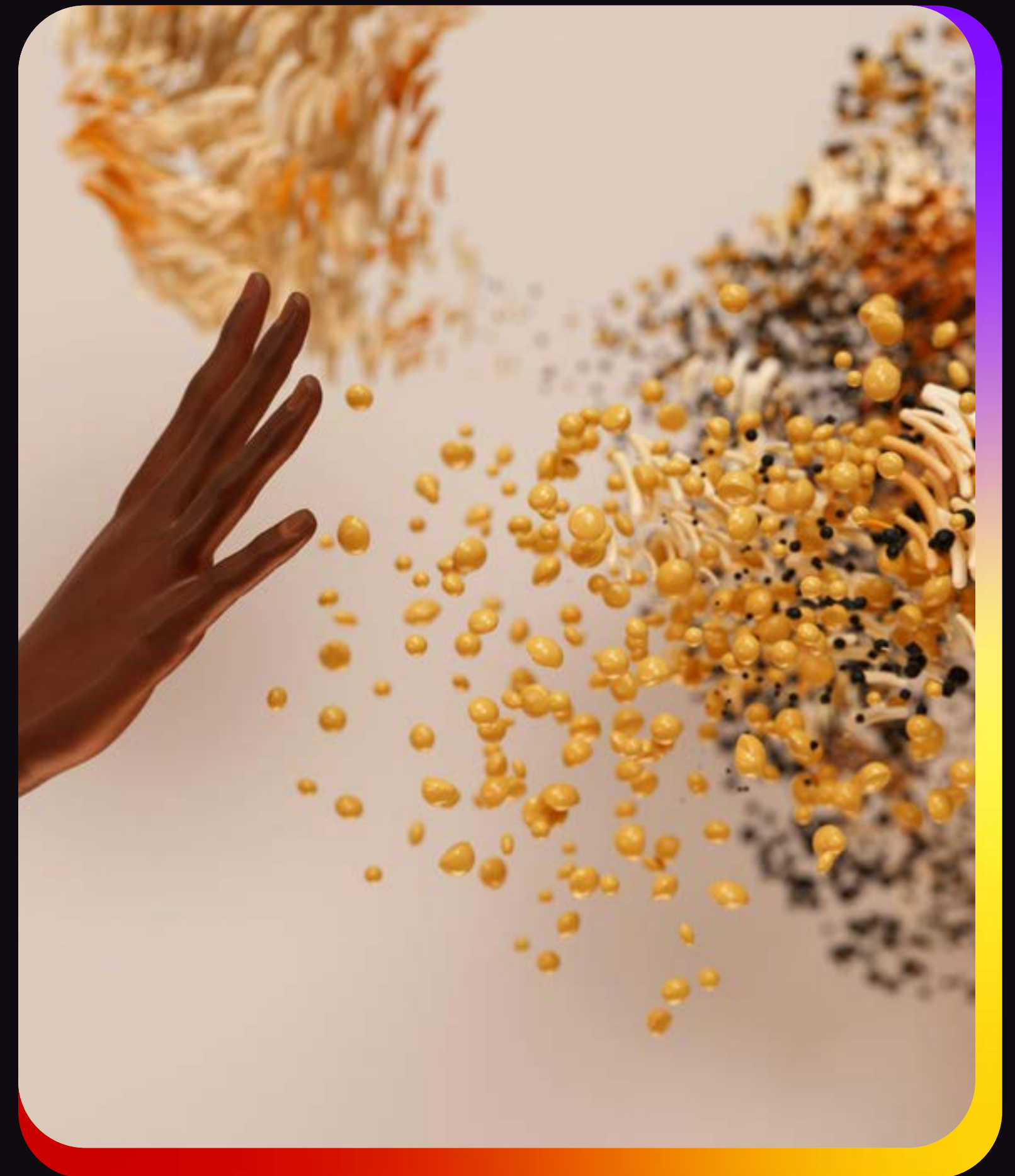
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RESPONSIBLE GAMING

An increased focus on player well-being can reduce stigma around gambling, fostering a more positive public perception of the industry.

Responsible gambling will be supported by data-driven monitoring systems that can detect problematic behaviour and provide real-time interventions. Collaborations with mental health professionals, focused on prevention and support, will become more widespread.



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CAN YOU BET ON ANYTHING?

Beyond traditional gambling formats and the rise of new betting areas such as e-sports, gaming offerings are likely to evolve in ways that are currently very hard to foresee.

AS **YOUNGER GENERATIONS** ARE EXPECTED TO SPEND MORE TIME ONLINE AND IN IMMERSIVE WORLDS, THE POSSIBILITIES FOR WHAT WE WILL BE ABLE TO BET ON ARE ENDLESS - **AND NOT ALL ARE POSITIVE.**

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WORKFORCE IN FLUX

As expected, specialists in AI, blockchain, cybersecurity, and game design will dominate the iGaming workforce. However, as regulation and compliance tightens, legal departments will be increasingly important, as well as collaborating with health professionals.

Soft skills like cultural adaptability and customer experience management will remain vital.



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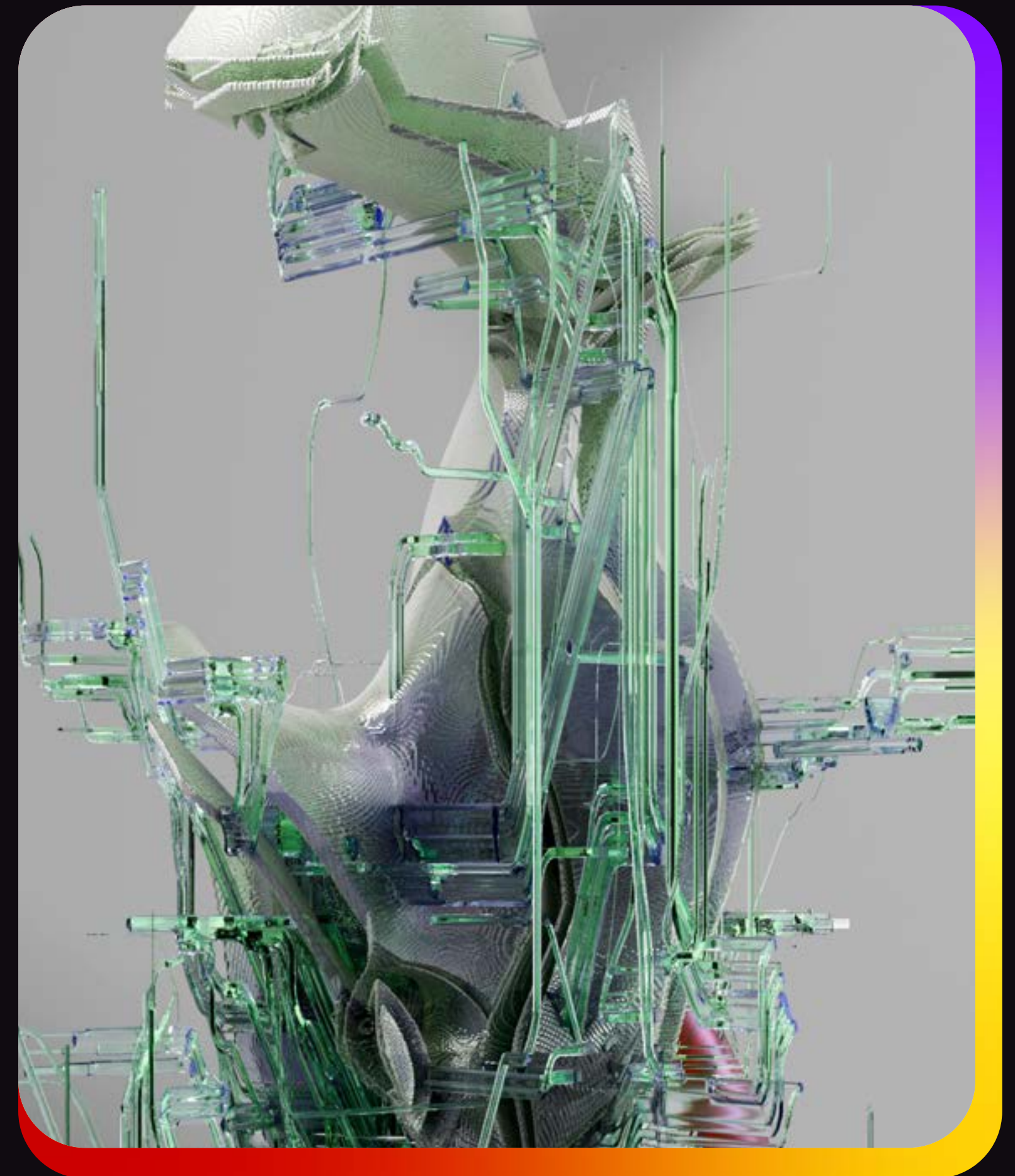
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HERE WE ARE NOW, **ENTERTAIN US**

Public perception of iGaming is likely to shift further toward entertainment, shedding its reputation as a gambling vice and emerging as a mainstream form of entertainment.

Gamification, e-sports, responsible gambling initiatives, and increased regulation in the industry are likely to contribute to this cultural shift.



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LOOKING BEYOND CARBON

While iGaming isn't the most energy-intensive industry, its expected usage of AI may inevitably lead to the implementation of sustainability initiatives aiming to minimize its environmental impact.

Energy-efficient data centres and the use of renewable energy will be critical to mitigate the industry's carbon footprint.



GENERATE: IMAGE OF THE FUTURE

OUR IMAGE OF THE iGAMING INDUSTRY IN 2050

ABSTRACT

By 2050, the iGaming industry stands poised to undergo a **seismic transformation**.

Advancements in technology will not only redefine the way users interact with gambling platforms but also elevate the industry's security, personalization, and overall user experience.

In this integrated narrative, we delve into the key tech aspects shaping the future of iGaming, including security concerns, blockchain, AI, AR and VR, the metaverse, personalization, and CRM.

However, this transformation will not only impact the platforms and technologies; it will also reverberate across the economic, environmental, political, and social landscapes. The industry's evolution will be influenced by changes in betting preferences, workforce, payment methods, regulatory frameworks, environmental impacts, and its public image.

HI. WAKE UP.

IT'S 2050.

The iGaming sector's contribution to the global economy are immense, with revenues projected to reach trillions of dollars annually. This growth drives job creation, tax revenues, and investments in infrastructure, especially in regions where iGaming is a significant part of the economy. Local economies benefit from partnerships with digital marketing agencies, payment processors, and tech providers.

The scope of events available for betting has expanded dramatically, reflecting societal interests and technological advancements. Traditional sports remain popular, but niche sports and emerging global leagues gain traction.

E-sports dominate the landscape, with tournaments attracting viewership rivalling that of conventional sports like soccer or basketball.

Betting markets also include unconventional events, such as:

VIRTUAL EVENTS

AI-driven virtual leagues which simulate entire seasons with realistic outcomes based on complex algorithms.

POLITICAL EVENTS

Though controversial, betting on elections, policy decisions, and international relations could become more common, regulated to ensure fairness and compliance.

CULTURAL EVENTS

Betting on award shows, reality TV outcomes, and even the success of new technologies or products could captivate users.

ENVIRONMENTAL

Some platforms may offer markets on measurable climate-related outcomes, like global temperature changes or renewable energy milestones, though this may raise ethical concerns.

COMPLIANCE

In 2050, calls for regulation of the iGaming industry to become more harmonized persist, but international agreements standardizing compliance requirements are slow to emerge.

Nevertheless, **Regulatory technologies** (RegTech) have streamlined compliance processes, using AI to monitor transactions, detect fraud, and ensure adherence to laws. Blockchain plays a crucial role in transparent record-keeping, simplifying audits and reducing disputes.

New licensing models have emerged, placing greater emphasis on operator accountability. Platforms must now demonstrate their commitment to **user safety**, **ethical practices**, and **responsible gaming** before being granted or renewing their licenses.

SECURITY...

has long been a
**cornerstone of the
iGaming industry**, and
by 2050, **the stakes are
higher than ever.**

As cybercriminals evolve, so do the methods to combat them. Next-generation encryption protocols, powered by quantum computing, render traditional hacking techniques obsolete. Quantum Key Distribution (QKD) allows for unbreakable encryption, ensuring that sensitive user data, including payment information and identity verification, remains secure.

Biometric authentication — ranging from retina scans to voice recognition — becomes standard. Multi-factor authentication (MFA) evolves into continuous authentication systems that monitor a user's behaviour in real-time, instantly detecting suspicious activity and mitigating risks.

The integration of AI-driven fraud detection systems allows platforms to identify and shut down malicious activities, such as match-fixing and identity theft, before they escalate.

These measures establish an unparalleled level of trust between users and platforms, a necessity in an industry handling trillions of dollars annually.

Payments in 2050 are **seamless, borderless,**
and **powered by advanced technologies.**

CRYPTOCURRENCIES

Cryptocurrencies and blockchain-based payment systems dominate, offering **transparency, speed, and low transaction fees.**

Stablecoins pegged to real-world assets provide financial stability, while smart contracts ensure automatic payouts and reduced disputes.

BIOMETRIC

Biometric payments, such as fingerprint or retina scans, add an extra layer of **security** and **convenience.**

Wearable devices and neural interfaces are starting to enable hands-free transactions, making payments almost effortless.

DIGITAL WALLETS

Digital wallets integrated with decentralized finance (DeFi) systems enable users to manage their funds across various platforms without the need for intermediaries.

Regulation ensures these systems are **secure, user-friendly,** and **accessible** to a global audience.

As the iGaming industry grew, so did the **responsibility to protect users from gambling-related harm**. In 2050, responsible gaming is a cornerstone of the industry, supported by technological innovations and robust policies.

AI-DRIVEN INTERVENTIONS

AI monitors user behaviour in real-time, identifying patterns indicative of problematic gambling.

Automated interventions, such as timeouts, spending limits, and personalized alerts, will help users stay in control of their activities.

GAMIFIED EDUCATION

Interactive tools and games educate users about responsible gambling practices.

Platforms incorporate tutorials, quizzes, and challenges to promote healthy behaviours while keeping users engaged.

HEALTH PARTNERSHIPS

Operators collaborate with mental health organizations, researchers, and policymakers to develop and implement effective harm reduction strategies.

Public awareness campaigns emphasize the importance of responsible gaming and highlight available support resources.

As a result of these practices, the public perception of gambling has undergone a significant transformation. Although stigmas surrounding gambling remain in some regions,

THE WIDESPREAD ACCEPTANCE
OF **iGAMING** AS A FORM OF
ENTERTAINMENT **HAS BECOME**
THE NORM.

Despite this, challenges remain. Critics raise concerns about gambling addiction, the exploitation of vulnerable individuals, and the ethics of certain betting markets. iGaming platforms are quickly understanding that addressing these issues transparently and proactively is crucial for maintaining public trust.

**AI AND MACHINE
LEARNING** HANDLE MANY
BACKEND OPERATIONS,
INCLUDING MOST OF
CUSTOMER SERVICE,
FRAUD DETECTION, AND
ODDS CALCULATION.

This automation reduces the demand for human labour in these areas, but it simultaneously creates new opportunities in AI development, ethical AI oversight, and system maintenance.

Roles focusing on creativity and user experience, such as game design, virtual environment creation, and community management, have grown significantly. The rise of immersive technologies like AR and VR requires a skilled workforce capable of designing hyper-realistic environments and interactive experiences tailored to diverse user preferences. Education and training programs have evolved to meet the specific needs of iGaming, with partnerships between operators and universities offering specialized courses.

**BLOCKCHAIN
TECHNOLOGY** IS THE
BACKBONE OF THE
iGAMING INDUSTRY,
OFFERING UNPARALLELED
TRANSPARENCY,
SECURITY, AND
EFFICIENCY.

Blockchain-based platforms eliminate intermediaries, reducing costs for operators and ensuring faster payouts for users. Smart contracts automate the execution of bets, ensuring fair play and reducing disputes.

Moreover, **decentralized autonomous organizations** (DAOs) have started to emerge as a model for iGaming platforms. Players can participate in decision-making processes, from choosing game offerings to shaping platform policies, fostering a sense of community and accountability.

HYPER- PERSONALIZATION

IS NOT ONLY EXPECTED
BUT DEMANDED BY THE
PLAYERS.

Advanced data analytics and AI enable platforms to create unique experiences tailored to individual preferences. Gamification plays a significant role in enhancing engagement. Users earn rewards, unlock achievements, and participate in tournaments based on their activity, creating a sense of progression and loyalty. Dynamic interfaces adapt to user behaviour, offering intuitive navigation and personalized dashboards.

Moreover, real-time analytics enable platforms to adjust their offerings instantly, ensuring users always have access to the most relevant and engaging content.

THE METAVERSE

The metaverse has matured into a fully realized digital ecosystem, providing a new frontier for iGaming. Virtual casinos, sportsbooks, and betting arenas all exist within the metaverse, offering users an unparalleled level of immersion and interaction.

Players have customizable avatars to navigate these virtual spaces, interacting with other users and engaging in multiplayer games. Brands and operators establish virtual properties, hosting exclusive events, tournaments, and promotions.

The metaverse also blurs the lines between gaming and gambling, incorporating elements of both to create hybrid experiences.

For example, players might explore a virtual world to complete challenges and unlock betting opportunities, combining the thrill of gambling with the engagement of gaming.

AR AND VR

AR and VR are integrated into the metaverse and therefore into iGaming platforms. Players enter hyper-realistic virtual casinos from the comfort of their homes, complete with lifelike graphics and interactive features.

Imagine putting on a VR headset and walking into a virtual Las Vegas casino, complete with other players, dealers, and slot machines. **AR enhances live sports betting by overlaying real-time statistics and odds onto a user's view of the game, whether they're in a stadium or watching from their living room.**

The rise of haptic feedback devices — gloves, suits, and even chairs — further enhances this immersion, enabling users to "feel" the weight of poker chips or the vibration of a spinning roulette wheel.

These innovations create a more engaging and social gambling experience, attracting both seasoned players and newcomers.

CRM SYSTEMS HAVE
EVOLVED INTO AI-DRIVEN
PLATFORMS CAPABLE
OF DELIVERING **REAL-
TIME INSIGHTS** AND
**PERSONALIZED
ENGAGEMENT
STRATEGIES.**

These tools integrate seamlessly with other technologies, enabling operators to provide a holistic user experience.

Predictive analytics allows platforms to anticipate user needs, from identifying optimal times for engagement to offering tailored promotions. AI analyses user data to segment audiences with unprecedented precision, ensuring that marketing efforts resonate with individual preferences.

Gamified loyalty programs incentivize user retention, rewarding players for consistent activity and long-term engagement. Additionally, CRM systems prioritize responsible gambling.

CONNECTIVITY UNDERPINS ALL THESE TECHNOLOGY ADVANCEMENTS.

7G networks deliver lightning-fast speeds, near-zero latency, and unprecedented bandwidth. These networks ensure seamless streaming of AR/VR content and real-time interactions in virtual environments.

Edge computing — processing data closer to the user — reduces latency and enhances performance, ensuring smooth gameplay and uninterrupted connections even during peak traffic times.

THIS ROBUST INFRASTRUCTURE ENABLES MILLIONS OF USERS WORLDWIDE TO PARTICIPATE IN IMMERSIVE EXPERIENCES SIMULTANEOUSLY.

As the industry scales, its **carbon footprint** is becoming a significant issue. Data centres powering the platforms, blockchain transactions, and VR/AR systems consume significant energy.

To address these challenges, the industry must adopt green technologies and sustainable practices:

RENEWABLE ENERGIES

Data centres and servers powered by solar, wind, or other renewable energy sources.

ENERGY EFFICIENCY

Advances in computing hardware and software reduce the energy consumption of gaming systems and blockchain networks.

CARBON OFFSETTING

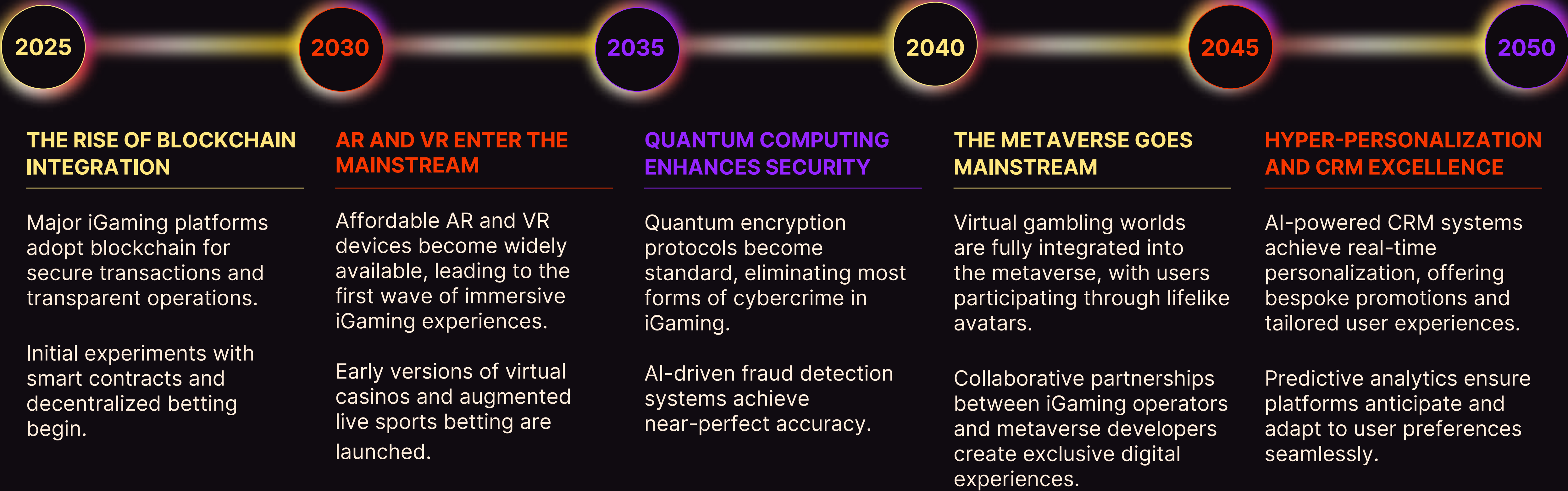
Operators invest in reforestation projects, renewable energy initiatives, and carbon capture technologies to offset emissions.

ECO-FRIENDLY GAMING

Developers can design games and systems optimized for lower energy consumption, reducing the environmental impact of user engagement



TIMELINE



SHARE:

FOSTERING AN INNOVATION ENVIRONMENT

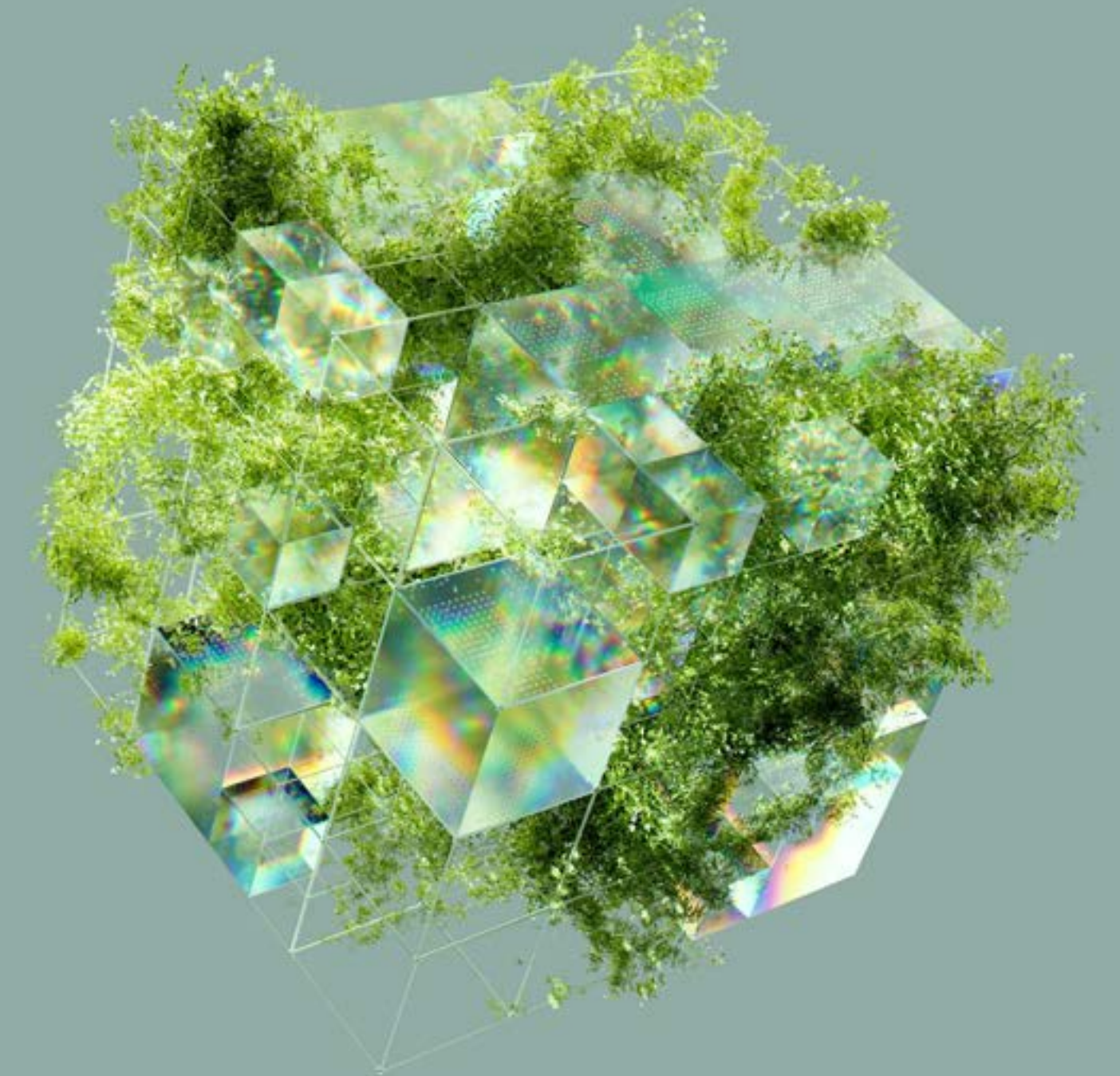
SPARK CONVERSATIONS AND ACTIONS SHAPING THE FUTURE

BEING PROACTIVE MEANS NEVER CEASING TO LOOK INTO THE FUTURE

Foresight efforts can (and should) be a cyclical, ongoing process within an organization.

Horizon scanning processes can be continuously maintained, gathering data and insights on the operating context while monitoring emerging possibilities that fuel new Images of the Future.

Since our understanding of the future is always provisional, it's essential to regularly benchmark against real-world developments, creating an early warning system that helps assess whether our vision remains valid and plausible — or if the world has shifted in a different direction.



KNOWLEDGE PRODUCTION IS KEY

Through open and collaborative efforts, we strengthen our connections with other players in the industry, gather more comprehensive insights, and share our own Image of the future — along with the space we aim to carve within it.

By continually building and sharing knowledge, we seek to foster strategic awareness and drive innovation within the industry.



REFERENCES

AI Impacts, 2022, Expert Survey on Progress in AI (ESPAI 2022), <https://aiimpacts.org/2022-expert-survey-on-progress-in-ai/>

Alvarenga, A., Furtado, A., Barros, M., & Carvalho, M. (2023) Future Foresight Book of Knowledge Level 2: Certified Foresight Leader. ALVA R&C. Cambridge, MA: GIMI - Global Innovation Management Institute.

Alvarenga, A., Vieira, A. C. L. (2025). Chapter 18: Methodological Exploration of Improved Reference Scenario Approaches – A Case Study in NOVA Executive Education. In M. M. Crawford & G. Wright (Eds.), Improving and Enhancing Scenario Planning: Futures Thinking. Edward Elgar.

Alvarenga, A.; Bana e Costa, C.; Borrel, C.; et al. (2019) Scenarios for population health inequalities in 2030 in Europe: the EURO-HEALTHY project experience. International Journal for Equity in Health 18 (100). <https://doi.org/10.1186/s12939-019-1000-8>.

ARUP. 2050 Scenarios: Four plausible futures. 2019. <https://www.arup.com/insights/2050-scenarios-four-plausible-futures/>

Batty, M., Axhausen, K. W., Giannotti, F., Pozdnoukhov, A., Bazzani, A., Wachowicz, M., & Portugali, Y., 2012, Smart cities of the future. The European Physical Journal Special Topics, 214(1), 481–518.

Center for AI Safety, Statement on AI Risk, <https://www.safe.ai/work/statement-on-ai-risk>

Deloitte. The future of the British remote betting and gaming industry - Adapting to a changing landscape. 2024. <https://www2.deloitte.com/us/en/pages/consumer-business/promos/the-future-of-the-british-remote-betting-and-gaming-industry-gaming.html>

European Commission. Study on the Critical Raw Materials for the EU 2023 Final Report. 2023. <https://single-market-economy.ec.europa.eu/system/files/2023-03/Study%202023%20CRM%20Assessment.pdf>

Fonseca, I. The Rio Times. Latin America's New Gambling Giant: Brazil's Path to Global Top 3. 2024. <https://www.riotimesonline.com/latin-americas-new-gambling-giant-brazils-path-to-global-top-3/>

Gallup. "Slim Majority of U.S. Adults Still Say Changing Gender Is Morally Wrong". <https://news.gallup.com/poll/645704/slim-majority-adults-say-changing-gender-morally-wrong.aspx>.

Gaub, F. Global Trends to 2030 – Challenges and Choices for Europe. 2019. ESPAS - European Strategy and Policy Analysis System. <https://ec.europa.eu/assets/epsc/pages/espas/index.html>

Generation Z Looks a Lot Like Millennials on Key Social and Political Issues, <https://www.pewresearch.org/social-trends/2019/01/17/generation-z-looks-a-lot-like-millennials-on-key-social-and-political-issues/>, Dating and Relationships in the Digital Age, <https://www.pewresearch.org/internet/2020/05/08/dating-and-relationships-in-the-digital-age/>

GHDx, Global expected health spending, 2021, <https://ghdx.healthdata.org/record/ihme-data/global-expected-health-spending-2019-2050>

Global Trade Alert, Global Dynamics, https://www.globaltradealert.org/global_dynamics

Godet M., Bonnes nouvelles des conspirateurs du futur, 2011.

Godet, M and Roubelat, F. (1996) "Creating the future: The use and misuse of scenarios". Long Range Planning Vol. 29, n°2, pp. 164-171.

Godet, M., 1994. From anticipation to action: a handbook of strategic prospective. Paris: UNESCO.

Grand View research. Online Gambling Market Size Worth \$153.57 Billion By 2030. 2023. <https://www.grandviewresearch.com/press-release/global-online-gambling-market>

IEA. Clean Energy Investment 2016-2050. <https://www.iea.org/data-and-statistics/charts/clean-energy-investment-in-the-net-zero-pathway-2016-2050>

IEA. Energy and Water. <https://www.iea.org/topics/energy-and-water>

iGB and H2 Gambling Capital. iGB Live 2024 – Issue 136. 2024. <https://viewer.joomag.com/igb-issue-136-igb-lve-2024/0361269001719920778/p92>

REFERENCES

iGB. LatAm report 2024. 2024. <https://igamingbusiness.com/legal-compliance/regulation/igb-releases-latam-gambling-report/>

iGB: <https://igamingbusiness.com/>

IMF, World Economic Outlook, January 2025, <https://www.imf.org/en/Publications/WEO/Issues/2025/01/17/world-economic-outlook-update-january-2025>

International Transport Forum, ITF Transport Outlook 2018.

McKinsey Global Institute, Globalization in Transition: The Future of Trade and Value Chains, 2016

MENFN. China Online Gambling Market Size, Industry Trends, Share, Growth And Report 2023-2028. 2024. <https://menafn.com/1107821551/China-Online-Gambling-Market-Size-Industry-Trends-Share-Growth-And-Report-2023-2028>

MIT Media Lab Research, Human-Machine Interaction, <https://www.media.mit.edu/research/?filter=everything&tag=human-machine-interaction>

Oddsgate. 2025 Trend Guide. 2025. <https://igaming-trendguide-2025.oddsgate.com/en/?hsCtaAttrib=202418115821>

OECD. “Is Care Affordable for Older People?”. 2024. https://www.oecd.org/en/publications/is-care-affordable-for-older-people_450ea778-en.html

OECD. Aging and long-term care. <https://www.oecd.org/en/topics/sub-issues/ageing-and-long-term-care.html>.

OECD. The future of health systems. <https://www.oecd.org/en/topics/policy-issues/the-future-of-health-systems.html>,

OECD. The Knowledge-Based Economy: A Report for the European Commission. 2001.

OECD: Environmental Outlook 2050, 2012. https://read.oecd-ilibrary.org/environment/oecdenvironmental-outlook-to-2050_9789264122246-en#page1

Pew Research Institute - What the data says about immigrants in the U.S., <https://www.pewresearch.org/short-reads/2024/09/27/key-findings-about-us-immigrants/#:~:text=How%20many%20people%20in%20the,than%2020%20years%2C%20since%202000>

PWC, The Long View: How will the global economic order change by 2050?, 2017, <https://www.pwc.com/gx/en/world-2050/assets/pwc-the-world-in-2050-full-report-feb-2017.pdf>

PWC. The Long View: How will the global economic order change by 2050?. 2017. <https://www.pwc.com/gx/en/world-2050/assets/pwc-the-world-in-2050-full-report-feb-2017.pdf>

Quantumrun Foresight: <https://www.quantumrun.com/>

Roland Berger, Trend Compendium 2050 – Six megatrends that will shape the world, 2023, <https://www.rolandberger.com/en/Insights/Global-Topics/Trend-Compendium/>

Roser, M. A long-term timeline of technology. 2023. <https://ourworldindata.org/technology-long-run>

Scholz, T.eSports is Business – Management in the world of competitive gaming. 2019. Palgrave Macmillan. Adapted from.

Statista. Online Gambling – Worldwide. <https://www.statista.com/outlook/amo/online-gambling/worldwide?currency=usd>

Statista: <https://www.statista.com/>

Sundararajan, A., The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism, 2016

The Economist, “Why Swedes are inserting microchips into their bodies”, 2018, <https://www.economist.com/europe/2018/08/02/why-swedes-are-inserting-microchips-into-their-bodies>

REFERENCES

The Guardian, “The fight Peter Dutton and others like him want to have about diversity is a distraction”. <https://www.theguardian.com/commentisfree/2025/feb/04/the-fight-peter-dutton-and-others-like-him-want-to-have-about-diversity-is-a-distraction-ntwnfb?>

The Lens: <https://www.lens.org/>

UN International Organisation for Migration, World Migration Report 2022, <https://publications.iom.int/books/world-migration-report-2022>

UN. Department of Economic and Social Affairs. Population Division, World Urbanization Prospects: The 2018 Revision

UNCTAD, Technology & Innovation Report 2023, https://unctad.org/system/files/officialdocument/tir2023_en.pdf;

United Nations Population Division Data Portal: <https://population.un.org/dataportal/>

United Nations Population Division. “World Population Prospects 2022”. 2022. https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf

United Nations, “Leaving No One Behind In An Ageing World - World Social Report 2023”, 2023. <https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2023/01/2023-wsr-tablecontents.pdf>

University of California San Francisco: What Will Health and Medicine Look Like in 2050?, 2020, <https://www.ucsf.edu/magazine/health-2050-predictions>.

University of Cambridge – IfM – Institute for Manufacturing. 2003. Adapted.

USA for UNHCR, Refugee Statistics, <https://www.unrefugees.org/refugee-facts/statistics/#:~:text=Global%20Trends%20At%2Da%2DGlance,63.3%20million%20internally%20displaced%20people>

Vixio. Latin America online gambling market set to quadruple, according to new report. 2023. <https://www.vixio.com/news/latin-america-online-gambling-market-set-to-quadruple-according-to-new-report>

Voros, J. (2003), "A generic foresight process framework", Foresight, Vol. 5 No. 3, pp. 10-21. <https://doi.org/10.1108/14636680310698379>

Wack P. (1985) Scenarios: Shooting the Rapids. Harvard Business Review, 63(6), 139-150.

Wall Street Journal, “Fight Against DEI Dominates Start of Trump’s Second Term”, <https://www.wsj.com/politics/policy/fight-against-dei-dominates-start-of-trumps-second-term-fea62a30?>

WEF. Global Risks Report 2025, <https://www.weforum.org/publications/global-risks-report-2025/digest/>

WEF. Nature Risk Rising. 2020. http://www3.weforum.org/docs/WEF_New_Nature_Economy_Report_2020.pdf

WHO. Global Health Estimates 2019. <https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates>

WIPO, Global Innovation Index 2024, 17th Edition, <https://www.wipo.int/publications/en/details.jsp?id=4756>;

World Bank- Data Bank: <https://databank.worldbank.org/>

World Bank, Groundswell Report – Part 2, 2022. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/540941631203608570/Overview>

World Economic Forum, The Future of Jobs Report 2020. <https://www.weforum.org/publications/the-future-of-jobs-report-2020/>

EXPERT BIOS

ANNEX

Expert bios

AMINE EL KHALFET



Innovative consultant with a focus on Gaming. Has empowered numerous public and private entities to engage with younger demographics. Holds a management and innovation degree from Audencia Business School and UC Berkeley, and worked in consulting in Europe and the Middle East.

With expertise in gaming strategies and crafting immersive experiences on platforms like Roblox, Zepeto and traditional gaming platforms, he possesses a deep understanding of both the platforms and their audiences allowing him to get to know about the mechanics behind human psychology both in iGaming and Gaming.



CARLOS SIU LAM



Carlos is the associate professor and programme coordinator at Centre for Gaming and Tourism Studies of Macao Polytechnic University in Macao. He has been a visiting scholar to the Institute for the Study of Gambling and Commercial Gaming at the University of Nevada, Reno, and has given talks in universities in China, Portugal, USA, and Taiwan.

He has published articles in such journals as the International Gambling Studies, and the Las Vegas Research and Review Journal. His book "On the Frontline in Macao: Casino Employees, Informal Learning, & Customer Service" was published by the University of Nevada Press. His current research interest is in the Asian gaming industry.



Expert bios

AMRITHA

SUBHAYAN KRISHNAN



Dr. Amritha Subhayan Krishnan is a visionary leader and educator in the creative enterprise ecosystem, with over 15 years of expertise spanning Idea Conception, Negotiation, Investments, Stakeholder Engagement, Production, Corporate Partnerships, and Creative Collaborations across Europe, the UK, UAE, Oman, and India.

As Founder and CEO of Smart Story Labs at Dubai International Financial Centre (DIFC), she pioneers research in blockchain-enabled smart contracts, transforming ownership, copyright, and payment systems in film production. She also serves as Enterprise Outreach Head for Feature Films, fostering strategic collaborations and international partnerships. An Editorial Board Member for the American Journal of Artificial Intelligence and the Journal of Interdisciplinary and Multidisciplinary Research, Amritha shapes global discourse on AI in creative industries. At Westford University College, she integrates industry insights with academic learning as an

interdisciplinary faculty member in Business, Media, and Computer Science.

Globally recognized for her leadership, Amritha represented the cultural industries at the Global Leaders' Summit in Vienna and serves as an International Partner for India at the World Business Angels Investment Forum (WBAF) 2024, affiliated with the G20 Global Partnership for Financial Inclusion. Her role as a jury member at major film festivals and involvement in cultural ambassadorships further highlight her influence in shaping the global creative and cultural sectors. Driven by innovation and collaboration, Dr. Amritha Subhayan Krishnan is redefining excellence in the film and cultural industries.



Expert bios

GORAN
MATIC

Goran leverages patterns from systemic design, creativity, humanities, and enterprise architecture to help co-design effective innovation outcomes – focusing on strategies at the intersection of stakeholder engagement and sustainable value creation. Key competencies are in building approaches for collaboration in ‘wicked problems’ and cross-sector environments. Goran regularly presents at leading international conferences – including Relating Systems and Design Thinking (RSD), MindCamp, CREA (Italy), Semiofest and others. His latest work focuses on helping organizations thrive in complex environments.

Goran also serves on advisory boards at the UN’s World Creativity and Innovation Week (WCIW) and the Canadian Network for Imagination and Creativity (CNIC) – to help emerge competencies for building a creative, innovative and sustainable world.



Expert bios

JOÃO
FARINHA

João Farinha is a technology foresighter at the Joint Research Centre of the European Commission, developing several activities and projects to support EU policy making.

He has co-authored several reports namely to support the prioritisation of innovation funding. His past experience includes both policy making (at the national and local government level) and consultancy across various fields, namely public sector innovation, social innovation & entrepreneurship, and digital transition.

JORGE
MARTINS

Jorge Martins holds a Ph.D. in Psychology and is currently a Junior Researcher at the William James Center for Research (WJCR) at ISPA-Instituto Universitário. He completed his postdoctoral training at Yale University and earned his Ph.D. and M.A. in Psychology from the University of Missouri-Columbia, following his B.A. in Psychology from the University of Coimbra.

His work integrates contemporary theory, advanced statistical modeling (e.g., machine learning predictive modeling), and multimodal neuroimaging techniques—including electroencephalography (EEG) and whole-brain functional magnetic resonance imaging (fMRI) analysis and neural connectivity to elucidate the underlying mechanisms contributing to addiction susceptibility and the heterogeneity in addiction recovery.



Expert bios

LUIZ MOUTINHO



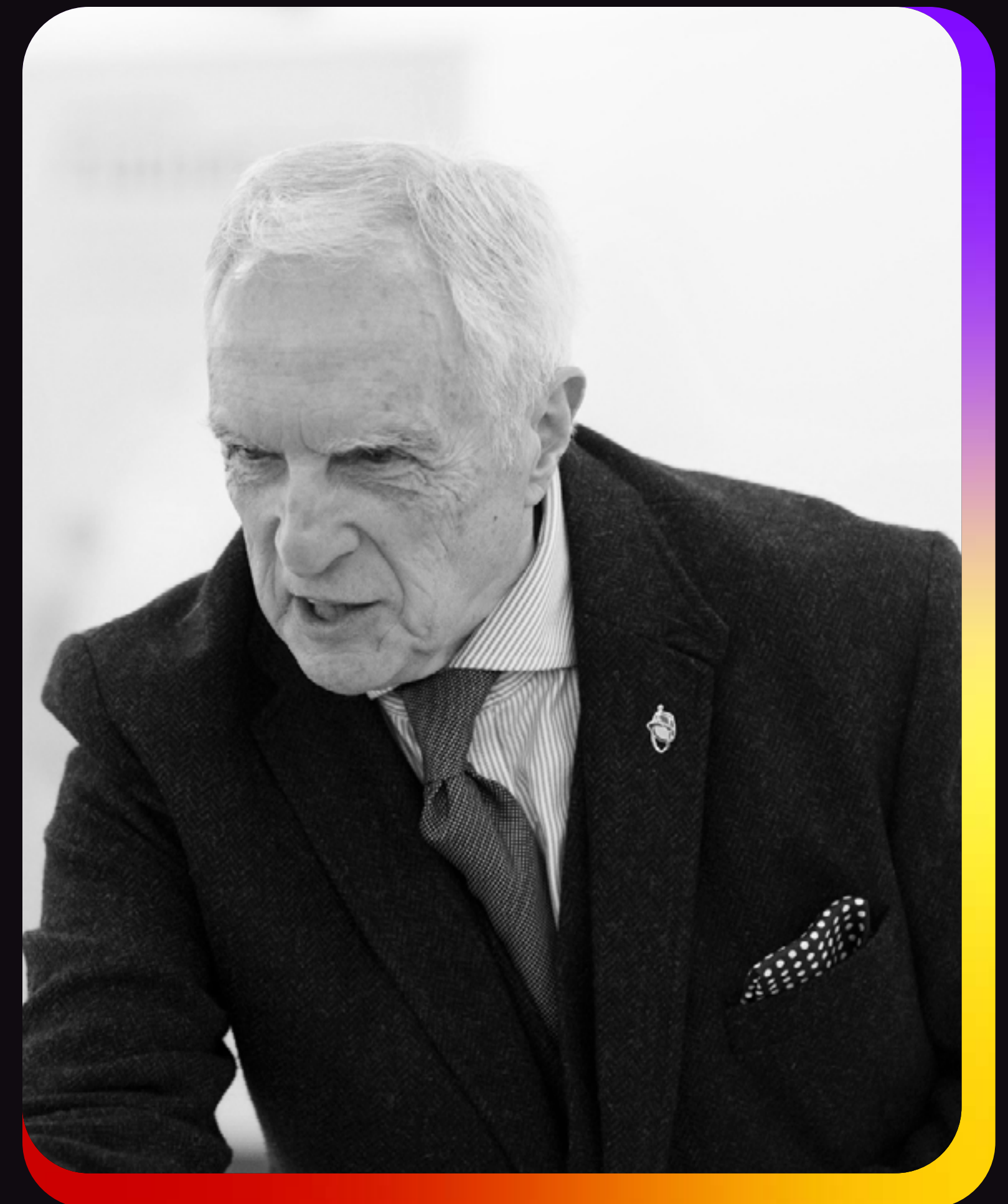
Professor Luiz Moutinho (BA, MA, PhD, MAE, FCIM) is the Visiting Professor of Marketing at The School of Technology, Business and Arts, Suffolk University, England and The Marketing School, Portugal.

In 2020 he was elected as a member of The Academia Europaea, in 2017, he received a degree of Prof. Honoris Causa from the Univ. of Tourism and Management Skopje, North Macedonia. In 2024 was rated among the 100 best scientists in Business and Management by Research.com.

Professor Moutinho is also the Founding Editor-in-Chief of the Journal of Modelling in Management (JM2) and Co-editor-in-Chief of the Innovative Marketing Journal. He has another 4 associate editorships as well as being in the editorial boards of another 47 international academic journals.

His areas of research interest encompass marketing and management futurecast, artificial intelligence, biometrics/neuroscience in marketing, futures research algorithmic self, EmoWear - a wearable tech device that detects human emotions, evolutionary algorithms, and human-computer interaction.

Prof. Moutinho has given keynote speeches in 63 countries and has 40 books and 161 articles published.



Expert bios

MANUEL TÂNGER



I'm originally a physicist and have been interested in all things related to Science and Technology since I can remember. I have an Msc in Physics from Instituto Superior Técnico in Lisbon and concluded with a top graded final thesis supervised by Physics Nobel Prize Winner 1999 Gerard t'Hooft at the University of Utrecht, which is pretty cool!

Since early childhood I've been lucky enough to live in many different countries like Brazil (where I was born), China, India, Holland, Italy, Canada, Belgium and, of course, Portugal. This international exposure has been formative and character building in important aspects in my life.

I started my professional career at Mercer HR Consulting where I was a CRM designer and manager. Following this experience I was invited to work for Danone in Italy (Saiwa) as a Strategic Planner for the Western Europe Zone for a couple of years and then Brand Manager of Vitasnella (Taillefine, Corpus Danone). With a great

team, we were able to bring back a defaulting brand to +20% growth year-on-year.

After Italy came Qbian, a training company that used training as a frontline marketing tool and developed Global programs for Nokia. There I was European Marketing Manager. I learned a lot and in particular how to evolve behaviours and turn information into knowledge and then into expertise. In 2009 I co-founded Beta-i, an organization actively promoting entrepreneurship and innovation in Portugal. I am one of the four board members and head of innovation.

Heading Innovation at Beta-i is exploring new paths to collaborative innovation with clients in a multitude of sectors and finding ways, together, to solve ecosystem challenges by tapping into the creative potential of startups, innovators, corporates and academia.



Expert bios

MICKAEL
SHAHINYAN

Mickael Shahinyan, co-founder of Oddsgate, has a background rooted in analytical precision and has earned a degree in the physics of complex systems. His journey into the iGaming industry began with a passion for creating innovative solutions tailored to the needs of regulated markets.

Since co-founding Oddsgate, he has been instrumental in its growth as a global service provider for B2C operators across various jurisdictions, including the transformative Brazilian market.

Recognizing Brazil's potential as a primary iGaming market, Mickael has dedicated significant efforts to ensuring Oddsgate remains ahead of the curve, adapting to evolving regulations and fostering transparency and security in the industry.

NUNO
GOMES

Nuno Gomes is a postdoctoral researcher at the William James Center for Research (University of Aveiro, Portugal) and an assistant professor at ISPA – Instituto Universitário (Lisbon, Portugal).

His research explores the modulatory effects of emotional chemosignals (e.g., axillary sweat released during anger, fear, and happiness) on receivers' vigilance and social relations. As an assistant professor, he focuses on research methods and data analysis in psychology, currently teaching statistical analysis in the bachelor's degree in Psychology.



Expert bios

NUNO
GONÇALINHO

Nuno Gonçalinho is the co-founder and CEO of Darwin Gaming, a company that specializes in creating online casino games. He holds a Master's Degree in Software Engineering from the Faculty of Engineering at the University of Porto (2008) and has over 15 years of experience in gambling and software development.

Nuno is not only a tech expert but also a passionate financial investor focused on technology-driven markets. His business acumen and strategic vision enable him to effectively drive innovation and growth within the company.

On a personal note, Nuno is a proud husband and father of two. He strives to balance his professional ambitions with a fulfilling family life, believing in the importance of personal well-being in achieving professional success.

NUNO
PIMENTEL

Nuno Pimentel is currently the CEO of MOME, a startup that provides real estate as a service. He holds a Degree in Economics from the Faculty of Economics at the University of Porto (1997).

Nuno has a track record of 25+ years in the professional services industry, with extensive experience in the IT and Digital Technologies ecosystem.



Expert bios

SHAHAR
ATTIAS

Shahar Attias is a globally recognized iGaming expert, a CRM strategist, and a frequent speaker at the industry's leading events. Following a career as a senior executive with 888, Playtech and PokerStars, Shahar has founded Hybrid Interaction - a boutique consulting agency, made by a premier team of experienced hands-on specialists.

To date, they have held more than 200 successful consulting projects across all verticals and through most jurisdictions, including online migration projects with brick-and-mortar casinos in the Dutch, Swiss, Georgian, UK, and US markets; among their clients are gambling powerhouses such as Greentube, Hard Rock & PlayStar in NJ (USA), GiG, Casino du Lac (Partouche), Logrand (MX), Holland Casino, Grand Casino Baden, Horizons Casino (UK), Groupe Barrière (CH), Entain / GVC / BwinParty / Sportingbet / Bet.pt, IGT, William Hill, Karamba, Crocobet, BetConstruct, Pin-up, EvoPlay, bgo, Win2day, DazzleTag, and StarCasino (BE).

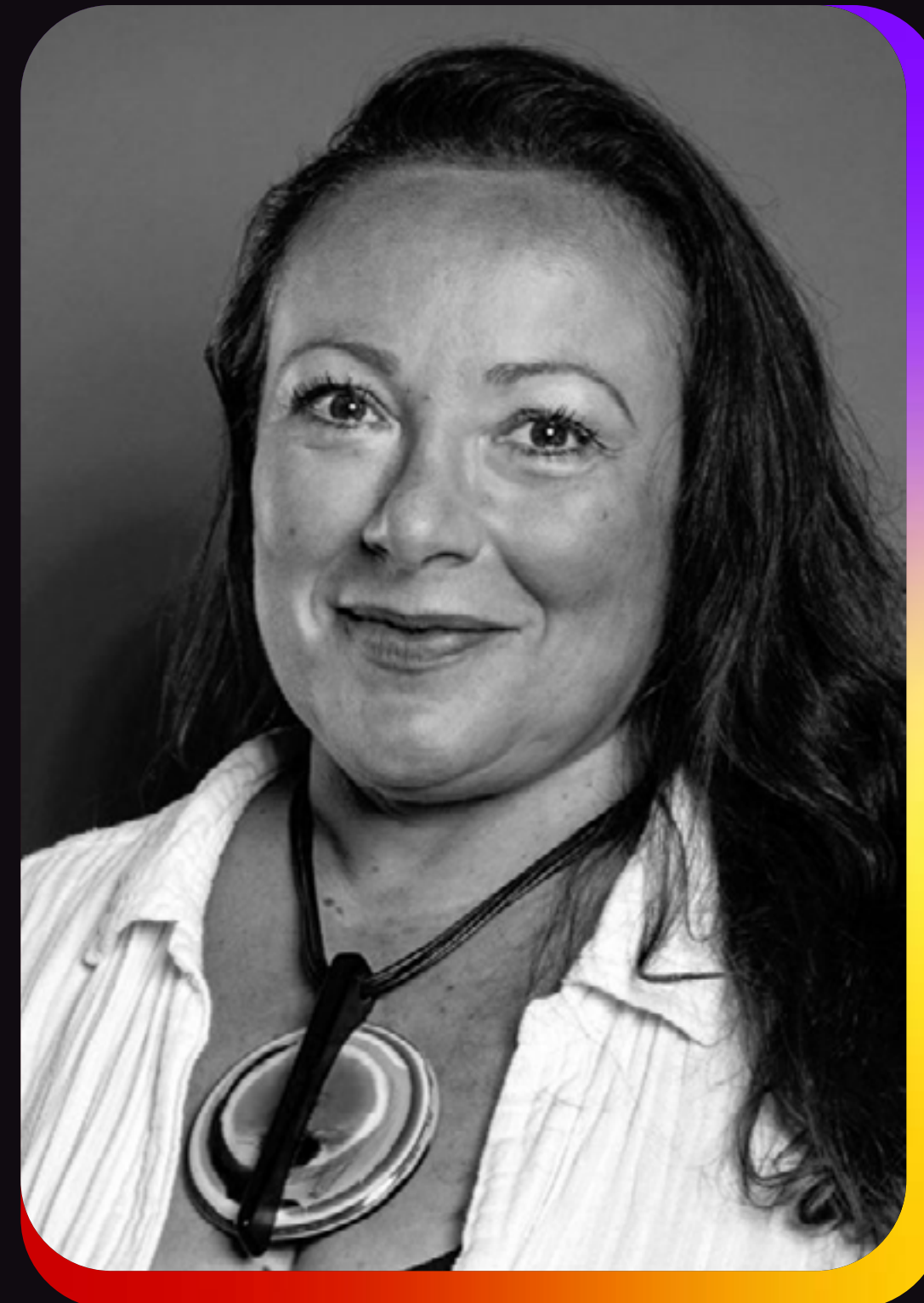
SHIRLEY PULIS
XERXEN

Shirley joined the SiGMA News team in July, 2023. In her first role as content writer at SiGMA, Shirley took on the challenge to reinvent her career in the gaming industry and brought her passion for writing, her communication skills and creative flair. She is currently Head of News.

She graduated as a teacher of English from the University of Malta and later obtained a post-graduate diploma in administration & management, and a Master in Creativity & Innovation. She has built a career in providing training and consultancy in personal and organisational creativity, thinking systems, innovation, and entrepreneurship in both the public and private sector.

Shirley's career has focused on education, teaching at all levels of schooling from primary years to tertiary education where she was a full-time lecturer at the University of Malta. During her academic career, her research interests focused mainly on organisational culture, creativity, and entrepreneurship.

She has always lived in Malta, spending her childhood in Haż-Żebbuġ and Birkirkara. She currently lives in a 400-year old, ghost-free house with her family in Żejtun. Shirley has an avid interest in music and studied acting and voice, currently engaged exclusively to entertain her three cats and, to their reluctance, her two kids and long-suffering husband.



Expert bios

TIAGO
ALMEIDA

Tiago steps into the CEO role in Oddsgate's new chapter of expansion, bringing a wealth of knowledge in product development, customer relations, team leadership and market dynamics—insights sharpened over years of diverse experience.

His journey in the gaming industry began in 2006, when he founded and led Sportingtech as CEO from 2017 to 2020, playing a crucial role in shaping the company's platform during the formative years of the Brazilian market. Alongside, Tiago established EGS Digital, a company dedicated to licensing services to gaming operators seeking to capitalize on opportunities in Latin America. Under his guidance, EGS Digital has thrived in the growing Brazilian market, with Tiago offering strategic advice to prominent clients like Esportes da Sorte, Pixbet, Galerabet, and F12.BET, among others.

TOM
LIGHT

Tom Light is CEO of FIRST - Best in Sports, the industry-leading solutions provider that is setting new standards in sports betting technology. Tom's professional experience has seen him work with leading B2B providers such as Playtech and SBTech, with this knowledge he has enabled FIRST to develop the most comprehensive selection of betting markets and trading options in the industry.

FIRST's unparalleled coverage in Latin America and Europe enables its B2B partners to compete with the largest betting brands in their markets. Its comprehensive solution includes GMFY, a unique gamification solution that boosts player engagement and revenues, while FIRST's full- and semi-Managed Services offers the largest selection of odds and bet builders that help operators boost their margins and revenues.



Expert bios

VICTOR ARIAS



Victor Arias is a leading iGaming expert, who is greatly admired within the industry owing to 25 years' B2C and B2B experience. His key areas of expertise include Online Poker, Online Casino, Live Casino, Sports betting and Bingo.

His discipline, hard work, training, and broad ambitions, both personally and professionally, have led him to conquer highly relevant positions in the world of iGaming. He has worked in numerous companies in different countries, in which he has been developing the most diverse skills, which today make him one of the most complete and versatile leaders.

Currently, Victor Arias is considered a true reference by the main representatives of the industry, due to his extensive and award-winning career. He has been awarded numerous times, earning the respect of operators, media, and collaborators, as well as the competition.

Victor Arias's Vice President role for the Latam division of leading technology provider Arrise powering Pragmatic Play has nurtured an unrivalled knowledge of the LATAM iGaming market. This experience has enabled Mr Arias to feature as a guest speaker at many of the world's most respected iGaming events.

A family man, leader of a multicultural work team, a role model and full of knowledge, Victor Arias is directly responsible for the great expansion of Pragmatic Play in Latin America.



Expert bios

WAGNER FERNANDES



With over 20 years of professional experience, Wagner Fernandes has established himself as a branding, marketing, and business strategy leader. Beginning his sales career and transitioning to marketing and branding roles, Wagner gained invaluable experience across multiple industries.

Throughout his career, Wagner has honed his ability to transform businesses into brands and create innovative strategies that resonate with clients and employees. His work spans multiple disciplines, including digital marketing, co-creation and strategy development.



WILLIAM BONALUME



Production engineer with over 15 years of experience in quality management and process improvements in operations. Specialist in Compliance/KYC products for neobanks and fintech markets. Passionate about startups and technology.

Former Meta employee. Currently Chief Operating Officer of the "Bet.Bet Soluções Tecnológicas" group: an iGaming company regulated in Brazil that owns the DonaldBet and Bet.Bet brands.



ABOUT ALVA R&C

At ALVA R&C we explore the future in a systematic, evidence-based and participative way. We design, mediate and implement foresight and scenario-building processes.

THE FOCUS IS ON:

Scenarios
Foresight
Innovation
Strategy
Sustainability

We integrate these five areas into specific processes and studies so that organisations can adjust or reinforce their position; reduce risk exposure by acknowledging key uncertainties and trends; increase resilience through strategic scenarios; enhance exposure to new opportunities and innovation; and create value within their business ecosystem.

We are a certified training partner of the Global Innovation Management Institute (GIMI) and we developed the Certification in Future Foresight (both at the individual and organisational levels).

ABOUT ODDSGATE

Since 2022, Oddsgate has been redefining the iGaming landscape, delivering cutting-edge SaaS solutions to operators across Brazil, Romania, Asia, and Africa. Our platform is designed for speed, efficiency, and scalability—allowing brands to launch and thrive in record time.

Whether you're starting from scratch or looking to enhance your operations, Oddsgate delivers a fully functional iGaming platform in just 30 days. Our customer-first approach ensures that every solution is tailored to drive growth, compliance, and long-term success.

Fast. Scalable. Reliable.
That's Oddsgate.

SPORTSBOOK & CASINO

Seamless gaming experiences packed with premium content.

AFFILIATE & CRM SOLUTIONS

Affiliate & CRM Solutions – Optimized tools to engage and retain players.

PAYMENT SYSTEMS

Payment Systems – Secure, flexible, and built for global transactions.

THANK YOU

ODDS:GATE