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Gaming and the Future of Experience Design

In partnership with

Critical Mass

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As digital interfaces become more immersive, game design is the paradigm we need to adopt to best serve our customers. A bold statement, yes, but the evidence is in accelerating trends on user engagement, ubiquity of technology, and maturity of experiences.

Video gaming leads all other forms of entertainment

For a dramatic illustration of how important game design has become, just check the high scores. [The medium has outpaced all other entertainment categories](#) in revenue and profit, pulling in \$116 billion globally in 2017, compared to \$105 billion for TV and streaming TV, \$41 billion for movies, and \$17 billion for music. And gaming has found widespread social acceptance. The average age of a gamer is 34, and 72% of gamers are over 18 (millennials and Gen Z). [Sixty percent of Americans play a video game daily. Gamers play six hours a week](#)—enough time to watch four feature-length films (or one Marvel movie).

Video games are ubiquitous and becoming more immersive

Make no mistake: Gaming is everywhere—and so are the sophisticated technologies that power it. Chances are you have a video game system on your desk, in your home, or in your pocket right now. Mobile gaming is the most popular form of gaming, which isn't surprising given the ubiquity of smartphones, making gaming accessible to billions of people globally.

Improvements in graphics will continue apace, regardless of device, while technologies like augmented reality (A.R.) and virtual reality (V.R.) are disrupting storytelling, both for gaming and for marketing. V.R. in marketing will remain niche for now, focusing mostly on experiential uses.

A.R., on the other hand, is easy to deploy and available on most mobile devices, and can add value to brand experiences. Not tomorrow, but today.

Thanks to A.R., invisible worlds surrounding our real locations exist in their own virtual universes. These “[mirrorworlds](#)” allow us to walk around a city and [capture Pokémon](#), [battle wizards](#), [hunt zombies](#), and [build permanent virtual structures](#).

Mirrorworlds are becoming common because of gaming, but they are not limited to games. In a mirrorworld, virtual buildings can be constructed. Photorealistic cars can drive on roads. Entire cruise ships can dock at port.

And yes, we can create marketing content, too. Agencies are well-positioned to connect brands with precision-targeted audiences through interactive experiences—the more immersive, the better—that encourage consumers to buy into these branded worlds.

As a lifelong gamer who wrote my first video game at the age of 8—a choose-your-own-adventure (CYOA) game—I may be biased. But this is an exciting time. We've got decades of game design knowledge, as well as the ability to build A.R./V.R. experiences on powerful gaming platforms. In other words, we have both the know-how and the technological means to create more immersive and engaging experiences for the brands we work with. Now we just have to shift our thinking, so we can deliver more value for our clients.

WHAT IS A GAME? WHAT IS AN EXPERIENCE?

Games



Games have features that vary wildly in scope, focus, and execution. A card game has the same core features as Fortnite—a goal, rules, and a feedback system—but their visual and user experiences are completely different.

Goal

Every game has a goal. Some are simple, others complex. The goal could be to gather the most points in a set amount of time, as in football or basketball. It could be to score a set amount of points, as in blackjack. Or it could be to build a character's abilities and relationships so you can run a 40-person dungeon raid, as in World of Warcraft. Goals are what drive us in real life, and what can drive us in games.

Rules

Every game requires rules. A game's rules can change and develop while you play it. In the card game Hearts, the rules are well established, but house rules can exist based on an agreement. With video games, rules are coded and intertwined within the system. Though they sometimes can be exploited, rules are typically designed to allow players to reach the goal of the game within certain constraints.

Feedback system

Every game has a feedback system: Play a card, roll a die, up-up-down-down-left-right-left-right-b-a. Your actions in the game cause some sort of effect. This feedback can be positive or negative. Defeat a monster? Advance toward your goal. Run into a monster? Start over.

Feedback systems are a critical element of games because they tell players how they are doing and let them enjoy a sense of progress. (Some games make feedback systems ambiguous as part of the rules.)

Experiences

In advertising and marketing, we spend a lot of time and energy on building experiences: radio and TV spots, out-of-home, digital, experiential. Some of these advertising channels can work seamlessly inside immersive worlds of advertising, and others, like digital and experiential, have already brushed the realm of game design. In an immersive world, you know who your customers are and where they are in the world. So you can still provide the :30 radio spot within that world, but you can also provide contextual content that targets that consumer. Old tech meets new. And advertisers can deliver more relevant brand content.

Ready to synthesize

All games are experiences, but not all experiences are games. Synthesizing the two is easier than it seems at first glance. Experiences and games both have goals. Experiences and games seek to entertain or inform.

Experiences and games need to focus on the customer. Storytelling is a key portion of both, but marketers need to tell stories in a slightly different way from game makers.

Build worlds, then stories



Everyone in marketing knows the trope that we're "storytellers." Which is true. We help brands tell their story.

Stories are amazing, but we need to think bigger. For an increasingly engaged audience, brands need to build worlds. Building a world around a brand allows us to communicate around all touchpoints—the ever-elusive omnichannel experience—and immerse consumers in the numerous brand stories that will resonate.

Different channels bring different expectations, and your brand has a world of stories to tell. Game designers have been building worlds for decades—worlds that are incredibly complex, with numerous challenges for the players. We need to take the world-building strategies of game design and use them to engage audiences of all ages.

Contextual content is king

Your content needs to be contextual and relevant within your brand world. And you'll need to adjust your traditional methods of storytelling to something more appropriate for brand worlds: non-linear narratives.

What is a non-linear narrative? Think of the HBO program "Westworld," in which visitors to the Wild West–styled immersive theme park interact with lifelike robots and can experience a nearly limitless number of stories and narrative arcs. So, too, will your brand world need to tell brand stories in non-linear ways, to give your customers an unprecedented level of engagement and immersion, compared to what your brand has done in the past.

Be our guest

Your user is the center of the world. That's the most important aspect of applying game-design principles to marketing and advertising. Good games feel like they're made for you, personally. They create a sense of immersion that can engage you for hours at a time, spanning weeks, months, and sometimes even years. Game designers relentlessly focus on understanding how players will interact with the worlds they build. Brands need to do that too.

PEOPLE AND SKILLS



Traditional linear narratives seen in broadcast will give way to non-linear narratives, providing users a choice of options and making the experience more immersive. An art director will still need to have a great eye for working with a director to get the shot right, but now the shot will be 360 degrees and interactive.

Let's break these new skills down a bit more.

U.X. is similar, but different

In traditional user experience design, we encourage specific actions and outcomes (e.g., planning and booking a trip) by making complex systems easier to use. The complexity remains the same underneath, and sometimes you may gradually expose that complexity for power users who seek out more advanced interactivity and complex choices.

In game design, we also introduce players gradually to the complexity of the game system. For a massively multiplayer online (MMO) game, players receive an onboarding tutorial before they're guided into the wild to start killing Level 1 giant rats. As you play longer and level up, you learn new powers that unveil more complexity. Eventually, you may be in a 25-person group in a four-hour battle that a Level 1 player would never have been able to navigate.

In both game design and marketing user experience, we can simplify complex mechanics to increase engagement.

Game design is a discipline

Great news! Game design is a mature discipline. You can get a college degree in game design. There are numerous online resources that teach how to design games, along with decades' worth of books, conferences, podcasts, and any other type of media you can think of to teach the discipline.

Along with the breadth of media types, you can learn highly specific subdisciplines. If you're a copywriter, learn the art of non-linear storytelling. For UXers, learn how to build logical flows using rule-based systems. For graphic designers, 2D is familiar, but A.R. and V.R. require a new set of skills using 3D modeling and shaders.

There's something for every discipline, as well as millions of examples and media everywhere to learn from. And best of all, you can play your favorite games for inspiration.

From print to immersive

All new media require new techniques. Prior to the advent of TV and radio, advertising was limited primarily to print media. When voice and motion pictures were introduced, advertisers

had to adopt the techniques of actors and directors. When the Internet came into being, advertisers adapted by creating email campaigns, display ads, websites, and other content native to the medium, conforming to the constraints of each new platform while pushing forward their capabilities, and working closely with technologists to understand these new media.

So, too, will advertisers need to learn how to use the mirrorworlds of A.R. and powerful storytelling capabilities of V.R. Immersive advertising will need to adopt the techniques of game designers to navigate these media.

GAMES AND BRAND EXPERIENCES BECOME ONE

Technology has changed rapidly over the last two decades. In a world where most people have an A.R. device in their pocket, and V.R. devices are becoming increasingly affordable and high-quality, we need to understand how advertising and marketing can use these emerging technologies to push forward their brands.

Spatial computing

Reality is what we live in. But everyone's reality is different.

As mentioned earlier, the ubiquity

of A.R. devices (smartphones) means that we now have the ability to create mirrorworlds.

As a result, [marketing is starting to merge with video gaming](#). Fortnite has featured tie-ins from brands that include Samsung's Galaxy, Ariana Grande, and the NFL. Marketers use game-design strategy to provide engaging A.R. experiences that [solve consumer pain points](#), like Band-Aid's Magic Vision, featuring Disney's Muppets performing on kids' bandages. And mirrorworlds have helped [increase brand engagement](#), as in a Walmart tie-in with Marvel's Avengers. Apple has even introduced the tellingly named Reality Composer, an easy-to-use tool that helps users create A.R. experiences.

These are well-known territories that are now more approachable than ever.

Digital twins

"Digital twins" is a concept born out of manufacturing in the computer age. Create a virtual model of the thing you are going to build; build it in the real world; collect data around the real thing and attach it to the virtual model, and now you can optimize this digital twin.

Beyond manufacturing, digital twins will revolutionize the way we create content. With technologies like [real-time ray tracing](#), we can now create cinema-quality scenes for architecture, automotive, travel, and beyond. Completely virtual scenes can empower directors, directors of photography (DPs), and other content creators to make realistic-looking content from any angle without spending money or time scouting locations, hiring a production crew, and abiding by tight timelines.

Interactive TV

Interactive TV has been around for decades but hasn't gained much ground until recently. Its roots in print stretch back to Choose Your Own Adventure (CYOA) books from the early 1980s. Print embraced gaming mechanics, allowing delighted young readers to experience branching narratives.

Around the same time, Don Bluth, a renowned Disney animator, created groundbreaking video games. Instead of using the low-pixel sprites that most games were using at the time, Bluth used LaserDisc, with its instant-seek ability, to create TV-quality cell-animation games that ate many quarters.

CYOA as a non-linear storytelling construct has been attempted a few times on TV, though without much success. That may change. With streaming services, a large audience can use devices and remotes to react in real time. To that end, Netflix may have opened the door to future successes with "Bandersnatch," a buzzworthy CYOA episode of its series "Black Mirror."

On the heels of "Bandersnatch," Netflix has launched Bear Grylls's "You vs. Wild," an interactive take on his popular survival series "Man vs. Wild." Featuring non-linear narratives with multiple branching paths, each episode features replayability, with multiple ways to win—or lose. It even has a rudimentary inventory mechanic at the beginning of each episode that affects your options later.

Beyond the interactive engagement of this format, the quality is really what shines. Interactive TV provides broadcast-quality content that computer-generated content cannot match.

At least not yet.

Unity 3D and Unreal Engine 4

One of the biggest tip-offs of this coming game-design-as-experience-design shift is watching which tools are taking the lead to build content on new platforms. The two biggest that keep popping up around spatial computing are Unity 3D and Unreal Engine 4 (UE4).

Unity is likely the most popular platform to create spatial computing experiences. Born as a 3D game engine more than a decade ago, Unity's easy-to-use interface allowed indie game designers and developers to create immersive video games without having to create their own game engine. The adoption of Unity has bled over into the advertising industry with the rise of A.R. and V.R., allowing us to borrow gaming talent to build most of the ad experiences you see in the spatial computing arena.

The game engine UE4 powers the runaway success of Fortnite, a free-to-play game that earns \$300 million in revenue per month. As well as being highly capable in the spatial computing world, UE4 also offers an incredibly powerful graphics rendering engine that could, say, render photorealistic cars in real-time.

UE4's cloud-based pixel-streaming technology will allow that quality of interactive rendering scale across devices including laptops, mobile phones, and VR headsets, devices that normally don't have the graphics-computing power to deliver that quality of experience.

Experiential design

Moving to the realm of marketing and advertising, experiential design crosses over quite a bit with traditional game design. To work with experiential design, you need to understand spatial design—how people move through spaces, how they

interact with experiences—regardless of whether you involve digital activations or not. Either way, you're creating a brand experience in a 3D space, and you need to engage the user while telling the brand story.

Advergaming

Advergaming is a tactic that's been around as long as video games have been popular. Kool-Aid did it with the Intellivision console in the '80s, in which gamers played a pair of kids who needed to gather the ingredients to make Kool-Aid while avoiding the enemy "Thirsties." A cult-like following emerged around the cereal-branded game Chex Quest in the '90s. Altoids and Cheetos went all in during the 2000s, building immersive sites featuring numerous games for visitors to interact with, to great success, with high levels of engagement and time spent onsite.

As Flash's dominance waned with the rise of the smartphone, so has most advergaming. But the popularity of gaming in general should remind us of the opportunities.

Advergaming exists on a spectrum—from simple to sophisticated—and marketers can place brands within popular games, along the lines of traditional sponsorships, or more immersive branded content in simple ways.

Marketing creatives would need to learn new skills to understand what works (and what doesn't) in gaming channels: How much brand representation is too much? How would we track metrics? Can we build non-linear narratives that fit seamlessly into these new worlds?

On the other end, you can build games that exist in your brand's world. This more traditional form of advergaming had quite a bit of

success before video gaming was as big as it is now. Consumers are often willing to exchange their time and attention for fun experiences, so there's no reason advertisers shouldn't resurrect this medium, with ever-growing engagement opportunities.

HBO built a "Westworld" experience for Alexa on Amazon devices that wrapped an engaging game in an interactive radio drama. The agency behind the game created more than 60 storylines and more than 11,000 lines of scripted content to allow more than two hours of unique gameplay. That's a world you can return to over and over again—and each visit strengthens the brand a bit more.

DEFINING SUCCESS

Like most of the synthesis of advertising and game design, success will look familiar, with a bit of a twist. So you've built your brand's world and it is truly omnichannel. Your customers drop into a partner's mirrorworld, and they see your brand's product placement in that world, executed in a logical, contextual way. As they walk by an activation, a radio plays an ad for your brand. Unlike the real world, in the mirrorworld we can track your customers' engagement for their entire trip. How long did they look at your brand? Did they move towards that contextual object or away? When they heard the ad, did they stop and listen? Did they turn their head so their ear is aligned to where the audio is coming from? And how can we use this data to further optimize your brand's engagement in the mirrorworld? Will similar tactics work when the customer exits the mirrorworld and we apply our learning in

this reality? Unprecedented immersion gives us unprecedented data to further optimize customer engagement.

LOOKING FORWARD

This white paper scratches the surface of what is coming at us in terms of opportunities for brands in the next five to 10 years. Gaming isn't going away, and advertisers and marketers need to understand why it's the most popular form of entertainment in the world. From a mobile phone in the U.A.E. to a V.R. rig in Silicon Valley, gaming is eating the world. Your brand needs to take advantage of these opportunities. So go download Fortnite—it works across platforms and is free to play—suit up, and dive in. What can your brand do when reality is no longer limited? What does your brand world look like?

ABOUT THE AUTHOR



icky Bacon is a strategically driven, creatively led, and technically practical leader and futurist. He works with the world's largest brands to build innovative experiences that surprise and delight customers while delivering real business value. He leads the technology group for Critical Mass New York and chairs the Creative Technology Committee for the 4A's.

ABOUT THE 4A'S



he 4A's helps empower our members to drive commerce, spark connections, and shape culture through infinite creativity. We are dedicated to and vested in, our members' success, just as they are dedicated to helping brands create, distribute, and measure effective and insightful advertising and marketing. With a focus on advocacy, talent and the value of creativity and technology and their impact on driving business growth and powerful cultural change, we provide community, leadership, guidance, and best-in-class training that enable agencies to innovate, evolve, and grow. The 4A's was established in 1917 to promote, advance, and defend the interests of our member agencies, their employees, and the industry at large. More than 100 years later, we continue to support the evolving needs of our community. Today, the organization serves 600+ member agencies across 1,200 offices, which control more than 85% of total U.S. advertising spend. 4A's Benefits division insures more than 160,000 employees, and its Washington office advocates for policies that best support a thriving advertising industry. The 4A's Foundation fuels a robust diversity pipeline of talent for its members and the marketing and media industry, fostering the next generation of leaders.