Deloitte TECHTalks | EPISODE 27 | AI & Infrastructure in Gaming
With Hanish Patel, US Games Vertical Lead and Host of User Friendly Podcast

Raquel Buscaino: Welcome to Deloitte TECHTalks. I'm your host, Raquel Buscaino, and I lead Deloitte's Novel and Exponential Technologies team, where we sense and make sense of emerging tech. On this week's episode, we're going to dive into the world of gaming, a dynamic industry that is continuously reinventing itself through creativity, immersion, storytelling, and of course, technology.

So how are technologies like generative AI, immersive platforms, and live service models transforming how games are made and how players engage? And what can leaders and other industries learn from the gaming industry? We'll cover all this and more on today's episode.

To unpack these questions, I'm thrilled to be joined by Hanish Patel, Deloitte's US Gaming Leader and host of the user-friendly podcast. Hanish has spent years working at the intersection of gaming, media, and tech, helping organizations navigate this landscape. So Hanish, welcome to the podcast! It's so great to you here today.

Hanish Patel: Raquel, thanks for having me on and looking forward to the conversation today.

Raquel Buscaino: Yeah. It's especially exciting because it's not that often we get a chat from one podcast host to another.

Hanish Patel: That's right. Feels strange being on the other side of the mic, so to speak.

Raquel Buscaino: No, it'll be great. Well… So, as Deloitte's US Gaming Lead, I feel like you're constantly in these conversations with leaders across the industry about where gaming is heading from emerging tech to different business models. Maybe you could kick us off with just what the general trends are that are shaping the gaming industry today.

Hanish Patel: Sure! Happy to. If I look at it from a technology perspective, I think you get in things like cloud stream, which is getting increasingly more competitive. You've got things like latency and bandwidth improvements via technologies, like 5G, that are really kind of pushing cloud gaming closer to what others may be used to from a console quality, as well as lowering the barrier of entry for new ways to play. Think of, like, game streaming straight to your smart television.

And why things like that matter is, as you look at the lower hardware barriers expanding a total addressable market for all, as both younger and older age groups or cohorts have easier access to the ways to engage with games, you don't require those consoles or PC or dedicated game devices. And the implication I see with something like that is game developers themselves need to be more, I'll call it network-aware around the way that they design and the delivery pipelines that they've got. Because reliance solely on static releases is no longer sufficient for industry leadership.

Raquel Buscaino: Wow, so interesting about cloud streaming, just becoming increasingly competitive across the board. It seems like this is something that's new, maybe within the last five years, would you say?

Hanish Patel: It's certainly something that has been developing over the last good number of years. And we've seen certain companies come in with those as an overall solution of cloud gaming. But you look at a lot of titles as they're being released, they're no longer just standalone titles, you're seeing so much more where it's multiplayer online and that's across different platforms.

Raquel Buscaino: So interesting. And what kind of trends are you seeing? If that's a trend on the technology side, what's something on the process side that you're seeing?

Hanish Patel: One of the areas is around IP. And I've seen the evolution certainly in the last five to 10 years. It's not that it's a brand-new phenomenon. That will be incorrect to say that, but certainly over the last 5-10. You're seeing much more magnification on the IP side of it. And kind of one of the areas as I call it is IP super franchising.

And what's happening here is you get the cross play and any screen access, a really driving collaboration across platforms and industries with gaming IP extending into movies, TV shows, music, theme parks, retail, and more.

The value of IP is rising, requiring stronger management and protection of that IP. And from a gaming perspective, those kinds of backlogs are now valuable for broader media and fandom extends beyond just traditional players. And these pieces have some hardcore fans who have never actually played the original source material.

So, gaming companies can now reach a much broader market as gaming IP now plays an integral role in helping to shape the mainstream trends. And I think about the implication of that is that investing in those cross-platform tools, live ops, diversified revenue streams, be that for shows or merchandising or events, is essential to maximize IP potential.

Raquel Buscaino: Yeah, I like that terminology- IP super-franchising. And especially the point that fandom extends beyond just traditional players. It is really opening-up access to totally different population groups that might not have otherwise had exposure or interest in gaming.

Hanish Patel: That's right. Another area, Raquel, that I see is just around monetization. And I would say that monetization strategy is changing, where monetization has really shifted from single purchases to live services, subscriptions and season passes, even for single SKU titles. And as micro transactions and in-game purchases lead to a significant spend, regulators are cracking down and scrutinizing on these transactions. And while forcing publishers to develop clearer value proposition and transaction policies to help the industry overall.

And as I think about the implications of these things, is that studios and publishers in a space will need to change more than the strategy itself as customer relationship management capabilities—like cohort segmentation or predictive churn and content matchmaking — all become critical to accurate

forecasting and prediction. And financial reporting metrics are of course impacted by changing monetization strategies as reporting moves from say static sale data to more dynamic insights like MAUs, that's monthly active users or DAUs, daily active users, and of course player lifetime value metrics.

Raquel Buscaino: So, if I'm hearing you on the monetization strategy side, what used to be a point in time or singular transaction is now multiple transactions across multiple channels, and companies need to be thinking about it from a continuous lens.

Hanish Patel: That's right. I mean, if you think about historically, you know, someone may release a title and that's that one-time payment where you go buy that game that you're interested in. There's certainly been continued evolution where you may not even buy that title upfront, but you're spending throughout the lifetime of that title through various purchases. Could be season after season or just some in-game content that you're purchasing throughout.

So therefore, then the monetization strategy has evolved. Now I'm not saying every title is in that manner. There are still those titles that you can absolutely purchase for that single amount, whilst there's others that have what may be called a bit more evergreen titles where they are actually sustained for many, many a year through updates and continual releases, which then you stay with that title for a much longer period.

Raquel Buscaino: So interesting. And what about the players themselves? How are they changing this ecosystem?

Hanish Patel: I think they're very much becoming a part of that ecosystem. One of the things I see more and more on the player side is the rise of what I'm calling that player developer economy. And UGC, user generated content, is becoming increasingly popular and valuable in gaming and even modding communities, inspiring anyone to become a game developer. Bottom line is that UGC is no longer a side hobby. It's a part of the industry with its own economies. And I believe why that matters is that traditional value creation has shifted from studio-centric to ecosystem-centric, where in content creation velocity from the sheer mass of individual creators outpaces any in-house team.

In addition, tooling barriers are collapsing. There's drag and drop editors, market asset packs, no-code scripting and other accelerators are really enabling at home game development to create games of size and scale and quality that can rival studios. And the implication of that is really that studios need to acknowledge this new source of competition because they aren't just competing on share of wallet. They're also competing for share of time, as well.

And like I mentioned a bit earlier on metrics, that kind of metrics and reporting should also expand into new areas to try and get new views on how much player time from the player base is actually spent on the mods or the UGC part of the game. And ultimately these studios that treat creators as partners and not pirates can unlock new recurring revenue and extend IP lifespans. And those that ignore that player developer shift risk ceding both attention and share wallet to ecosystems they don't control.
And one thing I guess I'll say as a note is that many people are familiar with the phrase player creator economy, but I deliberately use player developer instead because today's enthusiasts aren't just

decorating worlds or swapping skins. They're leveraging sophisticated DIY dev kits, asset libraries and tool chains released by major studios and others to architect an entire game experience from ground up. So, creation today goes far beyond casual content creation, reflecting depth of design, engineering and iteration, once pretty much reserved for professional development teams.

Raquel Buscaino: Yeah, because you do hear the player creator economy dominates the conversation a lot, but it's really the player developer economy now. So, I like that emphasis you placed on it and all the trends we just mentioned from the cloud streaming to IP super franchising, monetization strategies, and this player developer economy.

So Generative AI is already starting to influence parts of the gaming industry. From content creation to localization, in fact, Deloitte recent research highlights how AI-driven localization strategies are helping studios cut costs and reach new markets faster. So from your perspective, how is Generative AI beginning to shape the gaming industry today, and where do you see the biggest opportunities and challenges ahead?

Hanish Patel: I mean, listen, AI is not new when it comes to video games, right? But if we really look at Generative AI, what we're seeing is there's certainly AI tools that are reducing the time and the cost of traditionally human-led activities. Now, that could be certain asset remastering, could even be some asset creation. But certainly some, what's known as NPCs or non-player character dialogues, QA testing, I mean, you mentioned localization. That's absolutely one that's being used and actually analytics as well.

And why this is important as the industry continues to use these type of tools, and in particularly Generative AI, is some of the estimates that I've seen out there range between 20 to 40% cost savings in some of that content production because it's enabling that faster, more frequent content releases as well. Which is absolutely crucial to some of that live service retention in a competitive market. Going back to what we talked about earlier is one of those trends about bit more kind of evergreen titles through live service, it's exactly allowing some of that.

But of course, that does at the same token, raise some concerns about maybe IP ownership, and moderation. So, studios really need to think about upskilling teams in AI, establishing clear governance on ethics and data rights to stay competitive and really maintain trust with the developers as well as the players.

But ultimately, yes. Generative AI is already changing how games are being built, how e-sports are being watched, and how both industries monetize and engage their audiences. And the upside is faster for content creation, hyper-personalized player experiences where you and I feel that the game has been built around the way that we want to play it, much richer broadcasts, and frankly one could argue continued evolution of these business models that we touched upon earlier. The downside? There's definitely a spike in IP, labor, competitive integrity, risks that could undermine trust if not addressed early.

Raquel Buscaino: I couldn't agree more on the ethical considerations front. So, as these games become more complex — I'm thinking about the cross-platform plays, the cloud gaming, the live service

ecosystems that we chatted about prior — I feel like the demands on infrastructure are increasingly growing. And so how have you seen leaders approach investments in infrastructure to support that innovation and scale, and also support some of the GenAI activities and cost savings we just chatted about?

Hanish Patel: That's actually a great question. When we talk to CTOs (Chief Technology Officers) of big publishers or platforms or eSports tournament operators, we tend to hear the same strategic theme which infrastructure is no longer a cost center. It is actually the engine that unlocks faster creation, richer player experiences and global reach, which is absolutely critical because as we all know, games are global, right? And it's all about that delight in the player. Making it fun. Making it a rich experience. So, that's really important where that infrastructure is at the core of that.

And one could argue that the winners in this space are going to be the ones that are building elastic, AI ready, security hardened infrastructure that scales up for a big global launch but can also scale down during those non-peak times. It goes back to that kind of cost and efficiency element. And it, you know, still gives the designers and the developers the freedom to ship new ideas, frankly, in days rather than months. So that's a bit more speed to market.

And I guess couple of examples, if I may, is if you think about sort of that “cloud-first” and “edge-enabled” backbones — they let these big studios really burst capacity for launch day. Or it could be like a 300,000 concurrent eSports final that they're broadcasting while still hitting sub 50 millisecond latency in say, Sao Paulo or Seoul, which is huge to hit that level of latency when you're thinking about that scale that you're taking out. It can only be done with the appropriate infrastructure in place.

Or if you think about those live services that we talked about where you're continuously delivering, one could argue games are never done anymore. Because you're continually evolving the characters, evolving the ones you swap in or bring to the floor or different seasons and chapters. So, the ability to be able to do that and containerize those microservices or feature flags and frankly have that observability on dashboards, you can very quickly patch something, if there's something going wrong, but ultimately minimize, as best as possible, that player downtime.

Raquel Buscaino: That's, I've never really thought about — the need to scale up and scale down. But the examples that you’ve just mentioned—it’s pretty illuminating! Because I'm assuming that players also, you know, are logging in from multiple devices and they want the same experience across multiple devices, too.

And so, my hunch is that delivering that kind of cross-platform play requires moving and managing a lot of data across systems and even countries too, which might even raise some bigger questions about privacy, security, and trust. So, from your perspective, what are some of the big challenges that gaming companies are navigating when it comes to data production in this increasingly interconnected world? Whether that's Brazil or South Korea?

Hanish Patel: It’s a great question. If I look at it from that kind of security, privacy aspect and ultimately trust kind of spring balling off what we're just talking about here with the architecture. And like you say,

you could be accessing it through your mobile, I could be sitting on a PC, the person in the room next to us could be using a console.

And so I think there's a whole load of things around the architecture that companies need to be thinking about. And it's making sure that experience, as you mentioned, feels the same regardless of your point of access because as a player, you probably want that one identity and inventory everywhere.

Ultimately you want to have that performance, so servers need to sit close to where players are around the world. So if you're playing an online match, there's no lagging. This could be costly. So how can you maintain this game at a certain level and still make sure that it's economically viable? Same token from a data privacy perspective. There's things around just how you maintain that data and you need to really think about how you can improve the game using the data that's available to you, right?

But each device — depending on which one we're playing and the storefront — sends different data in different formats at different speeds and sometimes not at all — due to maybe bandwidth drops or platform rules. So, when things like those streams don't line up, your stats on player turn or store conversion or even frankly anti-cheat start to become unreliable, leading to not fully informed decisions. So, while this is a need for the publisher, players are also very concerned today about where their player data is going, how's it going to be used, which kind of brings me to what you mentioned on trust.

Players are increasingly wary of games that just scoop up the voice chat or localization or frankly even your purchase history without clear permission and as such there's laws that have been placed, not just for games, but just overall things like GDPR, the general data protection regulation, or the California Privacy Rights Act, which then can be in place and everyone needs to be aware of those.

But the key thing here is that if players think cross-play, (i.e. across different platforms) means cross-surveillance, then that could turn them off, so to speak. And they might even avoid the game. Or, they'll look to turn off the data share aspects because they just don't want that data to be used in different ways.

So, I think for studios to really be thinking about how do they follow a privacy-by-design architecture, separating who you are from what you do, and following some strict anonymization and aggregation rules to keep personal information secure. And in these kinds of more mature privacy-by-design architectures, player consent is often set as a visible feature on a player dashboard. So players can choose what data in which scenarios is aggregated and sent back for ingestion. and taking a somewhat balanced approach to transparency and regulation is how leaders in this space are really trying to balance the need for data so it could be utilized to make more personalized titles, and also what player concern may be about the surveillance of their activities online and in the game.

Raquel Buscaino: So interesting. I'd also imagine that the privacy-by-design architecture becomes even more important too, as you expand into immersive technologies like augmented reality, mixed reality, and virtual reality because you're collecting so much more data about your surrounding environments too.

Hanish Patel: 100 %! 100 %! And that's an interesting space as you talk about AR/VR because like you say, one can argue capturing significantly more different pieces of information beyond just an individual's gameplay.

Raquel Buscaino: Yeah, so maybe we'll talk about AR-VR a little bit as well, but I think many would argue that the technology hasn't quite reached the level of mainstream adoption that might have been expected by now via public interest or hype. But, at the same time, we're seeing more VR arcades and immersive gaming experiences spring up in big cities.

I know I did one two months ago with one of my teams and it was phenomenal. And so maybe you could just speak to this a little bit from your vantage point. What's driving the growth in location-based VR experiences? What challenges need to be overcome for more mainstream AR and VR adoption within everyday life? I would just love your state of the state with extended reality as a whole.

Hanish Patel: Yeah, sure. I mean, it is absolutely a lot of fun when you go to those places. But I think there's also been a bit of a challenge with some of those titles or movement into that more kind of spatial place. And that's, you know, unlike what we just talked about here, where that's kind of large sort of public attraction spaces, kind of at the home when you think about AR/VR adoption, it still somewhat lags. And ultimately because headsets are not the cheapest additional peripheral that a player needs to purchase, right? There's probably sometimes a little bit of that sticker shock that happens from a financial perspective, which may limit the uptake in the home. And the other part of it is just you know that, that desire that how many hours can you put a headset on without feeling that kind of fatigue of using it?

So, as over time, price points get at a more viable level as they get more ergonomically usable from a longer gaming time, it is going to make a difference. But most importantly, I go back to just kind of making the right titles, having that kind of must-play content that people gravitate to is going to be the important thing. I mean, certainly we've seen certain titles be successful, but one would argue the pipeline is quite thin. Development costs are high. Install base is relatively small. So the way that I see it is looking for those kind of hooks into where that existing IP can be used, where then mainstream players will stay on and want to play in these different platforms compared to just staying on the traditional platform.

When you go to those kind of location-based, those kind of VR arcades. I mean, they're certainly growing because they can spread the cost of that hardware across all of the visits that people have and they can still deliver that premium experience and social experience which is hard to replicate in the home.

Think of an escape room or kind of those indoor laser tag type of places. That's more that type of revenue model for those kind of social VR arcade places because the mainstream uptake will require affordable lightweight headsets, some real blockbuster cross-platform titles that, yes, are standardized, and as we mentioned, you know, privacy, that they are privacy safe in that sort of spatial data that they're using, that really allow the publishers and developers to build these compelling worlds without having to rebuild something from scratch. And I think that's where we may see more of that uptake.

Raquel Buscaino: I wonder if this is a good analogy or a bad analogy to make here. But I think a lot of people are rethinking, well, what do they want to own? And what do they want to rent? Let's take cars, for example. You can get around with a ride share much more easily.

And so with the location-based VR games, I wonder if it's a similar analogy where people are deciding, do I want to buy or do I really just want to rent and experience it maybe once a month? And what's the Pareto-Optimal equation that converts people from renting to buying? And it sounds like, to your point, it's when you have something that's a compelling title that you really want or whether it's integrated in your life in a really meaningful way. Once that happens, you decide to buy.

Hanish Patel: Yeah, yeah, I love that analogy by the way. But it does make me ponder over what are those choices that an individual player may take? Is this something that I will be playing a lot and want to purchase versus something that, Hey, I like the experience and the idea of it, but I'll wait for that compelling title to really invest my time and money into.

Raquel Buscaino: Exactly. Well, Hanish, this has been such a great conversation. As we wrap up here, I'd love for you to leave our listeners with just one key thought. So from your perspective, what's the one thing that business and tech leaders, whether in the gaming industry or beyond, what's one thing they should keep in mind about how the gaming industry could influence other industries or their own?

Hanish Patel: I'll go with this: When you think about entertainment and the games industry, one may not notice, but it's a huge industry. And when I say huge, it's bigger than movies and music when you put it together. So it's the sheer scale of games, played across all regions, countries, age groups...it's truly as universal as it gets in the scale of it is huge.

And in some way, it's a signal of kind of where consumer attention is going and where some of that discretionary spend could head but it's also important to remember that with such growth and size of, I'll call it entertainment as a vertical, as the industry continues to expand, so do player expectations.

So that whole way of accessing and playing is really hardwiring us all as how we want instant service, seamless access, doesn't matter where we are, what we're using, to really get the entertainment we want. And I think that is also then permeating to things beyond games. It's not just confined to games, right? It's shaping how we shop, learn and consume media.

So, you know, companies can really take a look at how games have kept players both engaged – I'll say safe as well — where possible from the trust element and will likely have an impact on how they're going to consume going forward, all forms of media. Enterprises in every industry can really position themselves to meet tomorrow's consumer expectations when it comes to the way that we want to be engaged and entertained.

Raquel Buscaino: So fascinating. You know, if you're not in the gaming industry and you're not a gamer, you might not realize just how big the market is and just how much innovation is happening in this space. So thanks for calling that out and for highlighting all the trends that you went over today.

Hanish Patel: My pleasure. I mean, as you probably gathered, I could talk forever on this stuff, I appreciate you inviting me to come on and have this conversation. Cause yeah, it's definitely an area I'm passionate about.

Raquel Buscaino: That was great. I learned a lot. To all our tech savvy listeners out there, if you enjoyed this episode, please share and subscribe. And if you'd like to learn more about the trends shaping the gaming industry and beyond, you can follow myself and Hanish to stay up to date. Our socials are listed in the episode description. Thanks for tuning in, and I'll see you on our next episode. Until then, stay savvy.