VR vs. Laser Tag

Zone's Erik Guthrie on Tech, Economics & What Sets Laser Tag Apart from VR Today

By Erik Guthrie
VP of Zone LaserTag

Erik Guthrie has nearly 25 years in the laser tag industry serving in many capacities. Starting out as a part-time game marshall in 1993 to Vice President of Zone Laser Tag for the past 14 years. Zone Laser Tag claims to be the world's largest laser tag manufacturer with 40 percent of the world market. In addition, Erik was the Executive Director of the International Laser Tag Association for seven years and is also an owner/investor in several laser tag facilities. He has been quoted in the Wall Street Journal, Inc Magazine, Fast Company, as well as numerous trade publications. He serves as the Curator for the Laser Tag Museum and was recently featured on the hit television show *Storage Wars.* He owns and chairs the Laser Tag Convention held annually throughout the U.S. Erik is also involved in the R&D of the laser tag experience now enjoyed by millions of players every month around the world.

There's a lot of buzz in the industry today about VR and what it offers, where the future might be and, among some, whether VR could unseat laser tag in popularity. VR is really cool and exciting, but I will flat out state that VR will not replace laser tag. It's just not going to happen that way, certainly not within the next 7-10 years.

Before you dismiss what I'm saying, let me prove my point by talking about the money involved, the type of play and other factors (such as augmented reality) that affect the profit reality in today's amusement business.

For those who don't know us that well, Zone is relatively different from most laser tag manufacturers in that we own multiple locations. I personally operate a laser tag arena, too. So we're nose-to-the-grindstone kind of folks because we're making money day-by-day on customers coming in and enjoying a great laser tag experience. We want to pay attention to anything that's a threat to that business model. Our interest in the future is multiplied two or threefold because we manufacture equipment. We must pay attention to anything that affects that side of the business…which leads us to VR.

I attended the FOIL event in Las Vegas (Sept. 13-14 at the Mandalay Bay Convention Center; see *RePlay's* October issue pages 41-46) to learn how this new technology was developing and where it might be heading. (I was on the panel discussing VR vs. laser tag where our resulting consensus was that the two technologies would more likely be allies.)

It was interesting to be in a room full of people much smarter than myself, and they were all very interested in VR. But at the end of the two-day conference, my take away —

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There are definitely visionaries out there, and people who were at the seminars, who see the world in a way I could never see it. They're to be admired, to be honest. But they're also not practical in the concept of what I'm going to call the "Rule of 12."

This, very briefly, is that an attraction should gross back in 12 months what you paid for it. That Rule of 12 seems to hold true across the board. I've spoken with go-kart guys, spin zone guys, laser tag guys, escape room guys, climbing wall guys, bowling guys…and the Rule of 12 seems apply universally within the amusement industry.

This is important and this metric is critical. If we don't have metrics that can be measured, we're not an "industry." We know what our operating ratios are, we know what our gross sales should be, what our labor costs should be, and we should know what our investment ratio should be: It's in the rule of 12. And it's not just me. I've spoken to financial people who are very well versed in this industry and they acknowledge this.

However, it does not apply to virtual reality. VR today does not conform to the Rule of 12. If you invest in virtual reality at this time, you don't gross back in 12 months what you invested in the technology. Keep in mind, the rule covers only attraction costs, not any build out, land acquisition or anything else like that, but it's a rule of thumb. Using it helps you understand whether or not you should make whatever investment in an attraction you're considering. If you are really looking at

whether or not your plan makes sense, the Rule of 12 kicks in. Virtual reality does not comply with the Rule of 12 at this time.

That means VR either costs too much or it doesn't generate enough revenue (or both), and that tells me that it's not viable. Do I have a vested interest in saying this to protect the laser tag business? Yes, but that's not where this is coming from. In my honest appraisal, it's simply a statement of where I see virtual reality technology today. It's certainly exciting, and there's a ton of development and growth going on, but the money's simply not there. Not yet.

There is something in the computer industry known as Moore's Law that states that computer-powered technology doubles every 18 months. And that's been the rule of thumb in that industry for some time. In recent times, word is that development has actually slowed down; we no longer see computer power doubling as rapidly. Therefore, the cost of virtual reality is not coming down. This all might be a little too technical, but at the end of the day, the technology is not getting cheap enough fast enough.

With that said, is VR something that we as an entertainment industry should be aware of? Absolutely! Is it a hound at the door? Not quite yet. It is definitely a hound baying out in the wilderness, but the hounds are not at our doors yet.

What is going to be at our door very soon is augmented reality. Augmented reality is what the Pokemon craze was all about. Simply put, it's the ability for the guests to look at their phone's camera or a display screen and see something that isn't actually there. Again, citing the Pokemon phenomenon of 14 months ago, you had people taking walks using their phones to capture these little Pikachus and other Pokemon creatures. Imagine in the entertainment industry, particularly laser tag, using augmented reality to have health packs floating in the arena like they do in a video game.

It's cool and it's possible.

What if we walk through an icon that enables rapid fire, or we walk through one that has relay bounce (where you tag one player and it bounces to a couple of other players)? What if the laser tag arena mines themselves, instead of being physical mines that the operator must purchase, were virtual or augmented? They could be "mounted" by being placed augmentedly in any corner of the laser tag arena. The player takes his laser weapon, goes to that corner, looks at the display on his weapon and "sees" bases there to destroy for bonus points and things like that.

At the moment, the objective of most laser tag games is to get from your side of the arena to the opposing side to tag the base. What if the bases were not really physically there? What if they were augmented reality that you saw on your laser screen? Think about what that opens up for manufacturing and for operation. Augmented reality bases reduce the cost of manufacturing the equipment and it allows the operator to put bases anywhere in the arena, creating a dynamically changing game.

My belief is that there would be a random factor you could generate with the placement of the bases, so that every game played is inherently different. It would take laser tag play to the next level. It would be no different than what they did with Pokemon. The Pikachu wasn't in the same spot all the time; it could be randomly generated throughout different areas. The programming gets a little more complex because it actually looks at what's called dynamic randomness: how many people are in a given area and increasing the possibility of a Pikachu popping up.

The big takeaway is that we could

see augmented reality implemented in laser tag much sooner than virtual reality. Why? Because we still have the "experience" of laser tag which is put on the vest and tag your buddy. That's what makes laser tag fun: tagging your friend! In virtual reality that experience doesn't happen right now because of the current game play we're seeing. Laser tag creates this tag-your-buddy play, whereas VR platforms are more about teamwork and working cooperatively.

To state it more clearly: There's a level of competiveness that exists in laser tag play that VR doesn't have…at least not today.

If you and I go to a laser tag center, I actually want to tag you. You're my buddy, my friend, but I'm trying to blast at you. I don't care about the other party that showed up and the other people playing in the same arena. I don't know them. Instead, I want to talk trash to you and try to tag you. That doesn't happen in virtual reality right now. VR is either your team versus zombies, or your team versus a robot, play like that.

Laser tag is classic – and popular – player versus player (PVP). It's ginormous, and while we don't necessarily think of laser tag as PVP, it certainly is and it's a big part of what's so fun. It's emerged from the gamification of America that has already occurred along with the eSports phenomenon within the home console and computer game market. This is where VR is still lagging.

What they're doing with VR is exciting and immersive, but at the end of the day, the graphics are still behind, the computer processing capabilities are inadequate, and they're still working on what I'll call "a comrade relationship" while my buddies and I are working together in a team-building situation. Again, that style of play isn't what makes laser tag fun.

When birthday parties come to a laser tag center, the players don't work together as a team. The group splits up

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and it's us versus them. That's what makes a great laser tag experience.

This isn't meant to be arrogant in any way, but no one has spent as much time looking at the gamification of laser tag as I have. It's really my passion. I go to great lengths to do things like being on the panel at FOIL, spending two days there, traveling around the country talking to operators and giving presentations on laser tag and business/marketing in general. On top of that, I'm an avid gamer myself. So when I look at all this together, when I look at all those trees, I can tell you there's definitely a forest there. As I said before, the VR hounds are baying out in the forest, but they're not at our door yet.

Of course, all this talk has likely sparked the question: Where is laser tag technology today with regard to implementing augmented technology?

We're in the concept stage. There hasn't even been a beta version made by any manufacturer anywhere in the world, and I'm in touch with most of them.

The benefit of my position with the Laser Tag Museum and the Laser Tag Convention is that it keeps me in touch with a lot of the competitors. Right now, there's not a hint that AR is ready for test. It may be theory in the R&D department, but no one's putting it into use or trying it at event yet. My best guess is that we're three to four years away from the implementation of augmented reality.

Here's an interesting dilemma, too. Arena manufacturers are interested in this technology, but maybe only to a certain degree. It's a bit of a threat to them (and remember, I'm part of "them" here). Because of the enormous cost of R&D on the software side as well as manufacturing, most want to introduce a new product approximately every six to seven years, with minor software or very minor hardware changes in between. They want those costs amortized over seven to maybe even 10 years. So

they're not racing to develop new systems.

We're still chomping at the bit to make this concept happen, but it will happen because there is no such thing as "laser tag technology." You read that right. There is cell phone technology and there's computer technology, but "laser tag technology" flows from all that. Clearly cell phones and computers are headed the augmented reality route. Therefore, laser tag will follow — we'll have to — simply because the technology paths are traveling down those routes. I see augmented reality being implemented first and I don't think we're afraid of virtual reality for seven to 10 years. *(Editor's note: We'll have to pick up this issue 10 years from now to see if Erik Guthrie's future came true.)*

Here's another thing to look at: Laser tag is no longer a fad. It's recognized as a business. Every laser tag manufacturer doing business in North America — the big six — have all hit critical mass with 100 locations or more. Now, because they have critical mass, here's the problem: You sell a set of equipment, and then two months later you introduce your augmented reality version, right? That guy who just gave you $75,000 for

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the equipment and $150,000 for the arena two months ago is now mad. He didn't get the new tech. This is definitely an industry where, jokingly, the buggy whip manufacturers want to make sure buggies are still being made.

If you think about it, buggy whip companies and buggy manufacturers were not the ones who saw changes in technology and decided to make automobiles. It was someone coming from the outside, someone who didn't have critical mass. So my belief is that there needs to be a laser tag startup that comes in with augmented reality, a laser tag company that may not even exist today. This start up is going to come in with AR, forcing the big six to have to embrace it.

I don't think the companies that are going to implement AR into laser tag fully exist at this time. I think manufacturers are looking at it, but at the end of the day it's actually not in their best interest because, going back to what I said earlier, if bases are now virtual, there's no physical base to manufacture and sell. Every manufacturer of laser game equipment sells bases and while it's a manufacturing cost, it's also a profit center. It will be hard for the old guard, meaning the heads of the big companies, to decide to stop making bases. It's simply because we've all done it a certain way for so long.

All four of the major theming companies out there sell props for the electronic bases used by laser tag manufacturers, and those props are profit centers. We're not faulting anybody for making a profit; we should celebrate profit as an industry! But at the end of the day, those makers of arena props will be less likely to recommend a laser tag manufacturer that doesn't sell a physical prop because that will mean the build out is less expensive, which results in a lower commission to the sales person.

As vice president of the largest laser tag company, I can tell you that we're definitely looking at augmented reality. We're looking to see how it can be implemented and we're spending money on the concept with in-house prototypes and looking at the cost to modify existing equipment. But we're nowhere close to saying "here's augmented reality laser tag" so I just don't know if we're going to be the company that rolls it out first. Leading edge technology is "bleeding edge" technology.

If Zone created augmented reality laser tag, is there a big enough demand for it yet? The equivalent would be the modernization of the bowling industry. When the concept of modernization began, half a percent of the proprietors embraced it. And then 1 percent. And then 5 percent. And then 10 percent Today, virtually 100 percent of new builds are being built on the "bowling entertainment center" platform. But 10 years ago, that wasn't the case.

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It's going to be the same with changing technology. We see this clearly in VR. There will be early adopters. So do we spin off a product or do we develop a brand that's for those early adopters, recognizing that the cutting edge technology is going to require that they just bear some unpleasant, uncomfortable days as any new developing technology has? Adoption will occur slowly and over time to become the standard.

Virtual reality will enter the entertainment industry, but I believe it will do so through an augmented reality model. A business model will emerge during the next 5-10 years as costs start to come down that will obey the Rule of 12. Once affordable and viable, AR and VR will be welcomed side by side with the #1 attraction in the entertainment industry – laser tag!

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