

A person is shown from the side, wearing a large black headset with a glowing blue light bar. They are looking at a computer monitor displaying a colorful, abstract game interface. In the background, there are other monitors and a sign with a 'b' logo, suggesting a gaming event or exhibition.

VIVOX

Whitepaper

Building communities: The complete guide to social interactions for game studios

How the biggest game studios connect
their players to build long-lasting communities
and amazing in-game experiences

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Welcome

If in-game communication is critical to your gameplay, as in a tactical shooter or when raiding on an MMORPG, you need to take extra care in handling the mechanisms for those interactions.

Just look at the amount of work that the *Elder Scrolls Online* team has put into their in-game communication (check out [their guide](#)). Or read the numerous tips on how best to communicate in *Rainbow Six Siege* (Team Dignitas did a [great breakdown](#)). Clearly, in the biggest titles, communication is essential.

So how do you ensure your players can communicate effectively?

The team here at Vivox has written this guide to help you identify the key considerations you should think about when developing and managing your game.

You'll find more on Vivox at the end of this guide, so feel free to get in touch with any questions. We'd love to hear from you!

Yours sincerely,

Dave Veratti

Head of Sales, Vivox

Playing games is social

Technically, the history of player interaction in video games dates back to those times you sat down with your family and shared the TV to play *Pong*. Remember what it was like to buy the four-player adapter for your SNES?

But it wasn't until the internet freed us from local play that multiplayer gaming became a phenomenon.

Multi-user dungeons (MUDs) were the precursor to all online gaming, as well as the foundation of modern massively multiplayer online role-playing games (MMORPGs). The idea that several people could simultaneously "adventure" in the same world once seemed like a pipe dream. Now, every major game has some form of shared online play, and the future invariably lies with persistent online worlds, or games as a service (GaaS).

As the internet expanded our playground, it quickly became clear that we would need to enhance our modes of communication. The world's gamers could get only so far by jumping around each other in a circle or slash-dancing on top of mailboxes.

Several solutions arose in the early 2000s: mainstays such as Ventrilo, TeamSpeak, and Mumble are still in use today as tools to help large communities of like-minded gamers communicate and coordinate. Discord is the culmination of internet relay chat (IRC) and voice technology.

But when it comes to integrated voice and communications, no service is more reliable than Vivox. Since 2005, Vivox has risen to become the preeminent provider of voice and text communications in games, with 120 million monthly average end users being serviced by Vivox across PC, mobile, and console games. From the venerable *EVE Online* to the globally dominant *Fortnite*, Vivox powers the communications of the industry's biggest online games.

With Vivox, instead of having to manage additional applications, players can simply stay in the game. Because no matter what kind of gameworld you've created for your players, communication is critical.

Types of in-game interactions

One of the primary reasons for playing games is that they are social in nature. And [studies show](#) that playing with a friend elicits stronger and more positive emotional responses than playing either against a stranger or alone.

Social in-game interactions help to forge new friendships, build communities and encourage players to return to a game time and again.

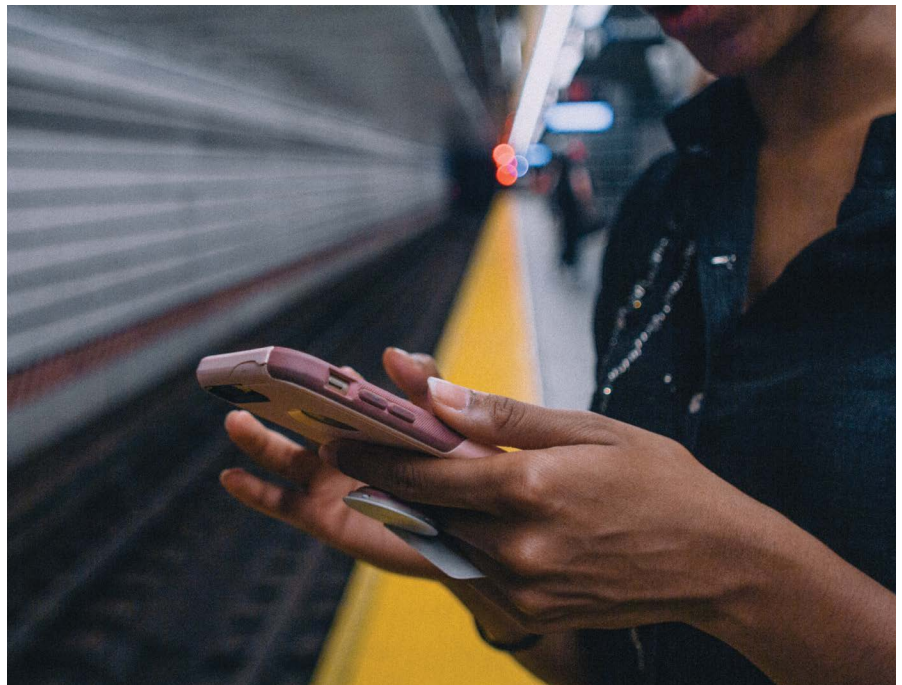
How players communicate has changed over the years, but the motivation remains the same. A smooth, intuitive communication system is essential to fostering a positive game experience for your players.

Text

A smooth, intuitive communication system is essential to fostering a positive game experience for your players.

Outside of the gaming world, text chat has become second nature thanks to the proliferation of tools like WhatsApp, Facebook Messenger and Slack. Indeed, before the development of high-quality voice comms, in-game text chat was the only way to communicate with fellow gamers.

Many modern gamers still prefer text chat for certain types of scenarios, even when a viable voice option is available, especially for games that don't require instant communication.



Voice

Internet bandwidth has improved, VoIP technology has advanced, and games have evolved in response to these changes. Voice communications need to keep up.

The dominance of team-based shooters in recent years, with games like *Call of Duty*, *PlayerUnknown's Battleground (PUBG)* and *Battalion 1944*, has brought voice comms into focus. Any real-time multiplayer game that requires tactics and quick decisions needs clear voice comms. In terms of back-end technology, clear voice comms are as essential as low latency.

Any real-time
multiplayer game that
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Battalion 1944



TEXT

In-game text communication,
usually via a chat room



VOICE

Voice comms via an in-game
system or third-party app



EMOTES

A more subtle, fun way
for players to communicate

Other interactions

Beyond text and voice, game developers have devised a number of unique and fun ways for players to interact in-game. Perhaps the most well-known conveyance of communication is the emote. Emotes in the gaming world have transcended the dictionary definition.

Emotes have been a social communication staple since *EverQuest* was launched in 1999. They are an important component of many of the biggest games being played today, including *World of Warcraft (WoW)*, *League of Legends* (which has its own emote store), and *Fortnite*. Indeed, many of *Fortnite*'s emotes have become cultural icons, appearing everywhere from the school playground to music videos.

But emotes aren't the only novel means of communication. *Hearthstone* and *Apex Legends* introduced two notable examples that have been lauded in the industry.

Hearthstone uses preconstructed sentences, allowing players to communicate quickly and effectively. In *Apex Legends*, players can ping items, aspects of the map, enemies and much more, meaning players can communicate in-game without voice or text.

Clearly, there are innovative ways of interacting – other than voice and text – to help immerse players in your game.

Why implement voice comms

Retention and engagement

One of the main reasons to implement voice comms in your game is the effects on retention.

Being able to communicate with other players is a boon to interactions, whether cooperative or competitive, which in turn creates ties among players. These ties create strong communities and friendships that go beyond the game and keep players gravitating toward your game.

Data collected throughout different genres and player bases shows that voice comms lead to two main outcomes: in-game times and player retention.

Players who use voice chat spend twice the amount of time in-game as players in the same game who don't.

Communications boost in-game time because they help build more interactive cooperative game experiences. As an example, *League of Legends* allows teammates to communicate in order to coordinate their strategy and actions to victory. When players increase their interactions, they enjoy their game experiences more and spend more time in-game.

At Vivox, we have collected data from our users and found that players who use voice chat spend twice the amount of time in-game as players in the same game who don't use our services.

When it comes to player retention, communications are the main enabler of player discoverability. Without comms, finding other people to play with regularly is onerous, and players have to rely on a random matchmaking process.

"Shadowgun War Games is a tactical shooter, so players being able to talk to one another ensures they stay engaged throughout the experience. We've seen first-hand how voice comms improve the experience and keeps players coming back for more."

— Marek Rabas, CEO, MADFINGER Games

For players with communications, in-game social structures such as teams, clans, etc., become more relevant to creating social networks, keeping players engaged and boosting retention. An example of this can be found in the *Elder Scrolls Online*, where clans and teams are a key part of the game.

One reason for having in-game social structures is player discoverability. To this end, voice comms can be a great enabler. This is especially true with open-world/3D communications, thanks to which players can spontaneously engage in conversations, for easy discoverability. *PUBG*, *Shadowgun Legends*, and *Fallout 76* are good examples of games where players can interact with one another without any barriers.

Data also backs up the benefits of voice comms for retention, consistently showing, across titles, that players using voice comms are five times more likely to be playing the game after a month.

Gameplay

As the complexity of in-game mechanics and advancement in tactics has evolved, voice comms have become increasingly important in the modern multiplayer game.

From raids on *WoW*, to Capture the Flag on *Overwatch*, to Conquest in *Smite* – whether you’re working collaboratively to solve puzzles or tactically to defeat other human players, the ability to talk strategy with fellow players makes the whole experience far more enjoyable.

“Like a lot of audio features, in-game voice comms is something that gamers simply expect today. With all of the different solutions on the market, there’s conflict in the experience associated with having to ask for details like username or server info, so a solid in-game comms system is important.”

– Kevin Chandler, CTO, Bulkhead Interactive

Immersion

Talking to fellow players, be it planning tactics, communicating in-game, or simply celebrating a victory, is a core component of an immersive experience.

Technological advancements in voice comms have made games more immersive than ever. Vivox's 3D-positional chat, for example, allows players to hear others relative to their location in-world. Innovations like this bring an added layer of realism to the gaming experience.



Realm Royale

“For our games, communication and immersion are essential, and for this we need voice comms. Hi-Rez players are highly competitive and they demand the best, which is why Vivox, with their proven track record of successful implementations, is the right choice for us.”

– Chris Larson, COO, Hi-Rez Studios

Build vs buy

Once you've decided to implement voice comms, you need to determine how. Cost, ease of integration, opportunity cost, and other such variables factor into whether studios choose to build or buy.

When it comes to providing your players with comms, there are three main approaches: free/nonintegrated apps (which are covered in the next section), building your own, or buying a specialist solution.

The main advantage of the build option is that it lets developers personalize their comms services as much as they want. That said, this option is one of the most complicated and costly to implement for several reasons. It requires developing a new technology, which means building a team of people that has experience in developing comms, and there is no guarantee that the outcome will be as good as existing options.

Additionally, the team must maintain the technology and ensure it can be used with new platforms, devices, etc. The build option also requires an internal team to administer operations, which for a voice comms service is 24/7 and worldwide, scale the solution as the player base grows, manage hosting, and roll out updates.

While buying a solution doesn't give you the same flexibility as building your own, buying has some major advantages. You would be giving your players a proven solution that in most cases can be easily and quickly implemented in their games. Vivox is the perfect example of this, as its service has been implemented in more than 150 titles over the past 15 years. Integration can be as quick as one day, but the time varies depending on your infrastructure.

Additionally, some third-party providers (Vivox among them) also manage the operations, so studios don't have to worry about keeping the service up and running.

One of the main considerations of your decision will be the cost. You'll have to weigh the cost of implementing a third-party solution against the cost of hiring a new team or pulling resources from other projects to develop an internal solution.

Importantly, costs need to be considered as ongoing, whether you build it yourself or buy a third-party solution. And your requirements may change over time, so you need to factor risk mitigation into your technology decision.

150+ titles

that opted to use Vivox services'

15 years

that Vivox has been
providing comms

120 million end users

served per month across PC,
mobile, and console

Nonintegrated apps

If you're not interested in developing your own integrated voice solution or committing to a third-party solution, several applications allow your players to communicate in-game, and many of them are free.

Indeed, some players choose these apps over the studio-provided solution, for various reasons. Let's take a quick look at some of the options available to your players.

Console-based solutions

Xbox and PlayStation both have a party system, allowing players to communicate in-game. Switch also has a party solution, but currently only for certain games. However, players can download and use the Nintendo Switch Online App to communicate.

These are popular solutions among console players. Their major drawback is that you have to invite people to your party to chat, which isn't as intuitive as simply talking as soon as the game starts.

Party chat is mostly used for already existing groups of friends and is usually restricted by the number of people that can be in the chat.

The other drawback is that these solutions are peer-to-peer, as opposed to server-based. As a consequence, players can experience network address translation (NAT) issues and are vulnerable to distributed-denial-of-service (DDoS) attacks, making this option unacceptable for competitive play.

Talking to fellow players, be it planning tactics, communicating in-game, or simply celebrating a victory, is a core component of an immersive experience.



Applications

DISCORD

With a slick user interface and intuitive design, Discord has become the go-to free nonintegrated voice solution. After logging in, players can communicate across mobile or PC via the app, with voice or text. However, with no dedicated server option, performance can be impacted at scale.



Free to download and use and offers more customized server options than most other options. It also has cool features like automatic microphone volume adjustment and background noise reduction. But to use TeamSpeak on mobile, users have to pay for server hosting.

OVERTONE

Using minimal resources but still packing a punch in terms of features, Overtone is a worthy competitor to Discord and TeamSpeak. Using Vivox technology for its comms, it's already proven at scale, but it's got some way to go to knock Discord off its perch.

There is no shortage of third-party voice comms applications for gamers to choose from.

Managing toxicity

Toxic behavior is one of the biggest challenges facing game studios. Something in the combination of competition, partial anonymity and arguably a predominantly male audience may embolden the dark side of human nature.

When considering in-game communication, toxicity will undoubtedly play a part in your thinking. In a recent [study](#) by the Anti-Defamation League (ADL), while 88% of adults who play online multiplayer games in the U.S. reported having a positive social experience, 74% reported experiencing some form of harassment and 65% reported severe harassment.

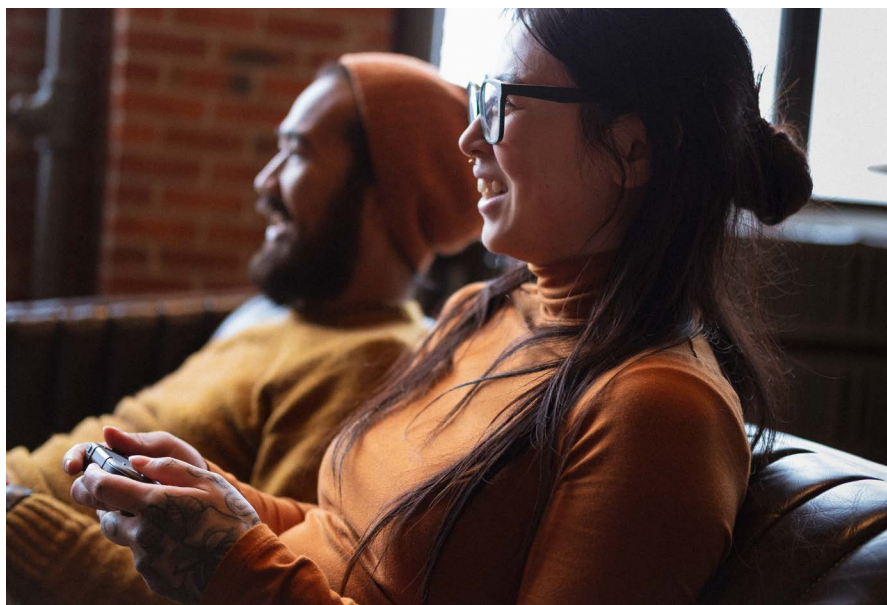
Beyond the obvious distress of the player, this also has a direct impact on your bottom line. It's estimated that between 6 and 16 million American adults (8% to 23% of online gamers) adjust how they socialize and take precautions to ensure their physical safety because of negative experiences in online games.

This is unacceptable. So what's the solution?

Many studios simply ban the toxic players, but, as Blizzard discovered after banning over 480,000 *Overwatch* players, that doesn't completely solve the problem. The issue is more nuanced than that.

The solution needs data and analysis. Lots of data. As deltaDNA, a recent addition to the Unity family, discovered through their work with Riot Games, it's insight that makes the difference.

Toxic behavior was actually spread across a broad range of players who exhibited this on rare occasions, perhaps when having a bad day.



Gaming is generally a positive social experience, and the ability to communicate with one another helps forge connections among players.

In an [article](#) for GameIndustry.biz, deltaDNA CEO Mark Robinson explains that only 1% of the game's players were actually consistently toxic, accounting for just 5% of all aggressive behavior. Instead, they found that the toxic behavior was actually spread across a broad range of players who exhibited this on rare occasions, perhaps when having a bad day.

The company quickly realized that banning the most toxic players would have little impact. To really shift the needle, Riot Games needed to change how players behaved.

The solution was to devise a series of messages to encourage positive behavior aimed at players who were beginning to show toxic tendencies. This data-led approach delivered dramatic results, reducing offensive language, verbal abuse and negative attitudes by up to 83%.

Building on this approach, Unity and Vivox are developing a data-based solution to aid in the review of disruptive behavior. Powered by machine learning, the new voice-to-text application will empower studios to make insight-driven decisions to combat toxic behavior.

Game studios, publishers and suppliers need to take the lead in tackling the challenges of player conduct. Gaming is generally a positive social experience, and the ability to communicate with one another should help forge and strengthen connections among players.

Making your game accessible

It is essential for all studios to make their games accessible to all players. Beyond the measures you can take to ensure your game is designed from the ground up with inclusivity in mind (for which [this guide](#) is a great resource), there are measures you need to take to ensure your players can interact.

The Twenty-First Century Communications and Video Accessibility Act (CVAA), which was signed in 2010 and came into effect at the beginning of 2019, essentially enforces a set of new communication-focused rules. Noncompliance with these standards could lead to a fine from the Federal Communications Commission.

In order not to be in breach of the CVAA, you'll need to add accessible communication options to your game. The FCC called out games like *Splatoon 2* and *Minecraft* and text-to-speech tools as progressive in this area.

Indeed, Vivox has been working on text-to-speech tools, to help the developers we work with comply with the regulations. With one such tool currently in beta and a new voice-to-text tool in development, this is something Vivox takes seriously.

Conclusion

The secret to building an online community around your game is surprisingly simple.

1. Provide simple, easy-to-use communication tools.

This includes everything from speaking to teammates to reporting toxic behavior. Make it easy, and your players will come back for more.

2. Be clear about what is and is not acceptable behavior.

Reddit, for example, does this extremely well, and the community is largely positive because of it.

3. Promote positivity and penalize unacceptable conduct.

Simple onscreen messages can have a huge impact on player behavior. Collect data to find what works for your community.

4. Engage, engage, engage!

Engage with your player base in-game, on social media, or wherever they communicate. This goes beyond in-game communications.

5. Listen to feedback and react.

Gamers tend to be vocal customers – use that to your advantage! If you develop and improve the player experience, your community will reward you with their loyalty.

Adopting these five tips will help build your community and reduce toxicity.

As we've explored in this guide, the opportunity and technology to empower your gaming community through communication is readily available.

Ultimately, social interactions are essential for any multiplayer game. After pouring your heart and soul into the development of your game, it'd be a shame if players couldn't tell each other how much they love it!

With Vivox, instead of having to manage additional applications, players can simply stay in the game. Because no matter what kind of gameworld you've created for your players, communication is critical.

Trusted by the
biggest names
in gaming:



Why big studios choose Vivox

Ensuring your players can communicate in-game is an essential component of any successful multiplayer game, but developing and managing your own platform is an unwelcome distraction.

Vivox makes communication simple. Scalable, easy to integrate and powerful, our platform delivers an immersive experience for your players. With one less thing to worry about, you can spend more time on your game.

Why you'll love working with Vivox



Proven at scale

As the comms service for the biggest games on the planet, Vivox is tried and tested at scale. Our platform serves more than 120 million players and over 12 billion calls per month.



Unrivaled immersion

Crystal-clear in-game comms, integrated seamlessly into your game. 3D-positional audio allows players to hear their teammates and competitors relevant to their position for a lifelike audio experience.



Simple setup

With SDKs for Unreal and Unity, as well as our own Core SDK, you could be fully operational in under two days. Our Developer Portal is a one-stop shop where you can monitor your comms, ask for assistance, and more.



Fully managed service

You've got enough on your plate. Let Vivox lighten the load. Our services are hosted and managed by an expert team with 15 years experience, managing 150+ titles.



The only cross-platform comms solution

Connect your players across PC, PS4, Xbox One, Nintendo Switch, IOS, Android, and browser.



You can get started for free.

Every player deserves the best comms. That's why we offer Vivox for free up to 5,000 PCU. [Get started today.](#)



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