

WHAT VIRTUAL REALITY HAS ON OFFER FOR ONLINE SOCIALIZING -

THE IMPORTANCE AND FUTURE OF SOCIAL VR.





MAN'S NEED TO SOCIALIZE

Introduction

Man is by nature a social animal said the ancient Greek philosopher Aristotle. From the early days of civilization to the modern 21st century, mankind has always sought out better ways to connect with fellow human beings. Socializing plays a big role in serving us a sense of belonging. Today, there are multiple platforms that provide us interesting and different ways to interact with other people. Most of us use at least three or four such platforms such as Facebook, Twitter, WhatsApp, Instagram, Linkedin etc in our daily life. It is easier now more than ever to know what your old buddy or colleague is upto. But as technology moves forward, every aspect of life will also encounter inevitable changes. With Virtual Reality, the next giant leap in technology on the rise, the world of socializing is in for a massive turnaround.

The evolution of online social networks

Computer networks were identified as an efficient tool for modified social interaction right from the early stages of its inception. Efforts were made to support computer mediated communication even in earlier online services such as Usenet, Advanced Research Projects Agency Network (ARPANET), LISTSERV and Bulletin Board Services (BBS). America Online, Prodigy, CompuServe, ChatNet and The WELL include some of the preliminary online services. Some of the other earlier social networking sites in the form of generalized online communities were Theglobe.com, Geocities and Tripod.com. TheGlob.com was founded in 1994 by Cornell University students Stephan Paternot and Todd Krizelman. The service went public in November 13 1998 and held the largest first day gain of any Initial Public Offering up until then. Geocities was founded in November 1994 by David Bohnett and John Rezner and was called Beverly Hills Internet (BHI) for a very short span of time.

In Geocities, users could select a city to place their web pages. The cities were assigned the name of real cities based on the content. For example, computer related sites were allocated in "Silicon Valley" and entertainment sites were assigned to "Hollywood". On January 28 1999, Geocities were acquired by Yahoo and during the time of acquisition it was the third most visited site on the Internet. Tripod.Com was founded by Lycos, Inc and it was instrumental in the wave of user generated content.

Classmates.com was founded on November 17 1995 by Randy Conrads, a product of Oregon State University. As the name implies, this site aimed at helping users find their old school pals and colleagues. PlanetAll was a social networking, calendaring and address book site launched in November 1996 by a group of Harvard Business School and Massachusetts Institute of Technology graduates. The site had more than 100,000 groups structured around real world counterparts such as academic institutions and employers. When a user enters the name of his or her university, the site would showcase their classmates who were also members of the service. The site featured an interesting service. When a user enters their travelling plan into the calendar, they would cross reference the destination with the address book as well as the travelling plans of their contacts. The site would then notify a user when would they cross path with their contacts.

The present generation of social networking sites began to prosper with the arrival of SixDegrees.Com in 1997, Makeoutclub in 2000, Hub Culture and Friendster in 2002. All living things and everything else in the world are six or fewer steps away from each other says the idea of six degrees of separation. This idea formed the basis for the social site SixDegrees.com. The site allowed users to list friends, family members and acquaintances both on the site and externally. Users could also send messages and circulate bulletin board items to people in their first, second and third degrees and also see how one user is connected to any other user. Makeoutclub, that was predominantly aimed towards youth and indie music culture was launched in 1999 by Gibby Miller. Makeoutclub introduced features such as customizable user profiles with photos and interest sections which later became the standard for social networking sites. The Hub Culture was launched in November 2002 and it was the first to merge online and physical world environments.

As of March 2017, Hub Culture has more than 25000 members and they have exchanged over 500 million units of Ven, its virtual currency. Users could create profiles depending upon their field of expertise and knowledge to help others within the network. Members could create groups to manage group projects or exchange virtual currency in return for sharing of information. It was Canadian Computer Programmer Jonathan Abrams that gave shape to Friendster in 2002 and it was one of the first sites to reach over 1 million members. It was originally a social networking service website but was relaunched as a gaming platform in June 2011.

Myspace which was launched in 2003 became the largest social networking site in the world during the period of 2005 to 2008. In June 2006, it even went past Google to become the most visited website in United States. Myspace giantly influenced pop culture and music and also generated a very popular gaming platform. On February 2016, Myspace and its parent company were brought by Time Inc. LinkedIn, the business and employment oriented social networking site was launched on May 5 2003. Google launched Orkut in 2004 which went on to become one of the most visited websites in Brazil and India. In the same 2004, Facebook was introduced and is presently the most popular social networking site in the world.



MAJOR PLAYERS

Virtual Reality as such is still in its early days. But some have already explored its social networking potential. Let us have a look at them.

Facebook



SOURCE: FACEBOOK SOCIAL VR DEMO - OCULUS CONNECT 2016

It is no surprise that one of the frontrunners in SocialVR is the modern day social networking giant. The company bought Oculus VR, world's most famous Virtual Reality company for 2 billion dollars back in 2014. So, the amalgamation of world's biggest social networking company with the world's biggest virtual reality company promises to be the beginning of a virtually enhanced mode of online socializing. During the F8 conference in 2016, Facebook showcased a working prototype of their Social VR vision. In the demo, the developer on stage wore a headset and was immediately shifted to a virtual space with another fellow facebook developer. There they shared 360 pictures and even clicked a virtual selfie. The team has already started the groundwork for what could be the upcoming mode of online communication. Some of them are:

Oculus Rooms

Oculus Rooms brings a user to the same apartment that was available using Oculus Rift. Once you are ready to make a social interaction with any of your Facebook connection, you can simply select the Party option and you will immediately be transported to a new virtual space that has four distinctive areas.

The launcher area allows you to launch different VR apps or explore other areas in the apartment. Then comes the T.V area where there is a semi circular couch that offers diverse content you can watch on a large virtual movie screen. You can prefer to watch trending, pre selected videos or Facebook videos from you or anyone in your contacts list. A striking feature here is that the videos continue to play even when you move to other areas of the apartment which magnifies the feel that you are inside a real space.

To the left of Application launcher, there is the chat area. Unlike Facebook's web and mobile social spaces that focus on text and live video, in Oculus Rooms your avatar represents your body and enables interaction with others. Compared to the virtual avatar in Oculus Rift, only the head of the avatar is available in Oculus Rooms presently. A beam of light serves as your virtual body. Then comes the game table that has three games: Lights, Words and Pairs.

Facebook Spaces

This VR app lets you hang out with friends in a joyous and interactive virtual environment as if all of you were in the same room. Here it is easy to create an avatar that looks the real you. Simply select one of your favorite facebook photos and the app will provide you with options for your Virtual Reality appearance. You can start with any of such available options and then move on to customize them until you feel it is perfect. Your eye color, facial features and even your hairstyle can be modified to accurately depict the real you.

In other words, Spaces allow you to be completely yourself in a virtual world. Once you have finalized your appearance, you can get into VR world and invite your friends to join. A special attraction of the application is that you can create anything that can be imagined using a virtual marker. Be it a pair of sunglasses, boots, a fancy hat or a board of carroms. For long, we have watched photos and videos of ours and our friends by being a mere spectator. Memories are special. So, what if you could actually be immersed in the photos and videos you create or view.

That is, when you are sharing your honeymoon photos with your friends, you and your friends can be transported to the actual Eiffel Tower and awe the beauty of everything that surrounds the giant structure instead of merely enjoying the beauty of a photograph! Using Facebook Spaces, you can relive any memories from timeline and even generate new ones as you browse through the people and pages you follow. Another striking feature is that Spaces is not just meant for people within a VR world. You can phone any friend in the real world using Messenger Video Calling and bring as many people as you like into your VR environment. So, if you want to show an amazing three dimensional video or just spend time chatting with your friend who is outside the VR space, you can. Furthermore, there is a selfie stick that allows you to take photos of your VR experience and share your VR memories with friends in facebook. Spaces also allows you to pause the VR experience anytime you wish. Pausing takes you into a quiet space where you can take a break. You can even mute or remove friends from your space.

Facebook 360

This app aims to serve as a hub for immersive photo and video content posted onto the site. The app in its primary stage contains four feeds to deliver 360 degree experience to the user. Just like the 'Trending' tab available today, the 'Explore' tab in Facebook 360 gives a bird's eye view of all the popular 360 content from different creators and companies. The 'Following' tab lets you delve into the content created by your friends. The 'Saved' tab allows you to experience immersive content you may have seen on the internet with an advanced immersive in-headset experience. 'Timeline' allows you to explore your own 360 photos and videos.

Altspace VR

This software startup company based in Redwood City, California is fully devoted in creating social software for virtual reality environments. 'Verge', an American technology news and media network named AltspaceVR as one of the most fully developed platforms for virtual social interaction. Eric Romo, the thinktank behind the startup formerly designed rocket engines for Elon Musk's SpaceX. AltspaceVR allocate meeting rooms in virtual reality so that users can have conversations, watch videos, play games and even browse the internet. One of the core missions of the application is to become a future digital meeting place. Through Microsoft's motion sensing devices called 'Kinect', the avatars in AltspaceVR can mimic a user's body language. The software also supports eye tracking. Using its simple Software Development Kit, developers can easily bring their apps into VR. Developers can make use of A-Frame components to control different Altspace VR features and resources including architectural building blocks, particle effects, physically blocking colliders, positional sounds etc. Some of the earliest apps from external developers were;

Flappy Dragon

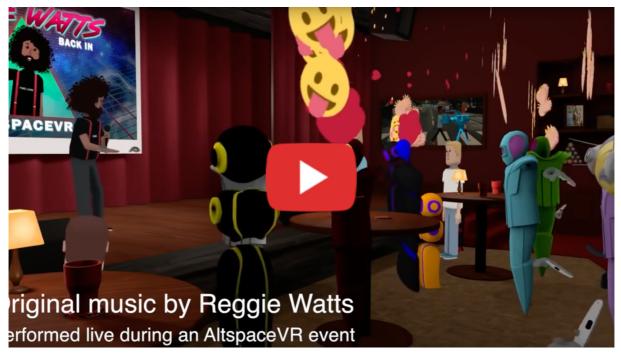
Designed by Thomas Kadlec, this app can be used by kids to pilot a dragon through the dangerous traps set by the village.

Interstellar Defense

Using this app designed by Elijah-Newman Gomez, a user could control the last line of defense between the Earth and its invaders.

Just like in web pages, you can interact with these apps privately and relay them to a display to share with others. Suppose you are hosting a party in your real physical world. You intend it to be a night full of music and movies. Now, you might have friends who cannot quite make it to the night. Maybe you live in New York and have a best buddy in Tokyo.





SOURCE: ALTSPACEVR HIGHLIGHT REEL

There is no way he could come down to join you in the physical world. But in the world of virtual reality, literally everything is possible. You can simply host a movie night, game night or any private event with a simple click in AltspaceVR. You can invite anyone to join you by sharing a URL. Be it the friend in Tokyo, Mumbai, Rome or Paris! The team recently created a Party Portal where users could create a portal, choose an activity and invite friends to join. Once you procure an interest, everyone is transported to the event together. Once you click on the portal button, you can select one of the three options: Holograms against Humanity, Video Jukebox, House Party. Once you have made your choice, the portal will appear before you with a gold tether attached. Other users can click the portal and indicate their interest to join. AltspaceVR also features a House Party Space, that is designed after a suburban Los Angeles Home. The space is actually equipped with a swimming pool, frisbees, a grill and pizza! There is also a radio app from where you can select an on demand playlist. Users can make the party friends only or open to anyone in AltspaceVR. You can also follow any user by simply clicking their avatar and selecting 'Follow'.

So, when you want to check out what they are up to, you can simply jump into their space using the 'Visit' button. And like in Facebook Spaces,

you can also take a virtual selfie and savour your virtual experiences. If you need to be away from keyboard you can mute yourself.

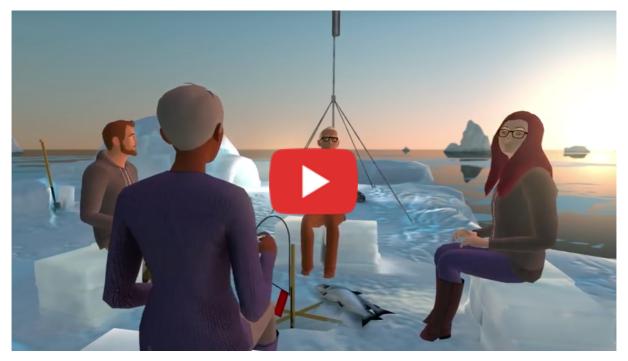
V Time

Developed by Starship, a Liverpool based studio, vTime allows anyone anywhere in the world to socialize with friends and family in a Virtual Reality Environment. This is Samsung Gear VR's first Social VR app. The application is designed much like a social network and it allow users to search others by name. One can send friend requests to others and once it is accepted, they can chat face to face in any prefered location inside the virtual reality space. The application features an intuitive gaze based User Interface that makes the navigation an easy process. The users also have plenty of options for customization. A user also gets access to themed chat rooms, combined view of 360 degree images and customized avatars. The themed chat rooms currently allow 4 users at a time. Users can restructure the chatrooms to be an astonishing beauty of the nature or an artistic building. Users can share photos and videos and new users can expand their network by connecting with others that match their interests. People who do not own a VR headset can also take part in conversations. They can do this by using the mono mode which is a 2D window in the metaverse of vTime.



SOURCE: AMAZING SOCIAL VR EXPERIENCE! | VTIME (OCULUS RIFT CV1)

Vcasts is a feature that allow users to record vTime sessions and watch them later. They can be shared as private sessions or to the public library. You can experience any recording as if it were a live session and you can also watch it as many times as you like. Once a user upload their favorite photographs to a free personal cloud storage area, they can opt to share it in 2D display via The Archive which is almost like an atmospheric underground vault to showcase pictures or prefer to have a conversation within the photograph with 360 gallery, which serves as a canvas that is ready to display 360 degree media content.



SOURCE: VTIME - THE VR SOCIABLE NETWORK. OUT NOW ON CARDBOARD AND GEAR VR

Inside vTime's Virtual Reality space, when a user moves his or her headset, it will also move the avatar's head. But, if you are in a space with other people, you can make use of directional sound - that is, when you hear a sound from your right, your attention will move there. From the beach in Paradise Island to Polar explorations and orbiting in space, vTime provides handful of interesting destinations for its user. Similarly, when you have friends online, you will be able to see which location they are in.



SOURCE: VTIME - THE VR SOCIABLE NETWORK. OUT NOW ON CARDBOARD AND GEAR VR



SOURCE: MARTINSHERVINGTON

High Fidelity



SOURCE - HIGHFIDELITY

Remember the highly popular virtual world Second Life? Philip Rosedale, Ryan Downe and Friedrica Heiberger, the creative brains behind Second Life gave shape to a Social Virtual Reality platform, High Fidelity in April 2013. They aim to create a platform where users can generate and station virtual worlds and explore and interact together in them. Perhaps, this is where the actual Second Life is happening! People can actually teleport themselves into another reality and enhance the sense of belonging. Already, there has been some striking applications of High Fidelity.

Animation Nights New York (ANNY) is a monthly event that provides a stage for independent animators and filmmakers to get their work noticed. ANNY teamed up with High Fidelity to create a Virtual Reality environment that would enable the members of ANNY to join, network and collaborate outside their usual physical meetup. The physical meeting usually takes place at 180 Maiden Lane in Downtown Manhattan. High Fidelity made use of Archilogics technology to

generate a three dimensional replica of 180 Maiden Lane and Artella's technology to collaborate on the content. The space included screening of animation clips, installations of animations and a 'Mars Tea Room'. High Fidelity also sponsored a virtual reality talent show on April 21 2017. The show was held in front of a live VR audience and it welcomed any kind of skill. From singing, dancing, magics to on the spot creativity. The show was aimed to explore the potential of a fully circulated VR avatar in realtime.



SOURCE - HIGHFIDELITY

'Shortbow', is a game as well as a tutorial series that can be used by anyone to build a game from scratch. This bow and arrow defense game tutorial has four parts. The first one deals with making a usable bow and arrow. Programming enemy entities comes next. Setting up game environment and scoreboard and writing a game manager are the final two stages.



SpatialOS

Imagine you are playing a game. You walk into the sphere of trouble and monsters start attacking you. But these monsters are not there when you are outside the gaming world. But what if these characters are alive, even when your gaming character or avatar isn't. Additionally, imagine them having a lifecycle of their own. For example, suppose you left a burning ship in an island last week during one of your missions. Today, the island could get depopulated! This is the kind of impact that 'Improbable', a London based startup is aiming to generate with their first product, 'SpatialOS'. While the initial focus was on gaming, the establishment believes their strong simulation can be put to significant use in everything ranging from government, healthcare and city planning. By integrating things like traffic simulation with other models, they can generate data like never before and then we could see things that were once impossible. Imagine ordering a package online but in transit, the truck gets a flat tire. Now, what if you could know what impact that could have in the traffic of an entire city. What about the deliveries for the rest of the day and the effect on the wider economy. What will happen if the Washington Union Station shuts down for a couple of hours. Which street is the least expected to suffer from a hurricane? Herman Narula, the CEO of Improbable explains this as 'emergent complexity'- a method where simple behavior that you can understand leads to behaviour you cannot understand. Narula also explains that his vision is to give the world in a bottle to which you can ask any questions concerning the real world.



SOURCE - TECHCRUNCH

TheWaveVR

"Do you like breathing" replied Emma Roberts's Noelle to the question "Do you like music" in the film 'It's kind of a funny story'. All of us love Music and TheWaveVR is an exclusive platform for music lovers. The platform enables users to view, host and socialize in shows world wide, anytime and anywhere. If you are a music creator, you can enthrall your audience by customizing the style in which your audience should experience music. You can transform your space into a realistic nightclub or put on the most incredible light show ever. If your favorite musician is from another country, you might have so longed to watch his or her live concert. With TheWaveVR, you don't have to worry about geographical boundaries. From the comfort of your room, you could be inside any music event or festival around the globe. You can also meet up with fellow music enthusiasts and make new friends.



SOURCE - THEWAVE VR AT E3 2016

FUTURE

Art, freedom and creativity will change society faster than politics said the renowned Ukrainian businessman Victor Pinchuk. With Virtual Reality at disposal, there is literally no limit to the kind of creativity human beings can endure into. Like all amazing technologies, the real potential can be known only when it becomes a common element in our daily life. But nevertheless, it is more than fair from our part to have a look at some of the future prospects of Virtual Reality when it comes to online socializing.

Virtual World as a stage for real world activities

It's a holiday and you feel like playing a game of soccer. It takes few hours for you and your buddies to get together in the nearest playground in the real physical world. Instead, you send a quick message through a platform like Facebook Messenger and invite your friends to join you. You can select a location of your choice, maybe even the Maracana Stadium and your friends, wherever they are, can play with you! When VR expands its horizon to social networks, we might soon shift most of our real world activities like this to the virtual world.

You are not very good in cooking and you need the help of your Mother who is in London. You can just text her to join your cooking session and help you complete the cuisine. Individuals, families, corporates, government organizations and even educational institutions can set up virtual meetings and conferences to discuss and share ideas. You feel like singing and you would like if some of your friends were present. With just a tap, you could invite whoever you want and sing in front of them. You have just bought a brand new car and you would like to show it to your family far away. Within seconds, they will be with you. You are shopping in a virtual store and would like some advice from your friends. You can easily let them join you and help complete your purchase.

If you feel uncomfortable, you will even be able to join in conversations with your healthcare specialists. Similarly, depending on your state of mind, you can join a disco party or take inputs from a group preparing to face a competitive exam. In other words, you can replicate all the things you do in real life and even more!

Live VR streaming

We are already familiar with the impact of live video streaming in the social media world. When Virtual worlds gain more and more popularity in social networking, we could even see live streaming of events taking place in the Virtual Reality environment. For example, Syfy and its parent company NBC launched a 15 episode Hybrid Television/VR series called 'Halcyon'. The first 10 episodes of this procedural cop series were broadcasted in standard 2D on Syfy's television channels and web outlets and the other five were presented as Virtual Reality experiences. In the immersive experience, users were able to interact with clues and were able to actively take part in solving the mystery of the show with guidance from the voiceover of show's principal characters. The show also featured a live premiere for the fans and the fans were able to hang out with the avatars of cast and crew after the show in the virtual reality space. So, you could stay in Los Angeles and watch a Virtual Reality screening of a movie or a show in New York and then later hang out with the avatars of the characters and then stream it on the social network! This can be put to a wide variety of uses. University students can live stream a virtual conference by a dignified foreign professor to students all around the world. Similarly, virtual parties, events and shows can also be showcased to the entire world at the very same time.

User Generated Content

In the present scenario, online socializing happen in predefined templates. You cannot create any space or world of your own. With Virtual Reality, that is exactly the power a user would possess. You could define the world that you want to move around. Imagine, creating planets and creatures in a Star Wars kind of galaxy and inviting friends to join you!

You could create a page for your own virtual world and fans can instantly get into that world the moment they visit it. Now imagine the kind of worlds you could create and the kind of socializing that could happen. You could create a world for almost anything. If you are a fan of books, you could open a virtual library and invite fellow readers. They could come in and enjoy your unique collection. In a similar way, you can open a movie or a music store. If you are a student, you can open groups for every subject that you have. Maths, Physics, Chemistry, Biology, History and anything. You could walk into the physics group and see virtual demos explaining gravity and theory of relativity. You could go to history groups and see the rise and fall of civilizations. You could go into Biology groups and learn the anatomy of different beings. If you are a sports fan you can create groups for Football, Cricket, Hockey, Basketball, Baseball etc. You could display your sports accessories, play games with your friends and even watch live screenings. If you are an ocean or underwater explorer, you can even set underwater worlds and invite fellow enthusiasts to discuss and explore. You can setup virtual space stations and learn more about astronomy! The possibilities are just endless.

It's not about Profile, It's about You

So you decide to get into a social network today. What are some things you have to complete before you can smoothly access it. Ideally, you have to fill up a long list of options ranging from your educational details to your job, likes, interests and hobbies. Once you have entered all this your 'profile' is ready. Now, you can view what others are upto from your profile. In the virtual reality driven social networking, you will not have to remain as an outsider. If you want to check out a photo uploaded by one of your friends, you can totally explore it as if the picture is alive and in front of you. The future socializing will not be of viewing. It will be of experiencing. So, if your friend has just posted a video of his skydive, you could actually be in a 360 environment exploring his adventure. Your activity in the virtual environment will determine your likes and hobbies. You will not have to pre-specify it. Today, you see someone is online and try to give him a text or make a video call. In the future, you could simply go to his environment, probably pat on his shoulders and ask "what's up buddy". Socializing has to be a personal experience. That's how human beings cherish their need for belonging. With Virtual Reality, online socializing is bound to get more personalized than ever.

Instant Information

Remember Tom Cruise's Steven Spielberg directed blockbuster 'Minority Report'. Remember the newspaper that broadcasts instant and live updates? The content in the device that you carry changes from minute to minute. This reality is not too far away! A lot can happen when you are in a Metaverse. Your favorite team might have just won a match in the NBA. Or a world famous chemist might have visited your virtual laboratory and gave you a Hello! Or you are a history enthusiast and there is a History exhibition going on. Someone tried to play a prank inside the gallery and got caught. Your favorite musician is composing a new album. There is a new update from scientists who had deployed robots into MARS. There is a new experiment conducted in a newly found footmarks of dinosaur.

Each and every update from around the world connected to your interests and likes will reach you the minute it happens! You can also prefer not to get any updates surrounding a particular topic. Suppose you are not a big fan of rugby. Or non vegetarian food. You can comfortably ignore them and you will hardly receive anything that you don't like to see or hear!

Explore the unexplored and strengthen your weaknesses

You are working with a tech giant but you are not that big a tech savvy. Or all your friends are soccer lovers but you don't know much about the game. You might have had this feel of being left out during a conversation. You might want to do better at your workplace or at your university. In an interactive and immersive online socializing future, there will not be any sphere where you cannot get a help from. You can simply walk into a virtual store and improve your knowledge about a particular technology so that the next time there is a company meeting, you could score like everyone else.

You might be weak in physics and the subject is ruining your overall grades. You can get in touch with worldwide experts and take part in simple yet efficient methods to improve your knowledge regarding the subject. Similarly, you can get in depth knowledge about any star or planet in the universe or the deep underwater surfaces. There will remain no world that is unexplored. There will not be any limitation that cannot be surpassed. That could well be our future.

CONCLUSION

The need to socialize has played a big role in moving humanity forward. Man would not have been where he is, if he hadn't reached out to mingle with his fellow beings. No matter what era we are in, we need compassion, empathy, love and care to keep going. In fact, if we take a look at most of the technological advancements humanity has seen, the underlying factor has been to connect humanity in one single thread so that we may live our lives better. SocialVR promises to be the next big leap in this regard. If it succeeds the way it promises, in the end, as always it is humanity that will triumph.



"If you need help with an upcoming project, do write to us on hello@srushticreative.com and we'd be glad to help!"

