Media
TalkBack

TRANSFORMING TOMORROW WITH

NEW AGE SKILLS
AR & VR

Skill India
कौशल भारत - कुशल भारत

MEDIA & ENTERTAINMENT
SKILLS COUNCIL

N·S·D·C
National
Skill Development
Corporation
Transforming the skill landscape

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MESSAGE FROM THE CHAIRMAN

MESC is a new revolution & evolution to the whole education system of India with full emphasis for skill-based education rather than memory-based education.

It's one of the finest initiatives by the Govt. of India and I'm proud to be associated with MESC with a serious responsibility to develop a new generation of skilled man in every field. It is especially important in our sector of Media & Entertainment, to explore & think beyond obvious. I'm humbled & thankful to everyone who has entrusted me with this great responsibility of taking the council in the right direction for the next generation and I am sure that we have a good team to achieve our targets at the earliest.

MESSAGE FROM THE CEO

I extend my regards towards everyone who supported and contributed in the completion of the 25th edition of Media TalkBack focused on "Transforming Tomorrow with New Age Skills (AR & VR)". I believe reading is the most powerful tool we have for connecting and sharing the human experience.

Today, with millions of people around the globe staying close to home to reduce the risk of spreading COVID-19, access to books, magazines and information is more important than ever before. Reading can offer incredible comfort: it reduces anxiety and makes us feel more accomplished and even happier. Through this, you will get an insight on one of the biggest aspects of the Media & Entertainment Sector with articles, relevant information, and one on one interview with some of the Top-Notch Professionals from the Indian AR & VR Space giving scoops on their journey, upcoming projects, do and don'ts to have a successful career, etc.

Our goal is simply to ensure quality content for everyone as we settle into our new normal. We encourage you to take care of yourself and each other, and we hope reading can offer you solace during these difficult times.

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AR AND VR
IN ENTERTAINMENT INDUSTRY

The entertainment industry uses the benefits of augmented reality and virtual reality to the maximum. Games are not the only application of AR and VR in the entertainment sector. Cinema, events, shows, museums - all of them can leverage the advantages of AR and VR to promote their product and attract more customers.

The first thing that comes to mind is, of course, games. Even those indifferent to computer games have heard of Pokémon GO, an AR game where players catch virtual critters in the real world. And VR games immersing the player in a virtual space are a fascination for young and old alike.

The main advantage of VR is that it allows reducing time and space to nothing. With VR, users can attend shows and concerts thousands of miles away. Besides, for those actually present at the show, the organizers can enhance the experience by including a virtual component.

AR & VR IN ENTERTAINMENT INDUSTRY

Theatre

According to the recent surveys, over 66% of people are more likely to visit an immersive or interactive theater performance rather than a traditional one. Immersive performance allows the audience participating in the action which makes the process more entertaining and engaging.

Museums and Art Galleries

The use of AR and VR technology in museums and galleries is not a new trend but rather the one increasing in number.

Music Shows and Concerts

Although concerts with the use of AR/VR are still at an experimental phase, like the ones used by such bands as Maroon5, Eminem, Coldplay, U2, Imagine Dragons, and many others, it is inevitable that this technology will become an integral part of most live shows. Thanks to AR and VR such concerts become incredible and never-to-be-forgotten. Many music fans are ready to pay extra to watch VR performances and concert shows.

Amusement and Theme Parks

Virtual reality for amusement and theme parks is on the go helping create exceptional and extraordinary experiences. Many are either incorporating a VR component into existing rides and roller coasters or adding new VR rides to their parks

AR and VR technologies seem to bring enormous benefits to different fields in the entertainment industry from theaters and museums to football matches and music concerts. In pursuit of gaining new audiences and improving their engagement experience, entertainment business owners should think of integrating AR/VR technology.

DIFFERENCE BETWEEN
AR AND VR

Augmented Reality (AR)

Augmented Reality uses a real world setting and enhances it with computer generated images and audio. AR requires a smartphone or tablet to work. Also, technology such as hardware components -processor, display, sensor and input devices, camera, eyeglasses, contact lenses, Heads-up Display (HUD), projection mapping, positional tracking, motion tracking, projectors, and others are necessary for creating AR. AR has a lot of applications in gaming, entertainment, music, architecture, urban design and planning literature, education, and visual art. AR technology is designed in such a way where you can point and move your camera while projecting images over whatever you look at.

Virtual Reality (VR)

Virtual Reality is a completely virtual immersive simulation which can create any visual or place imaginable to the user using special equipment such as headset displays, cameras and motion sensors. VR technology provides simulation and complete immersion in a virtual space and has nothing to do with the physical world. VR has a lot of applications in entertainment such as video games, 3d cinema, etc., education (medical or military) and business (virtual meetings)


Key Differences

AR augments the real-world scene whereas VR creates completely immersive virtual environments.- AR is 25% virtual and 75% real while VR is 75% virtual and 25% real.- In AR no headset is needed on the other hand in VR, you need headset device.- With AR, end-users are still in touch with the real world while interacting with virtual objects nearer to them, but by using VR technology, VR user is isolated from the real world and immerses himself in a completely fictional world.

TOP AR AND VR TRENDS IN 2020 - 2021

There are a lot of VR and AR technology trends on the rise this year. Here are the top ten most exciting VR and AR trends to watch for in 2020-21.

01 Widespread Adoption of VR and AR

02 Mobile AR Goes from Strength to Strength

03 AR and VR Merge with AI

04 Increasing Benefits of Educational VR

05 Increasing Use of VR and AR in the Military

06 Immersive Sports Events

07 Adoption by the Entertainment Industry

08 New Experiences in the Shopping & Retail World

09 Increased Advertising Opportunities

**10** VR Cave
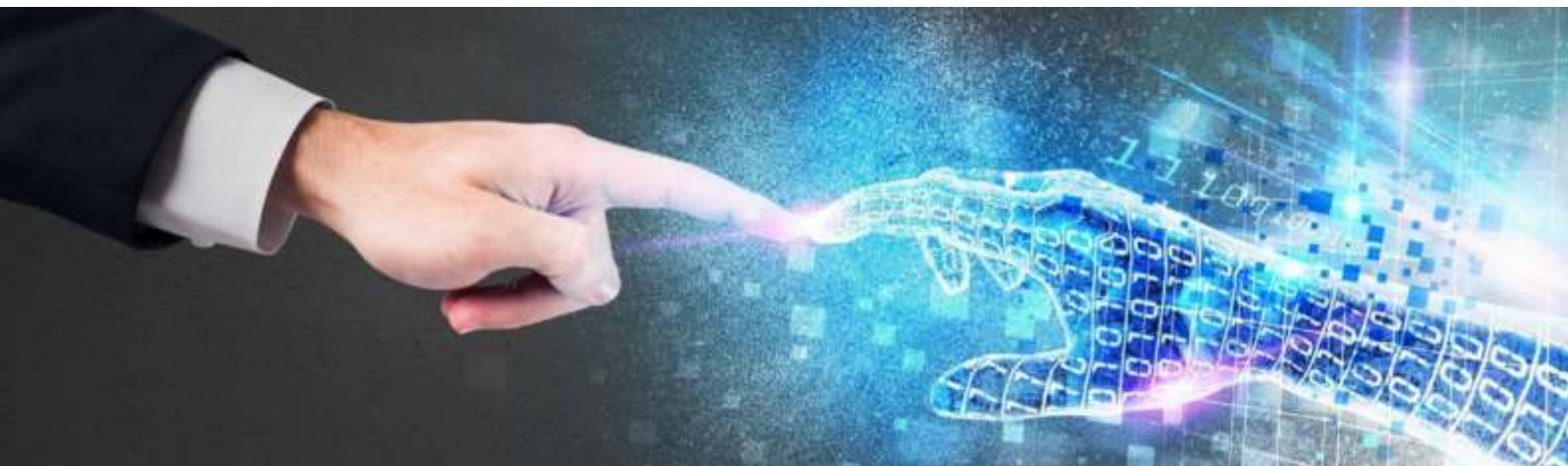
Humans and Bots Working Together

Popular visions of artificial intelligence often focus on robots and the dystopian future they will create for humanity, but to understand the true impact of AI, its skeptics and detractors should look at the future of cybersecurity.

AR and AI combination can help brand's embrace immersive customer experience by syncing together on various applications. They can leverage each other's best features and build great mobile experiences. AI enables AR to have a multidimensional interaction with the physical environment by allowing it to manipulate 2D and 3D virtual objects.

AR & AI COMBINATION - PRACTICAL MIRACLES

- ✓ Speech Recognition
- ✓ Image Recognition and Tracking
- ✓ Human Pose Estimation
- ✓ 3D Interactive Education
- ✓ Car Recognition
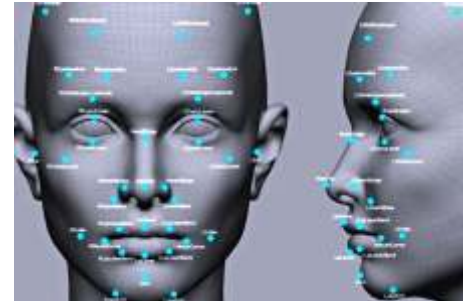
WHAT'S HAPPENING IN THE WORLD OF
AR/VR?

01 **Vuzix** Showed Off New Consumer-ready Microled Smart Glasses

02 **Lenovo** released the ThinkReality A3 - a versatile mart glasses for the enterprise.

03 New design unveiled for **Panasonic's** VR Glasses.

04 **Pollen Robotics** showed humanoid robots controlled remotely through VR.

05 **TCL** debuted commercially-ready Wearable Display glasses.

06 **Bhaptics** showcased consumer-ready Haptic Suit.

07 **SenseGlove** showed off the Nova VR Haptic Gloves.

08 **Nolo VR** revealed new additions to its VR hardware lineup including a new 6DoF VR solution costing less than $200.

09 Nolo VR also provides a 6DoF motion tracking kit for the **HUAWEI** VR Glass

10 **Lenovo**'s New Realities project featured 10 young women changing the world through 360-degree storytelling.

Augmented in AI

Augmented intelligence is an alternative conceptualization of artificial intelligence that focuses on AI's assistive role, emphasizing the fact that cognitive technology is designed to enhance human intelligence rather than replace it. The choice of the word augmented, which means "to improve," reinforces the role human intelligence plays when using machine learning and deep learning algorithms to discover relationships and solve problems.

IMPACT OF AR & VR ON TEACHING AND TRAINING

Statistics from a National Survey are showing that 90% of educators agree that VR technology is quite an effective way of providing differentiated and personalized learning experiences for students. One of the main struggles teachers face is capturing and maintaining students' attention, and VR and AR are not only enabling teachers to capture kid's attention, but also to teach in a more exciting, productive way that at the same time eases the explanation process and is more fun for the kids.

They help students build focus

VR and AR technology during classes help students concentrate on literally what is in front of their eyes, and in a way, they are being 'forced' to interact with their studies and exclude any potential side stimuli. The VR and AR technology are making the lectures, books, and exercises more immersive, interactive, riveting, and engaging, and with that, they are becoming a feasible solution for seizing students' focus and attention.

They eliminate language barriers

Language translation is one of the features that could easily be built into the software of VR. This will allow the VR classroom realizations to potentially be experienced in any language which will eliminate the language barriers and all the difficulties that may come from learning in a foreign language.

They help in improving the learning process

With VR and AR, students can easily explore different realities and angles of the thing they are learning; instead of hearing, reading, and just seeing a two-dimensional picture, they get to learn that material through experience. Statistics confirm that students remember 90% of the material if it is learned through experience. This confirms further that VR and AR are improving the learning process.

360 Degree Marketing

The rise in augmented reality (AR), virtual reality (VR) and 360 degree film has led to a huge increase in opportunities for companies to develop exciting, interactive and immersive content.

Here are 4 ways that you could use AR, VR and 360 to support your marketing activity:

Let people experience the product

Augmented reality allows people to see products in their own spaces. They can discover how it would feel to purchase the product, which is going to add to the evaluation process of the customer journey.

Put someone into another person's shoes

You can create an experience for a customer which transports them and visually puts them into a new world. You can literally place someone into another person's shoes which changes the game when it comes to first person storytelling.

Entertain

Virtual reality, augmented reality and 360 degree film is entertaining marketing. AR has not only grown in advertising and marketing, but also in gamification. This creates the opportunity for brands to incorporate an element of gaming into their campaigns.

Harsha Kikkeri is the CEO of Holosuit Pte Ltd where he is building HoloSuit – An AI enabled full body analytics platform which acts as a virtual trainer for your body. He has over 18 years' experience working on IoT, augmented/virtual reality, aerial and ground robots with expertise in drones, sensor fusion and machine learning. He did pioneer research at Microsoft Robotics in USA building robots which could learn by demonstration. He has won numerous leadership awards including Gold Star from Microsoft, Excellence Award from Infosys, Bharat Petroleum Scholarship and has won numerous chess tournaments. He has a master's degree in Electrical Engineering from Syracuse University, NY and BE Electronics from SJCE, Mysore, India. He holds 44 international patents from US, Europe, China, Japan and other countries. He is a TedX speaker.

Q1. Could you please talk about the role VR and AR currently play in our world?
A. AR/VR is disrupting the world. Just like internet caused a disruption starting with e-commerce but then spreading into every nook and corner of our life, AR/VR will become indispensable in our life.

Q. Where does the future of AR/VR lie in India?
A. AR/VR is a game changer for India. It provides a low cost means for people in India to create and consume 3D content. It will create lot of job opportunities, which unlike traditional job opportunities will be individual driven rather than companies driven. The companies will provide platform and the individuals will showcase their skills on the platform to make their name.

Q. What would be the size of AR and VR market by 2025?
A. It is projected to be $200+billion. Microsoft and Magic Leap are already there focused on enterprise space. Apple and facebook are launching their headsets and it could act as a catalyst for the consumer ecosystem.

HOLOWORLD GOLF

Q. Please tell us a bit about the opportunities and threats in this new emerging market?
A. Opportunities are limitless. Initially when photography was invented, only the cameramen were using the camera to create 2D pictures, videos, now with digital photography with phone, everyone has become a cameraman. Similarly with the advent of the tools which simplify creation and consumption of 3D content, every person can become an AR/VR 3D video creator. The threat is that there will be so much content at varying quality that it will be difficult to parse through and find the really good ones. The biggest threat is that first impression matters a lot and we need to give the people good experience the first time. For example, while Google Cardboard had good intentions, it gave a very low quality impression of the possibilities of VR to masses and turned them away.

Q. Which industries are best poised to take full advantage of AR VR development?
A. Apart from Entertainment, Gaming and Arcades, Sports, Education, HealthCare, Social Media are areas where there is a lot of scope. Gaming is going to fundamentally change with VR and AR and become closer to real world. Just like there are youtube and tiktok stars, the next social media stars are likely to emerge from AR/VR. Increasingly Education, Skilling and Sports are going to be driven by these technologies.

Q. How do you prepare for an AI-driven world as a business leader?
A. Like electricity, AI will be everywhere. To prepare for it, you need to understand its strengths and weaknesses and control its direction. Otherwise, it can be as dangerous as Electricity. Also there is a lot of hype about AI which is masking its true potential. So there needs to be a lot of healthy debate on the true applications of AI and leaders should really question whether something is truly AI enabled or is it just old wine in new AI bottle.

Q. Which industries you think would be fastest to adopting AR platforms with smooth efficiency? What are the new emerging markets for AR technology markets?
A. Virtual Production, Advertising, Automobile for Technical Support, Training

Q. While VR is creating waves in the gaming industry, which industry do you think augmented reality content will naturally fit?
A Augmented Reality has a lot of use cases in Product Advertising and Interactive Content. You can really bring the product alive and make it speak for itself in fully 3D form.

Q. Can AR/VR be the potential promotional mediums for small and medium business in future like what 'Websites & Apps' are doing today?
A Definitely. Website will just die away; the future is immersive 3D content. Once people get used to 3D content, they will not spend time reading text. The communication medium for millions of years was 3D immersive content with gesture and speech, temporarily due to limitations of technology we went back to written text and 2D images. That is a transitionary period.
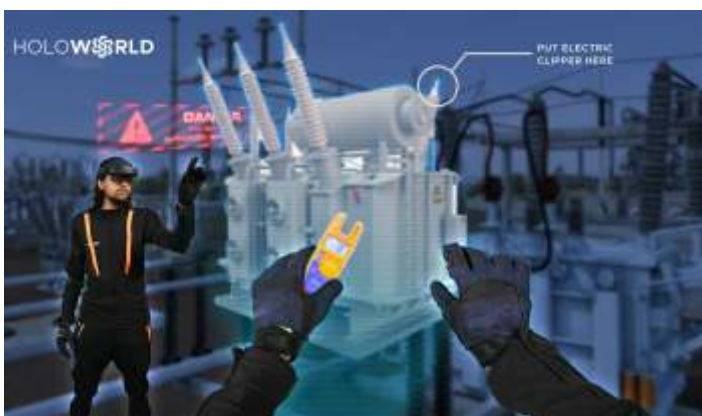
Rajat Ojha - CEO, Gamitronics

Rajat Ojha is the CEO of Gamitronics and the Creator of #1 game on Mobile and top 10 on PlayStation. He is also an Advisor for Betting & Gaming vertical in Samsung Harman. He has worked on VR experiences for AAA titles like Resident Evil, Battlefield, Gears of War, Final Fantasy, Hack Attack etc. and own sports VR IP.

A veteran in video games, serious games, and simulation industry and an expert level in AI and especially conversational AI and F2P games.

Q. Which industries you think would be fastest to adopting AR platforms with smooth efficiency? What are the new emerging markets for AR technology markets?

A. Manufacturing industry. Remote assistance and AR manuals are the immediate contenders for adopting AR as it's a need there. Other industries are shopping/retail, architecture, and education where the real use cases are emerging.

Q. Can AR/VR be the potential promotional mediums for small and medium business in future similar to what 'Websites & Apps' are doing today?

A. Absolutely and it's already happening. AR QR code is the simplest form of AR which is all around us and there had been many campaigns around it. Right now, many big brands are telling their stories using AR/VR and hopefully small & medium size businesses will join the bandwagon. Entry barriers are blurring with cheaper devices.

Q. How do you prepare for an AI-driven world as a business leader?

A. Being the leader gives you an opportunity to see the world from above and when you have in depth understanding about your domain, all you do is keep transferring your knowledgebase to an AI based system which enables you to be ready. Personally, we are fully invested in AI and totally believe that all repetitive tasks should be passed on to AI and humans and especially business leaders should be focusing on innovatively solving bigger problems.

Saksham Agarwal – CEO, Acropolis

Saksham Agarwal is the founder and CEO at Acropolis Infotech (P) Limited – an award-winning custom app development company. He is a multi-faceted, efficient, reliable & dynamic entrepreneur who uses creativity, leadership, and teamwork to design and execute solutions that create value for the client as well as for the end-user. He has a collective work experience of over a decade to date. Saksham started working on his first start-up back in early 2009, followed by one more start-up before founding Acropolis in 2016, with the motive to cater well-tailored, perfectly customized tech solutions to businesses across the glob

Q. How does Augmented Reality unlock the possibilities of image-based conversation, including for videos?

A. Augmented reality, as its name suggests, is an interactive technology, which works with a fusion of real world and augmented world. Augmented reality enables the consumer to interact with the data, images, videos, characters, objects, etc. within the real world. With advanced technologies like image recognition, image processing, machine learning, etc., targeting a specific image and figuring out the objects, people, places, actions, etc. is very much possible and interesting.

The possible applications of image-based conversations are endless, and the industry is yet to explore its full potential. To give you an idea how interesting and exciting these applications are – imagine watching a movie on your laptop and finding a nice shirt that the actor is wearing in a shot within a movie. With help of AR based image conversation, we can simply pause the movie at that shot and can click on that shirt directly. It will allow us to find products across internet, which are same as the product (shirt) which we are interacting/conversing with. From there, we as consumer can directly buy the same shirt that the actor was wearing in the shot. This application has already implemented by multiple OTT platforms and eCommerce platforms. Many such other applications of image/video interactions will be there in the market in near future.

Q. Tell us about the latest projects at Acropolis.

A. Acropolis, being a custom app development company catering clients across the globe, we are working on some really intriguing web and mobile app ideas which involves technologies like Augmented Reality/Virtual Reality (AR/VR), Artificial Intelligence (AI), Blockchain, Machine Learning, Internet of Things (IoT), etc. Some of our interesting projects requires the below mentioned functionalities:

(I) Measuring the length of any object with the help of mobile device camera

(ii) Taking the body measurements (linear and circular) simply by revolving in front of device camera

(iii) Visualizing a vacant space with digital furniture and determining which furniture piece/combination looks best in that space, etc. Acropolis has been working on many more such amazing projects. You can always inquire about specific expertise/capabilities by dropping us a line at hello@acropolisinfotech.com or sending us a whatsapp message at +91 9999 8765 94. Alternatively, you may also give us a call at +1 716 393 8486.

Q. Please tell us a bit about the opportunities and threats in this new emerging market?

A. Opportunities as well as threats, both seems endless at this given time in this new emerging market. New technologies and emerging markets always come with ocean of opportunities and threats. Considering the fact that augmented reality will enable consumers to directly interact with images, videos, graphics and animations across media publishing channels, opportunities of augmented reality include its application in multiple industry verticals to make production/sales/marketing and all other possible processes more seamless and automated. On the other hand, threats include loose cyber security, which can only be tighten over the time, false representation/recognition, etc.

Q. Which industries are best poised to take full advantage of AR VR development?

A. Let us compare the above question with this question – 'which industries are best poised to take full advantage of internet?' I guess we already got the answer. Just as internet is being leveraged by every existing industry in its own way, almost every existing industry can be best poised to take full advantage of AR/VR development too; it is simply a matter of time while industry experts continue to figure out the possible applications of AR/VR in different industry segments. Some of the industries that have already shown a commendable inclination towards AR/VR development are medical & healthcare, travel & tourism, gaming, real estate, education, etc.

Q. Where does the future of AR/VR lie in India?

A. It is a long way to go, which is making progress by multiple folds on daily basis. AR/VR are radically changing the way we consume experiences. and the future looks damn exciting, within India, as well as across the globe..

Q. Any tips for budding aspirants?

A. There is no one size fits all philosophy. Simply continue doing which seems aligned to your interests, keep hustling, be regular with your work, continue educating yourself and eventually you will find the path to success.

A seasoned entrepreneur, the COO and founder of Techugo, Ankit Singh has impressively crafted a niche for himself at a young age. He has sulccessfully established Techugo as a leading brand in the global app industry in just 6 years. An expert in business operations and skills, Singh loves to write and interact. He claims to be a keen learner as building and further expanding a business mandates constant learning.

Q. Tell us about some latest projects at Techugo

A. I must say, it's great timing for visionaries who are trying to hop on the digital bandwagon. Ever since the Pandemic, a lot more conventional brands have approached us for the integration of their own digital platform. Digitization is giving birth to invaluable opportunities, and, as an emerging brand in mobility, I'm delighted that we have a major role to play in shaping that vision.

Last month we launched 6 apps from different domains. All 6 of them have been creatively fulfilling – we tweaked the generic ones with interesting features. For instance, we worked on an on-demand app that hosts competitions and events for earning badges, reward points, etc. Another is a Guidance App for Parents which has already bagged a Guinness World Record.

We collaborated with Greek's Favourite Song Writer, Producer, and DJ- Xenia Ghali to create a gender-neutral app in beauty, wellness & fitness. We have built a first-of-its-kind online kandora shopping application that's backed by AI – it provides real-time human measurements using the front camera, nothing else is required!

Applications and solutions, both heard and unheard of, have been and are being created by Techugo. All this has commemorated our 6-year anniversary in the most beautiful manner!

But yes, I must not miss one thing here – being creative has its own challenges. The AI-enabled app I talked about earlier was a tough nut. We had to toil with MirrorSize API and make everything smooth and flawless. So, in a nutshell, there is much on our plate, but we are enjoying taking on such tasks and the related challenges – how else would be become finer, right?!

Q. Give your opinions on how far this app revolution can make a difference in the technology world?

A. Can make a difference? App technology is already making a difference by bridging the inconsistencies between businesses and their user base.

Check your own phone if you don't believe me. Apps are everywhere! These wonderful little tools stay in our smartphones and offer solutions of all kinds; you name anything – there is an app for it! But that also cannot put a full stop on newer apps from getting built! Because convenience, ease, fun, and utility offered by different applications will always differ. Our vision will continuously trigger the rise of newer ideas and better options will keep coming into the market, it's inevitable – and this is what will always keep the users on their toes! Apps undoubtedly are a great business opportunity. As for the tech world in general, applications are making our lives faster, easier, more convenient and this too isn't happening mindlessly! Every solution that any app offers has been well-thought. The ones that are created just for the name-sake, don't fare well! More thoughtful integration of technologies like AR/VR, AI, blockchain, IoT will lead to enhanced user experience. With newer advancements coming our way, we will witness an era of way more intelligent applications in the future!

Q. What latest technologies and tools you're planning to implement for mobile app development?

A. We have already developed an AI-enabled application and some unconventional projects are under progress at Techugo. Whether it is AI, ML, AR, VR, MR, Data Science or Deep Learning – from these to the better ones coming up – we intend to use each one of them to offer the finest solutions to the users. Apps aren't just created for others, the creators themselves use these tools – their utility will only improve when integrated with latest tech-advancements. So, yes, I don't know what will come our way; all I am sure of is – we are ready for it!

Q. What's your approach to creating interactive and addictive UX/UI of mobile apps and websites??

A. Ease and convenience – all of us at Techugo swear by these, especially when working on the UI/UX of apps and websites.

Apps are built to offer convenience, ease, and speed to users – a complex interface might ruin a wonderful app! My team always keeps a mental note of that. Along with a simplified UI, the aim is to make it fun, interactive, and engaging, keeping the user-friendliness intact.

If anyone asks why – because none of us know which demographic will consume our product – it is out there for everyone to use. Through design, it is important to address an understanding of inclusivity when it comes to app technology. Hence, it is crucial to make the interface of an app or website interactive, accessible, easy and fun. The goal is to make as many people use the platform as much as possible!

A difficult to use app doesn't establish its intent and frustrates users too – I for sure don't want a Techugo product to hit the drains!

Q. What are the challenges you see in the outsourcing industry and how much you're prepared to face those challenges?

A. The biggest challenge that the outsourcing industry most commonly experiences is different time zones. This problem then leads to communication issues which become the biggest barrier in successfully materializing an outsourced task/project.

Since distance is the uncompromising part when it comes to outsourcing, companies in mobility need to figure out a solution that resonates with them and their clients. I truly believe that everything is manageable if people are willing to converge and work together.

In Techugo, we prioritize work ethics and professionalism. If these two remain intact, distance or no distance, outsourcing or not, work can be done in the right manner, without compromising on the quality.

Q. Any advice for budding aspirants?

A. Yes! Don't stop innovating! Think, build, create... learn new things and create better. Entrepreneurship might seem to be all about numbers, but it is more about creativity, out-of-the-box thinking and a vision! Having said that, I do believe that an entrepreneur is not a creative genius. An entrepreneur is just a practical dreamer with sharp business insights. More importantly, all the budding entrepreneurs must not stop, irrespective of what others say. I would strongly recommend going with the gut-feeling, self-confidence but not without practicality and knowledge. Know what you wish to do, before doing it – it will prove highly beneficial, mark my words

With over 10 years of experience, Leeshant has diverse experience in Engineering, Operations, Marketing, and F&B. His professional experience with Larsen & Tourbo, IBM India & other industry verticals provide him an edge to comprehend the needs & wants of any business. While he consults clients in requirement gathering, our design team has a steady focus on creativity and problem-solving. He is the therapist who understand our client needs from a objective perspective.

Q. Who we are and what we are about?
A. Palette69 is a product and experience design company since 2015. With allies in the UK, US, Nigeria, and India, we offer diverse creative branding solutions that transcend global and cultural boundaries, which is reflected in our 100+ global projects.

Acclaimed for our cutting-edge yet deeply humane designs, we believe that we are at the forefront of design exploration, knowing just how well to balance AR/VR, Gamification and other technology innovations with our proven empathy-led design. Offering a unique combination of excellence in behavioral sciences, technology and design solutions, our specialty lies in elevating your brand vision by developing brand experiences that directly speaks to you and of you. We also have our other entity as Limpidfrog, where-in we inject our decades of experience in content creation and we are working currently on our own multi-branch storytelling IP, in terms of Movies, games and beyond.

Q. Tell us about your latest projects.
A. https://housepartyuniverse.com/ We are currently working in House party – A Cross-platform storytelling experience, imagine we have a thread as core story and each knot would be branching into a new dimension of story experience. What we are doing in Housepartyuniverse, only handful of team globally are doing similar stuff, from China its Genshin Impact and from US – Uknownw 9, We are adding an unique side to it by adding NFT angle, which will not only give consumer an option to be part of the Metaverse but they can also gain through the increase in the value of the IP, Something like a Mutual Fund of Entertainment, where instead of Stock/Equity the fans can now invest in IP and Own a part of it. In a Nutshell, we are working on & building an ecosystem named Boolien where we intend to show House Party as a used case too. We have recently launched Boolien, but it was in the making since a long time now - https://medium.com/@Boolien/introducing-boolien-part-1- 2e0335167291 Note – NFT are 100% legal Globally.

Q. Moving onto the general AR / VR space, where do you believe the AR / VR Space is heading to in the very near future in the India?
A. Just seeing the questions, itself, we always tend to talk about technology rather then what and how humans would end up using it, we believe public doesn't bother what the technology is about but is more focused on the end experience they can or would get. With the high-end devices launching every year, the camera and stabilization features are boosting up to cope up the AR needs of it, in terms of VR the Frame rate in Mobile would still need some time, for that we have some amazing devices like Occulus and etc. But in terms of human experience's, what we need is a simple and easy to use content without getting into to complexity.
The future from our perspective would be more in sync with real and virtual world,(the best example being the massive success of Pokemon Go) where cross-platform storytelling not only would give the user/viewer/consumer to dive into a narrative world of their liking but can also be a part of the world by through NFT's, where at a time they can trade and interact through their digital assets in the medium of AR and VR, In near future we would be interacting in a Metaverse world. The Digital ecosystem has a massive way to go ahead, and AR-VR would play a prominent role in it.

Q. Are there any startups that have really intrigued your interest recently?
A. The best and closest we can think of, is from a Founder, we know and have also worked with long back. It's called Artha France, where they started making games now have created a VR Device that helps blind people to perceive their environments! The Founder Remi recently also gave a TED talk on this. You can check out here – https://www.youtube.com/watch?v=gCNaDcUvbW8

Q. How close do you think we are to a VR TV channel?
A. We think this does have some time for it to become a reality, until we make the user experience more friendly and the technology handier. Also, the question here is confusing, as we in order to have a TV channel we can think of a 2D Screen, in order to actually get into the VR, we have used a device to enter, But assuming if you are talking about a 360 Degree (We can use our head gesture on the TV screen) TV channel, then that is near reality. Now let's imagine a world, where AR / VR technology was fully advanced, what is one thing that you would like to use / experience the technology with? Where I can wear our NFT Hats, and my friend can see that through AR and buy or bid it from me. Or I own a famous timestamp from an event in Marvel's Avenger and present it in shop which is live in my virtual land. A VR gallery where top corporate show case there product or service. We believe AR and VR can never replace human physical interaction, but it would amplify the bonding if tapped in the right way and treated with more humane approach, more than just technological Hype.

Q. Any tips for budding aspirants?
A. Find the sweet spot in between what you want to do and what's the world Needs. Follow that and be elegantly desperate in your approach. And Never Compromise on principles.

Auggin is a XR brand with a mission to bring the power of XR technologies (AR/VR/MR) in the hands of every individual and businesses. Digital world holds many things which are not possible in the real world, but they are still limited to a 2D screen. Our vision is to integrate the digital world into the real one and extend human reality. Our first product under this vision is an AR based SaaS offering for jewelry brands which will help them enable virtual tryons for their jewelry items.

Q. The role VR and AR currently play in our world?

A. AR and VR hold the power to irreversibly change the way we buy products, experience events, get education and many other things. We are on the forefront of an entirely new form of computing which will create a more immersive and engaging world and provide new ways to imagine, design and create things. Right from entertainment & education to e-commerce, healthcare & marketing, these technologies are providing very good results with a better use of resources. Almost every industry has started using these technologies in some way or the other. For e.g., Burger King AR based advertisement, Ikea's AR app to try furniture virtually, Boeing using VR for training mechanics, etc. Another example is from Japan, where students were taught about disaster management by using a simulated reality. They were taught how to identify disasters such as flash floods, quickly take decisions and evacuate the place. These examples show how AR/VR can utilize resources properly, give better ROI and even save lives.

There has been much development going on in the AR/VR industry. The Coronavirus pandemic has also boosted it further by forcing organizations to rethink the way they operate, do business and work remotely with employees. But these technologies are yet to go mainstream. Few people may argue on this point, but the reality is different for most people due to the digital divide. High cost of hardware and certain barriers to develop prototypes are a few reasons among others.

Q. Where does the future of AR/VR lie in India?

A. India is not currently at top in using these technologies mainly due to unawareness and lack of solutions on Indian specific problems. But few brands have already taken the leap and are developing these technologies for the Indian audience. Recently, Flipkart added a feature to view furniture in AR. Ikea already has its own app for that and Swiggy launched an AR filter in 2020 for its promotion. Besides this, there are many startups which provide tailor-made solutions to brands in real estate, education, automobile, etc. One such startup is ours where we are building solutions for e-commerce brands to help them enable virtual try-ons for their products.

Overall, the future of AR/VR looks very promising in the Indian market and is expected to witness a robust growth in the next 5 years. The expected release of 5G technology, various headsets/smart glasses and the ever-growing data are fueling the process in both consumer and enterprise segments.

Q. What would be the size of AR and VR market by 2025?

A. According to a few reports, the AR/VR market is expected to hit a market size of USD 180-200 Billion with the most optimistic view being USD 300+ Billion. Looking at the trends, I believe it may hit upto USD 200 Billion with an optimistic view being USD 250 Billion. While North America will hold the major market share of nearly 40%, Asia-Pacific region is expected to have the highest CAGR of upto 66%, with China and India being the key players.

Q. Please tell us a bit about the opportunities and threats in this new emerging market?

A. There lies a huge no. of opportunities in this new emerging market. Opportunity to interact in more innovative ways, opportunity to use resources optimally and reduce costs, to educate in new ways, travel new places and a lot more. Few examples are VR based sporting events & music concerts, audience engagement in museums, world tour while sitting at home, interactive marketing campaigns, experiencing movies from the protagonist's perspective, virtual try-ons of fashion accessories, superimposing the route of your friend's place over the live view of road, educating through a simulated reality, viewing your new house even before it's built, etc. Other examples from enterprise include industrial training and design using simulated reality, virtual environment for meetings, remotely controlling equipment, assistance in healthcare and many more. Every technology has its own benefits and threats, and AR/VR is no different. Few of its disadvantages include eyesight issues, motion sickness and losing general ability to focus. Apart from effects on the body, these techs also use and generate lots of data, leaving less room for users' privacy and allowing hackers to take benefit of the same. The worst-case scenario will be people depending extensively on these techs and forgetting the actual reality. Spending all your time in virtual environments and forgetting the actual social experience of the real world won't be a very pleasant situation. This possibility is shown in a great way in the 2018 Sci-fi movie "Ready Player One".

Q. Which industries are best poised to take full advantage of AR VR development?

A. Almost every industry will benefit from the development of AR & VR. Right from media & entertainment, e-commerce, travel, to education, automobile, healthcare, and many other industries. Among them, media & entertainment, e-commerce, and education & training are best poised to take full advantage of the development.

Q. How do you prepare for an AI-driven world as a business leader?

A. There is a quote which goes like this, "Change is the only constant." The rate of advancements in technology is the highest throughout history. What once was possible in 40-50 years can now be done in 10 years or even less. So, I believe the first step to succeed in this AI-driven world is to "learn to unlearn" and embrace new technologies. AI, as a technology, can accomplish many tasks better than we humans do. And if not used responsibly, it may turn dangerous for us. So, the next step I believe is to have a proper vision and strategy which also takes into consideration the rapid advancements in AI and align its goals with ours. And the third one is to build non-technical skills or soft skills such as creativity, planning, communication, and empathy within your team. You see, AI works on data and provides us with valuable insights. But it alone can't decide what is best for a business. What works best is to let AI assist you in decision-making with its insights. With proper vision and strategy, businesses can leverage the benefits AI has to offer and achieve greater growth.

In Demand Jobs in
AR/VR Industry

Software Developer/Software Engineer

Skill Requirements

- ✓ Two to five years of experience in VR, AR, or MR
- ✓ Practical experience with Unity
- ✓ Experience developing for Oculus, Vive, and other platforms
- ✓ C# development experience

AR/VR Maintenance in Support

Skill Requirements

- ✓ Experience with computer systems maintenance using Unity and other VR systems
- ✓ Able to use 3D tools like MAYA, 3D MAX, Autodesk 3D, or the like to create texts in 3D
- ✓ Capable of troubleshooting a VR and AR system

Design/Graphic Engineer

Skill Requirements

- ✓ Experience developing 3D applications or games
- ✓ Worked and familiar with 3D game engines like Unity and Unreal
- ✓ Years of experience coding in C#, C++, and other languages like Java
- ✓ Holds academic degrees in computer engineering and skilled with 3D maths

XR Gameplay and Tools Engineer

Skill Requirements

- ✓ Three or more years of experience writing in python, C, and Java languages
- ✓ Experiences with Vulkan, OpenGL, or DirectX
- ✓ A Mathematics or Computer Sciences degree, or their equivalent

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Creative Warriors

Learning Management System

Creative Warriors Learning Management System is a platform by Media & Entertainment Skills Council; where learning is beyond the traditional ways of classrooms and blackboards. With varying learning programs, nowadays students need to be made more familiar with the modern ways of education. They can explore a wide-range of features and available resources.

Creative Warriors LMS platform aims to accelerate the transformation of the education system by making it accessible to every student, teacher, professionals, institutions etc. It offers creative & career oriented programs classified into three levels Beginners, Experts & Professionals. Learning is a never-ending process which is why along with the beginners there is a level for the professionals as well. So everyone gets an equal opportunity to grow in their career with the skills of future trends.
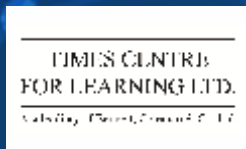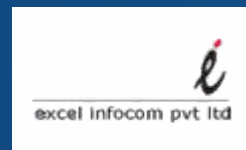
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