

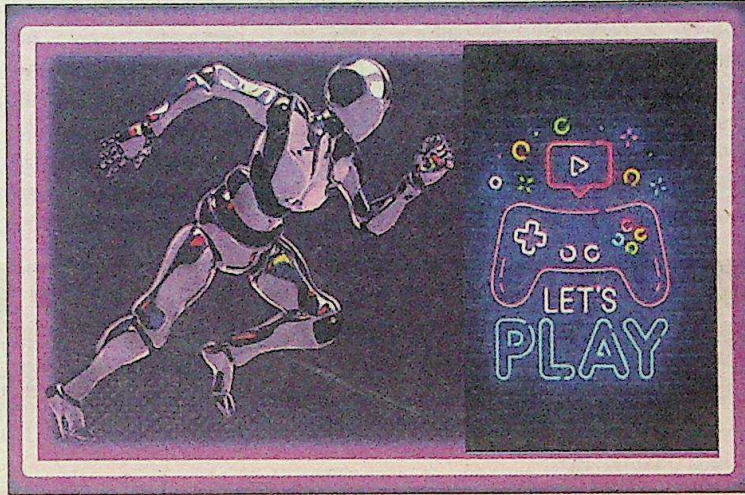
Become a Game Changer in the Expanding Gaming Industry

Deepti Subba

Gaming is not just about joystick jiggling anymore; it's a cultural and technological rollercoaster that's spinning faster than ever! Back in the day, gaming began with legendary pioneers like The Magnavox Odyssey and Spacewar. But then, things went turbo with Nintendo and the mustachioed legend Super Mario Bros.

As time raced forward, PlayStations and Xboxes stormed the scene, and suddenly, gaming wasn't just a trip to the arcade; it was a full-on living room extravaganza. Fast forward to today, and your gaming adventures unfold not only on your personal computers but also in the palm of your hand, thanks to smartphones. eSports, once a niche, has now hit the big leagues with officially organised online tournaments that could rival the IPL in excitement.

The internet and mobile tech have turbocharged gaming into a colossal industry. India, in particular, has gone gaga for



gaming, with more players joining the fun thanks to affordable smartphones, and, of course, social media's expanding reach. The result? Gaming is now bigger and richer than ever. And now with the lightning-fast 6G on the horizon, mobile gaming is set to soar higher than a rocket.

Gaming has become an immersive, hyper-realistic wonderland thanks to mind-blowing tech like cloud-based wizardry, Artificial Intelligence,

Virtual Reality, Web3, and Blockchain magic. It's like stepping into a parallel universe where the fun never ends.

And if that's not enough to tickle your gaming fancy, there's the world of Crypto and Non-Fungible Tokens (NFTs) that have stormed the scene. Imagine

owning virtual assets and getting rewarded for it - it's like being paid to have fun!

But guess what? This isn't just about having fun - it's also about building a career. From coding wizards to game designers, data geeks, AR/VR pioneers, visual effects artists, sound and music composers, and Web 3.0 gurus - there's a dream job for everyone.

India's Gaming Ecosystem

The Gaming industry encompasses the development, marketing and monetisation of video games across various platforms including consoles, personal computers, mobiles and tablets. This industry is considered to be the one that's up and coming with growing excitement among users, due to its importance in culture,

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EN QUESTION OF THE WEEK

Readers' views elicited on important issues
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FREE SUBSCRIPTION FOR WINNERS

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entertainment, and technological advancements, and its contribution to them cannot be understated. Therefore, for the gaming industry to reach new heights of growth, it necessitates a clear and structured framework.

Hence, the Government of India, is in the process of finalising a policy for the Animation, Visual Effects, Gaming, and Comics (AVGC) and Extended Reality (ER) sector. The AVGC Task Force led by the Ministry of Information and Broadcasting has already submitted its recommendations which are awaiting the Union Cabinet's approval. The main objective is to set up a National Centre of Excellence for the AVGC sector which would focus on skilling, education, industry development, and research & innovation and to attract investments.

Multi-disciplinary Field

If you are wondering where you fit into this exciting world, here are some specialised knowledge areas that can open doors to different aspects of game creation:

(i) Computer Science and Engineering: The building blocks on which gaming industry thrives on are the domains of Software and 3D, 2D, Animation and Vfx, IT and specialised computer language like C++, Java and Dev Ops.

(ii) Psychology and User Experience (UX): Dive into the minds of players by understanding human psychology and UX principles. This knowledge is the secret recipe for creating games that resonate with players on a deep emotional level.

(iii) Business and Marketing: For those with a knack for business strategies and marketing wizardry, your expertise is essential for successfully launching and promoting games to the masses.

(iv) Storytelling and Narrative: If you have got a background in literature or creative writing, your storytelling skills can make the game's narratives and dialogues truly compelling and unforgettable.

(v) Research and Development (R&D): In a tech-savvy world, R&D plays a pivotal role in game development. It helps the industry stay ahead of the curve as technology continues to evolve and shape the future of gaming.

Popular Job Roles

The anticipated boom in gaming applications invariably means an explosion in job creation by the industry. Specialised skills are likely to grow in demand and diverse domain knowledge will be sought after. Though it is a rapidly evolving landscape, enlisted below are a few job roles that form the backbone of the gaming industry and will always be in demand.

Game Designers: Game designers conceive the gameplay, mechanics, and overall structure of a game. They focus on creating an engaging and immersive player experience with captivating visuals, character designs, and environments. A strong background in computer science and programming languages like C++, C#, or Python is crucial in this role.

Programmers/Coders: Game programmers write the code that powers the game. They work on everything from physics simulations to Artificial Intelligence (AI) and user interfaces.

Artists/Animators: Artists and animators are responsible for creating the

visual elements of a game, including character models, environments, textures, and animations. They bring the game world to life through their creativity and artistic skills.

Sound Designers: Sound designers and composers work on the audio aspects of a game. They create music, sound effects, and ambient sounds that enhance the player's immersion and emotional engagement.

Quality Assurance Testers: QA testers play a vital role in ensuring the game's quality. They identify and report bugs, glitches, and gameplay issues, helping developers refine and improve the gaming experience.

Production and Project Management: Producers and project managers oversee the development process, ensuring that projects stay on track, meet deadlines, and stay within budget. They act as the bridge between the creative and business aspects of game development.

The next significant rise in this industry will be seen in roles such as cybersecurity, applications for cloud security analyst, information security development lead, cybersecurity engineering and investigation analyst, as these positions shall attract demand in hiring.

Gaming Applications in Other Sectors

Gaming isn't just about entertainment; it's a versatile tool with applications extending far beyond the gaming industry.

e-Commerce: In India, one major sector harnessing the power of gamification is e-commerce. It creatively integrates game-like features into various aspects of the shopping experience, such as rewarding customers for purchases and point redemptions. Gamification has found its way into websites, apps, social media, physical stores, events, and email, offering a wide array of engaging formats.

FinTech: In FinTech, gamification used to make financial education engaging and enjoyable, simplifying complex concepts and offering rewards for prudent financial choices. As we step into the Metaverse era, an immersive gaming experience in FinTech is on the horizon.

Education: Gamification is revolutionising learning. Ed-tech platforms employ collaborative problem-solving, point-based reward systems, achievement badges, and student-generated narratives to enhance learning outcomes while making the process enjoyable. Real-life leader-boards and badge displays are even being explored in formal education settings. India's New Education Policy (NEP) 2020 emphasises "innovative methods like gamification" for high-quality education.

Corporate Training: Gamification in corporate training is about constructing real-life scenarios and challenges in a risk-free learning environment. Instead of being lectured to, employees learn through self-driven, interactive training activities.

Courses to Pursue and Skills to Master

Educational Credentials: A bachelor's degree in computer science, game development, or a similar discipline is frequently the preferred educational background. In specialised domains like game AI, certain positions may

India's Gaming Sector- Overview

- ◆ India ranks as the world's top mobile gaming market in terms of app downloads.
- ◆ There are more than 400 million gamers and 500+ gaming studios in India.
- ◆ India has around 600,000 e-sports players and 100,000 e-sports teams
- ◆ Online gaming revenue experienced an impressive 39% growth in 2022.
- ◆ The gaming sector is anticipated to further expand by 20% by FY25, achieving a total value of Rs 231 billion.
- ◆ Over the past five years, Indian gaming sector secured a significant \$2.8 billion in investments from both domestic and global investors, marking a remarkable 380% increase from 2019 and a notable 23% upswing from 2020.
- ◆ India takes pride in three gaming unicorns, namely Game 24X7, Dream11, and Mobile Premier League.
- ◆ 100% FDI through automatic route is allowed in the gaming sector.

(Source: Invest India)

necessitate the attainment of a master's degree.

Programming Proficiency: Proficiency in programming languages commonly employed in game development, such as C++, C#, or Python, is a fundamental requirement. Additionally, a sound understanding of game engines, encompassing unity, unreal engine, or proprietary engines, is expected.

Mathematical and Physical Aptitude: Proficiency in mathematics, including but not limited to calculus, linear algebra, and geometry, is imperative for the formulation of game mechanics and the development of robust physics systems.

Problem-Solving Competence: Game developers are necessitated to exhibit adeptness in problem-solving, enabling them to adeptly recognise and tackle intricate technical challenges that may arise during the development process.

Creativity and Collaborative Skills: The cultivation of creativity is paramount in the domains of game design and storytelling. Additionally, effective communication and collaboration skills are deemed indispensable for seamless integration within cross-functional teams involved in the game development process.

Meticulous Attention to Detail: Game developers must demonstrate an unwavering commitment to precision and meticulousness. This dedication to detail is indispensable for safeguarding the quality and refinement of the final product.

Popular Institutions and Courses

Pursuing a career as a game developer requires a solid educational foundation. *There are numerous colleges, universities, and specialised centers around the country where individuals can enroll in courses and programs focused on game development.

Indian Institute of Technology Bombay - IDC School of Design: IIT Bombay offers a Master of Design (M. Des) program with a specialisation in Interaction Design, which covers game design principles. The program focuses on user-centered design, making it valuable for those interested in creating user-friendly games.

National Institute of Design Ahmedabad: NID offers a Master's program in New Media Design, which

includes game design as a part of its curriculum.

Srishti Institute of Art, Design, and Technology (Bangalore): Srishti offers Bachelor's and Master's programs in Digital Game Art and Design. The institution emphasises creativity and innovation in game development.

Manipal Institute of Technology-Manipal: MIT offers Bachelor of Technology (B.Tech) programs in Computer Science and Engineering with a specialisation in Game Programming. It provides a strong technical foundation for aspiring game developers.

Arena Animation: Arena Animation has centers across India and offers courses in game design and development. They provide diploma and certificate programs in game art and design.

Maya Academy of Advanced Cinematics: MAAC has numerous branches in India and offers courses in 3D animation, VFX, and game design. Their courses cover various aspects of game development, including 3D modeling and animation.

Backstage Pass (Hyderabad): Backstage Pass is a specialised institution that offers Bachelor's and Diploma programs in Game Development. It is known for its industry-oriented curriculum and game development studios.

DSK Supinfogame (Pune): DSK Supinfogame is a renowned international game design school with a campus in Pune. It offers a Bachelor's program in Game Design and Game Programming.

Amity School of Animation and Gaming (Noida): Part of Amity University, this institution offers Bachelor's and Master's programs in Animation and Game Design.

iPixio Design College (Bangalore): Offers diploma programs in game design and development. It is known for its hands-on training and industry partnerships.

National Institute of Gaming and Animation (NIGA) - Chennai: NIGA offers diploma courses in game design and development.

Whistling Woods International (Mumbai): The WWI offers a Bachelor's

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PTP-NER: The Gateway to a Global Outreach

EN EXPLAINS

As a succession to the Central Sector Scheme introduced in April 2023, the Ministry of Tribal Affairs launched the second phase of "Marketing and Logistics Development Promotion of Tribal Products in the North-Eastern Region" (PTP-NER) on September 21, 2023. This initiative promises robust and sustainable livelihood opportunities for tribal artisans inhabiting the eight North-Eastern States of the India. This is but a significant step in the path of socio-economic elevation of the tribal communities of the nation, especially the ones in focus for this initiative, which are Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim.

In this edition of the EN Explains series, let's look at the various facets of the scheme and how it has served as an earnest effort in bringing the target groups to the foreground.

The Vision

Launched by Union Minister of Tribal Affairs, Shri Arjun Munda on the 18th of April 2023 in Imphal, Manipur, the objective of this endeavour is to tap onto the massive potential of the North-Eastern tribal population, making it possible for tribal artisans to exhibit their vast cultural abundance through skill enhancement, meanwhile also enabling them to leverage the opportunity to augment their incomes and look beyond mere subsistence. With the provision of backward and forward integration to expand production capacity and publicity, the scheme aids the artisans in all respects, i.e., from assistance with incubation, optimisation of expertise, aggregation and entrepreneurship building to sourcing and devising marketing mechanisms, transit and advertising, also roping in technology to enhance the process.



The Mission

During the first phase of the project PTP-NER 1.0, tribal craftspeople were enlisted as part of the initiative through the 64 Tribal Artisan empanelment Melas (TAEMs) that were held district-wide from April 18- May 20, 2023. In partnership with state administrations and the Department of Posts, the Tribal Cooperative Marketing Development Federation of India Ltd (TRIFED), under the Ministry of Tribal Affairs, along with North-Eastern Handicrafts and Handlooms Development Corporation (NEHHDC), under Ministry of Development of North-Eastern Regions (DoNER), visited a total of 38 districts across the eight states. Artisans from these regions were invited to the platform to display their products, which could include natural products as well as art and craft items. With merchandising teams deployed in each mela, new artisans and novel products were identified and the same were sourced

directly to ensure quality and authenticity. TRIFED and NEHHDC were able to achieve a commendable outreach within the tribal communities, i.e., 2526 artisans from 44 tribes, as part of these visits. This stunning participation saw 1056 people gaining empanelment and the remaining 1465 being inducted in training capsules to fine-tune their expertise. The accomplishment extends further with an outstanding procurement of 3115 products, which includes diverse products such as articles fashioned out of bamboo, textiles, forest produce jewellery, pottery, paintings, forest produce, to name a few. These events also acted as a medium to inform the communities about the benefits of the scheme and how it will help their products reach a wider audience in the longer run.

The teams of TRIFED and NEHHDC, kick-started the second segment of this pivotal programme, PTP-NER 2.0 scheduled to run from 21st September through 10th November 2023, with the primary goal of reaching out to 29 other districts in the Northern Eastern States and help tribal artisans unlock their potential to showcase their rich cultural heritage in the ever evolving market sphere. Looking to achieve a multidimensional goal, the dedicated teams from TRIFED and NEHHDC will conduct the Tribal Artisans Empanelment Melas in these regions to facilitate production capacity, and also aid the stakeholders introduce their products in the marketplace through smart and attractive packing. This is intended to improve the global value chain of the sourced tribal products and also provide the tribal communities a platform to sustain themselves financially.

The scheme undoubtedly emerges as an assurance to the tribal communities by

way of promoting yet preserving their exclusive craftsmanship and products, whilst also paving a way for the artisans to enter the mainstream markets.

About TRIFED

Tribal Cooperative Marketing Development Federation of India Ltd. (TRIFED), established in 1987, is a national level organisation that functions under the Ministry of Tribal Affairs, and is entrusted with empowering the tribal communities by facilitating and providing them assistance with developing and selling their native products. In addition, the national body comes up with strategies to make the tribal communities conversant with relevant technology and novel strategies with respect to the market development of tribal products, such as pottery, tribal painting, metal crafts, etc., simultaneously making way for capacity boosting. This significant role involvement of the organisation ensures that these communities are equipped with an adequate understanding of the specific skills to undertake an activity and bolster it in their own scope. The organisation explores ways that the tribal products can thrive in the national and international markets, in the attempt to build a brand for them and also opening a door for the communities to create sustainable income for themselves by utilising the potential of their cultural heritage and resources.

About NEHHDC

Instituted in the year 1977, North Eastern Handicrafts and Handlooms Development Corporation (NEHHDC), strives to develop and promote the indigenous crafts of the region. Primarily, it provides technical and financial support to the craftspeople, weavers and local establishments and acts as a bridge between the artisans and consumers. To garner attention towards the tribal products and increase their accessibility, the organisation sources handicrafts and handlooms from the weavers and artisans and sells them in retail through their emporia called 'Purbashree', which is located in various cities namely- Kolkata, Shillong, Guwahati, Delhi and Bengaluru. Apart from this, Sales Centers, showrooms and exhibition centers are also set up to widen the possibility. NEHHDC also regulates production through artisans, cooperatives, or self-run production centers, in addition to promoting products in national and international exhibitions and managing policies to develop handicrafts, handlooms and other products pertaining to the categories.

Source: PIB



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program in Game Design and Game Development.

(*The list is indicative only)

Future-Proof Your Skills Set with New Technologies

Blockchain: In an industry that constantly evolves, acquiring blockchain skills can future-proof your skill set. These skills are transferable and relevant across various sectors, providing long-term career stability. For professionals in the gaming industry, embracing blockchain technology represents a remarkable opportunity for personal and career growth. By mastering blockchain, you position yourself at the forefront of innovation in gaming. As blockchain

continues to reshape the industry, having a solid understanding of this technology will make you a valuable asset to any gaming company. You can explore roles related to blockchain integration, Non Fungible Tokens (NFT) development, or even start your own blockchain-based gaming projects. The blockchain and gaming communities are vibrant and growing. Learning blockchain technology allows you to connect with like-minded professionals, attend conferences, and collaborate on exciting projects.

Data Science: Proficiency in data science is vital for orchestrating the smart operations of a metaverse grounded in augmented reality and virtual reality.

Like in all other tech sectors, in the gaming industry too, positions with an ongoing need for skill enhancement will consistently be in high demand.

Conclusion

Virtual gaming has transformed into an exhilarating, larger-than-life universe that goes way beyond just having a good time. It is like a big, global party where millions of players, creators, and future entrepreneurs gather to team up, go head-to-head, and dream up epic things. The gaming world is not just about playing games; it is about building them, crafting entire virtual wonderlands, and creating adventures that capture hearts and minds.

So, if you have recently passed high school or graduated from college and looking for a fun yet rewarding career, you

are at the doorsteps of an industry that is bursting with opportunities. All you need to do is equip yourself with the right skills and training and you are all set to embark on the thrilling journey of the virtual wonderland.

Even for the experienced hands, the gaming world is the place to be if you are looking to give your career a new dimension. Whether you are a coding guru, a design maestro, an artistic wizard, or a big dreamer, the gaming community is ready to welcome you with open arms. So, jump into this thrilling world, where your skills and imagination can transform the future of entertainment and beyond.

(The author is a career counsellor and digital content creator. Feedback on this article can be sent at feedback.employmentnews@gmail.com)

Views expressed are personal.