

iXie's Guide to Mastering the **7 stages of Game Development**

E-book



In this guide, you'll learn:

- ❖ About the need for high-quality game development
- ❖ The ways in which game ideas are brought to life
- ❖ The importance of a game development strategy
- ❖ The 7 stages of game development
- ❖ The best practices to be followed while creating games from scratch.

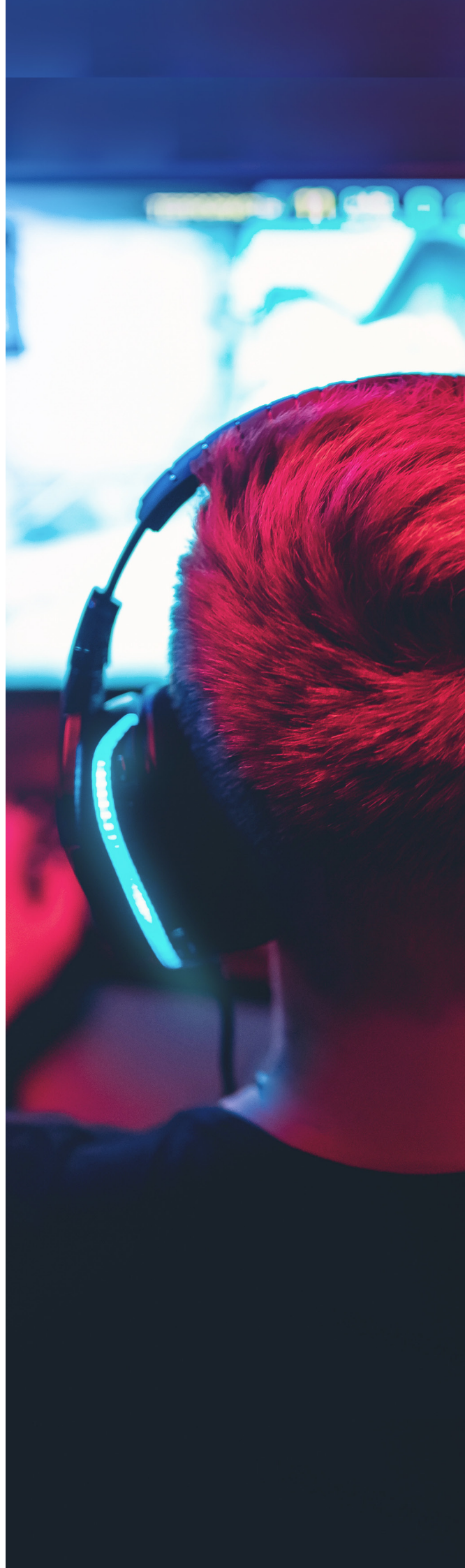




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Overview of the Gaming Industry

The introduction of the very first game brought about a craze that lasted for decades but the pandemic brought the Gaming Industry to heights never seen before, as seen by the 16.5% increase in the average time spent gaming between 2019 and 2020. Gaming has proven itself as having the power to unlock the bonds of community, educate and even inspire. With the value of gaming increasing in the hearts of the players, it is clear that gaming has a bright future ahead of it.

What started as a niche industry has now transformed into a global behemoth, making it one of the biggest success stories in the new millennium. So, what does the future have in store for this industry? Let's find out!

Key Statistics – What is the worth of the gaming industry?

- ↗ The revenue of the gaming industry is expected to reach \$435 billion by 2028.
- ↗ By, 2024, the video games segment will hit a sales volume of \$100.56 billion!
- ↗ Similarly, by 2024, immersive gaming is expected to surpass \$2.4 billion in global revenue. (Statistics taken from techjury.net)

Gaming Trends – 2023 and beyond

Gaming is one of the fastest growing industries and with absolute cutting-edge gaming technology being introduced at a mind-blowing rate, the future of gaming is big. Here are some of the future gaming trends to watch for:

- Cloud-based subscription services are currently a hot trend with interest in Cloud Gaming having grown by 105%
- The future of gaming is immersive
- High-fidelity games are on the rise
- Streaming is all the rage.
- There is a market for remakes and reboots as nostalgia is a powerful tool.

The above trends clearly show the unlimited scope of the gaming industry and the trends which are worth pursuing to stay relevant in the market. But with so many games being developed yearly, how can game developers stand out from the competition? Is just a good game idea enough? What makes a great game?

This is where an understanding of player preferences plays a huge role. Like other industries, in gaming too, the customer or player is king and ensuring that your game meets their expectations is key to developing a successful game.



Understanding Player Preferences

“

***Let's optimize for player experience
rather than what we think will
make more money***

- Ron Carmel

”

Other than keeping up with the latest trends, game developers need to prioritize player preferences while developing their games. By meeting expectations like an increased need for personalization, a preference for mobile to PC and producing more

female-friendly output for the increasing female gaming audience, developers can separate themselves from the competition. Players are much more likely to remember a game that takes their preferences and expectations into consideration.

For example, in the case of Online Games, personalized gaming has become very popular. In the mobile version of Clash of Clans, players can customize aspects of the game to suit their preferences. The game developers understood this need for personalization, which helped them in ensuring that such features were included during the development process of the game.

Now that we better understand the Gaming Industry as a whole and the trends and preferences that influence game ideas, the question remains how does a game idea transform into the games that we all know and love? Let's take a look.





Idea to Development

“

***It's not about ideas, its about
making ideas happen***

– Scott Belsky

”

As seen in the previous section, a game idea is finalized post deep analysis of various factors such as player preference, existing trends and the target audience are considered. But once the idea is selected, the question that arises is how it should be developed.





In the above scenario, game creators have 3 options to choose from

1. Solo Developer

One, you can develop the game on your own, provided you have the skills and resources needed to do so. As a solo developer, if you know to code and are building a casual game, there are multiple sources where you can get free or paid art assets from characters, UI, backgrounds, music, sounds, etc. which will make your effort more concentrated towards coding. However, this is a risk too, as you might not be able to find the right assets if you are looking to develop something unique. In this case, you

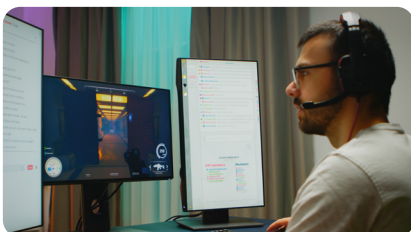
would need to learn 2D and 3D art software to create the assets yourself which is time consuming and might lead to frustration and abandonment of the project.

There is also another option apart from the ones mentioned. A solo developer can hire freelancers from various sites to work on the art. Or a game designer can hire freelancers for both programming and art. There are competitive prices and are cheaper than hiring from the outsourcing industry. But this comes with a lot of risk.

There is no backup, and the solo developer is at the mercy of the hired freelancer.

If the freelancer does not match the quality that the solo developer or designer wants, they will end up spending lot of time and money that can lead to extreme delays in release of the game or in some cases, total abandonment of the game idea. Hiring an outsourcing game development studio is a safer bet since they will have multiple resources, contingency planning, and deliver the intended quality in most of the cases.

Some of the basic skills you need to develop the game yourself is knowledge of coding, artistic skills, creativity, access to free or paid assets, storytelling and time management. Additionally, you will need access to game development engines such as Unity and Unreal. Game development also requires a lot of specialized skills such as analytics, animation expertise and marketing. Some of these skills can be learned or compensated for with the help of digital tools. For example, there are analytical tools available that can be integrated into the game which will help you in live-ops and analysis of what is working in the game and what the audience is rejecting. Based on this data, you can make changes and release regular updates.





2. Developing an in-house team

The second option is building an in-house development team who can develop the game for you. With an in-house team, you will have complete control and say over how the game is developed. At the same time there are also certain cons in choosing this option. Building an in-house team takes a lot of time and money as you will need to take the time to train them and set up procedures to ensure that the game development process goes smoothly.

As with any new team, adjusting to working with new people takes times. If you want your game to be developed within a certain timeframe, going with this option can result in delays. Additionally, you will incur a lot of overhead charging such as the money you need to pay your employees, as well as the cost of obtaining new software and equipment.

3. Outsourcing your game development

In terms of budget and time, the third option is the best for successfully developing and launching your game, especially financially. Outsourcing has a lot of benefits.

- End-to-end game development companies have a lot of experience which makes developing games on-time and within budget much easier.
- Additionally, game development companies have teams with specialized skills, so you don't need to hire multiple agencies for different aspects of your game. One agency will be adequate to meet all your needs.
- Risks such as a sudden staff turnover or security concerns for your game are also reduced as a reputable agency will always have staff on hand and will provide the highest level of security for your games.

Instead of increasing the overheads to the company internally by hiring more people, this option allows your core team to focus on your next game, while an outsourcing partner can keep your launched game alive by developing features and events at a cheaper cost.

Now that we know the three ways in which we can take a game idea to development, choosing the best option depends on your goals, requirements and time. Once you have decided on how you are going to develop your game, the next step is to focus on your development strategy.



Importance of Game Development Strategy

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**Success is 20% skill and
80% strategy**

– John Rohn

”

Game Development is not easy and is very chaotic in nature. A proper game development strategy can help bring order to this chaos. Additionally, it also has a lot of benefits some of which we will be seeing in this section.





1. Strategy helps in preparing for different markets

As discussed in the first section, before creating a game, the game creator must decide the market and audience. Once the market and audience are decided, a strategy can be created to decide how the new game will be developed in order to meet the preferences of the market and audience. A proper strategy will also help the developer decide if he will be targeting just one market or multiple markets, what budget he needs as well as the time needed to market the game. The game development strategy helps facilitate the decision-making process.

2. Strategy helps optimize the game development process

The game development process has multiple stages. A proper strategy ensures that the process is smooth and on time. Additionally, if you choose to outsource your game development services, a strategy will help you as well as the game development outsourcing company you chose to ensure absolute clarity and context/concept transfer between yourself.

3. Strategy helps to protect against sudden changes

With game development being so volatile, there is no guarantee that everything will go according to plan. Having a strategy will help ensure that the game development process can continue no matter what disruptions occur.

Now that we have seen the importance of strategy in game development, let us look at the 7 stages of game development.



7 Stages of Game Development

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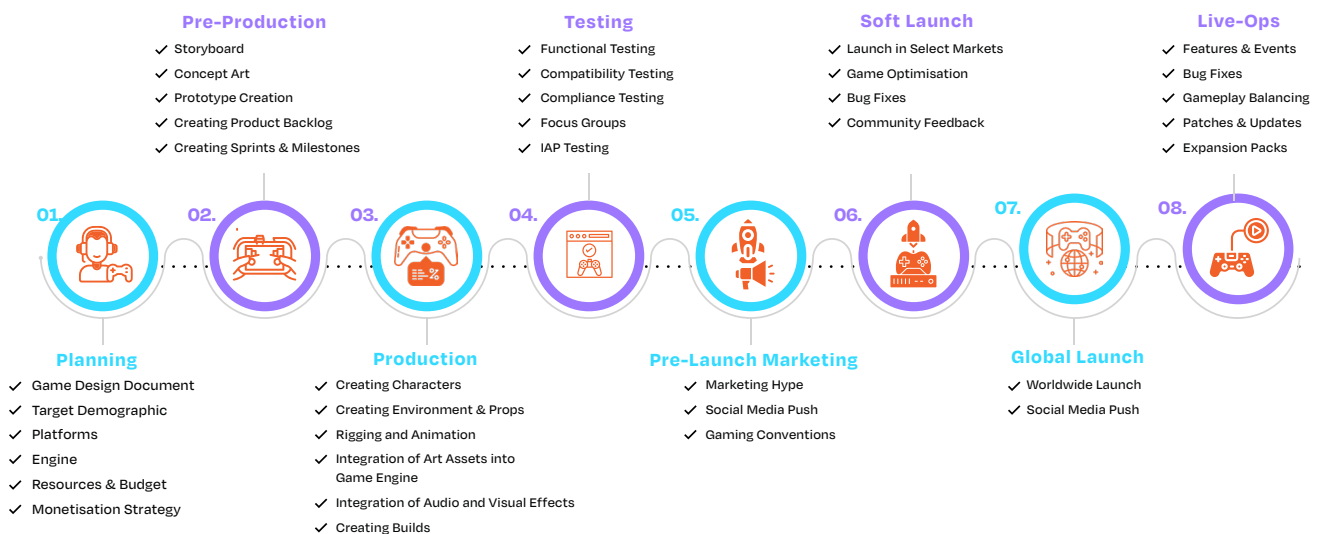
Gamers can feel when developers are passionate about their games. They can smell it like a dog smells fear. Don't be afraid to hold onto your unique vision: just be aware that it may not turn out exactly how you envisioned.

- Scott Rogers, *Level Up!: The Guide to Great Video Game Design*

”

A lot of time, effort and passion is put into developing a game. But despite careful planning, the game development process is not always smooth. The Game development process is divided into 7 stages in order to better facilitate this. These stages are Planning, Pre-Production, Production, Testing, Pre-Launch, Launch and Post-Production. Let us go through each stage of the production process and understand how games are developed from scratch.

The Stages of Game Development





1. Planning

The planning stage is the most important stage of the development process as it is at this stage that the ideation of the video game is done. Game ideation is a critical aspect of the game development process as it serves as the backbone of the entire game. In Game ideation, some important questions can be answered such as:

- What is the basis of the game
- Should it be 2d or 3d
- What platform are we building on
- What should be its key features etc.

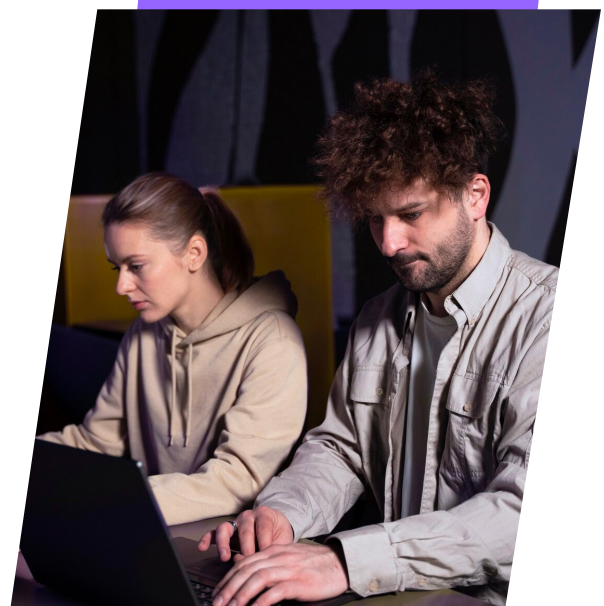
All the above questions are answered and consolidated into a Game Design Document, which provides a standard for developers and designers to follow during the development of the game. Additionally, it also gives game publishers an idea regarding what the game is about. The game design document is a must if the game development process is outsourced, as it helps to bridge the gap between the outsourcing company and the gaming studio. It also helps to keep your team organized.

Other than game ideation, proof of concept is also developed during this stage. A proof of concept takes the existing games ideas and tests their validity, helping to answer further questions that arise such as:

- The size of the team required for the project
- Do we have the technology needed to bring this concept to life?
- What is the estimated timeframe of the launch?

By helping to answer these questions, game creators can also put together a pitch that allows publishers to approve the budget for the game. Publishers do not agree deals only based on the Game Design Document (GDD). They need an MVP (Minimum Viable Product) which will be integrated with their Software Development Kit (SDK), after which they will test it out with their market reach and if the MVP matches or exceeds their benchmark on DAU (Daily Average Users), CPI(Cost Per Install), and other data points, only then will be publisher and the development studio start talks on a publishing model.

In Independent studios without publishers, game development can be funded through crowdfunding websites. There are many games which are developed through crowdfunding. After the planning stage is the pre-production stage.





2. Pre-Production

In the pre-production stage, the ideas plotted out during the planning stage are fleshed out through collaboration between the project leads, writers, designers, engineers, developers and artists. In this stage the narrative of the story, the technological constraints, in-game mechanics and consistency of the color-palettes and design with the initial planned concept are tried and tested. The concept sketches of the characters, environment, props, the color schemes and environment models etc. are all developed in this stage. This stage is mainly to check whether the designs, characters and environment can be developed as

planned, and if not, what changes need to be made.

The prototypes act as the first check point before the production stage. If the game does not pass this check, then the game idea needs to be reevaluated, so this is a very important part of the pre-production process. Game creators can also get a third party to test the proof of concept as they might miss mistakes. Once the prototypes are tried and tested, the developers will move on to the next stage of the process which is the production stage.





3. Production

This is the most challenging stage of the entire game development process, and a lot of time, resources and money are dedicated to this stage. In this stage, the actual development of the game takes place. The character models, the environmental designs and animations, the voice-overs, and sound effects are all completed during this stage. These activities can take years to complete with multiple iterations. Multiple players are involved in this stage. The artists, voice actors, animators, developers, project leads, and audio engineers work together to integrate the

different elements of the game. For example, for voice overs a document containing all the dialogues and noises is sent to a voice-over actor who then records it and sends it back as individual files to the developer. The developer then adds the dialogues in the relevant places. Each player is aware of their role and the project coordinator acts as the link between the different teams.

Below you can see the various responsibilities that the different teams cover in order to produce a single game.



Despite such efforts it is still possible for large parts of the game to be deleted if it does not pass testing which brings us to the next stage of the game development process.



4. Testing

Before the game is released to the market, it needs to be tested for bugs which can spoil the quality and performance of the game. Not only does a badly developed game not sell, but it also affects the credibility of the company as a whole and might affect the popularity of future games as well. This is why testing is an important part of game development. In this stage, the game goes through multiple tests, such as:

- Functionality Testing , in which the gameplay issues, audio-video sync, and asset integrity are tested to see if they perform as per specifications.
- Compatibility Testing is where the games compatibility with multiple devices that encompass various screen sizes, phone memory, OS versions, etc are tested.
- Compliance Testing is done to ensure the game is compliant with the Console Standards such as TRC, Lot Check, TCR, etc.
- Focus Group Testing is conducted to ensure that the game is reviewed from the perspective of the end user. It is a test to see whether the game can retain the attention of the end-user after launch.
- IAP Testing is mostly done for games which involve using real currency to purchase in-game assets. It is to test the compatibility and security of In-App Purchasing feature.

During testing, each aspect of the game is tested meticulously to see if there are any bugs or lags present which might affect the gaming experience. There are also many testers who conduct stress tests to see if the game can hold up well under pressure.

Only after all these tests is the game released into the market as an Alpha or Beta release depending on polished the game is.



5. Pre-Launch

The pre-launch stage is when the public gets first glimpses of the game. In the beginning of the pre-launch, a hype video is released in order to create awareness about the game and create anticipation. Additionally, some game publishers might also schedule a spot at popular game conventions in order to show an exclusive preview of their game. For independent studios with limited marketing budgets, sending a beta version of their game to popular gaming personas to live stream is one

option to promote their game. Other than the marketing the game, some game developers will also have a soft launch of the game in select markets or to select audiences, this is to gauge the view of live players on the game. These live comments will help developers to identify any bugs which they might have missed, as well as optimize the game further. Developers will also get an idea of what the players think of their game before the actual launch.

6. Launch

Now we are at the most highly anticipated aspect of game development – the launch. In the months leading up to the launch testers and developers usually work on squashing as much bugs as possible while also polishing the game. Once the game is clear of bugs and is considered as squeaky clean, it is time to launch and distribute it into the market. While the developers work on the bugs, this is the busiest period for game marketers and publishers.

The publishers use the reviews and comments gathered during the pre-launch period of the game to come up with a launch strategy. The typical launch strategy includes details on the messaging to be used for the social media, the best channels for promotion, whether to use a brand ambassador, and the timeline to the launch date. Based on these details the publishers will focus on creating a hype for the game on social media and other PR channels in the months leading up to the game.

7. Post-Launch

If you thought that you could relax now that your game has been launched, then think again. The post-launch period is an important and exciting time as well. Even with all the testing that was done it is not unexpected to launch with a few bugs in place. As such most of the launch period is spent on identifying

and fixing these bugs. Game studios evaluate gamer reviews on online forums and players experiences in order to identify and fix these bugs. All of these are part of the post launch support. Additionally, releasing fresh content in order to keep the interest of the players alive is also a part of post-launch activities.



Best practices while creating games

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Practice is the best of all instructors

- Publilius Syrus

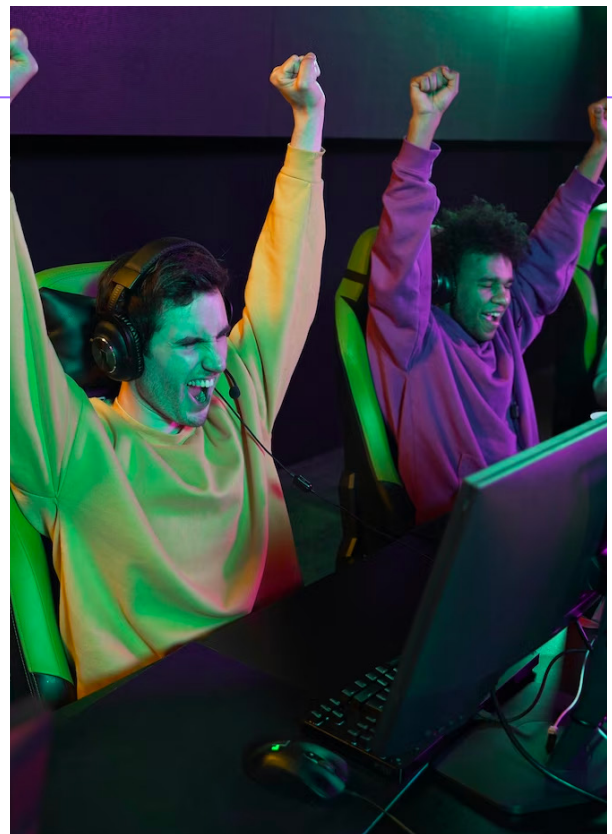
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As seen above in the stages of game development, it is a lengthy process that takes a lot of time and effort. But as long as you understand each stage of the process it is easy to make a game that is polished and thorough. Even with that being the case, here are a few best practices you need to keep in mind while creating games in order to better optimize your game development process.

Make sure you tell a story: Gaming is an experience. Ensuring that the story your game is telling is interesting, fun and inventive is one of the best ways in order to make your game popular and stand out from the competition.

Have a thorough understanding of the game development platform: While developing a game it is a good idea to keep in mind which platform you are creating the game for. Some platforms are not as popular as others and additionally if you don't have a good understanding of the platform, the gaming experience might end up sub-par.

Create an interactive and stunning design: Design and graphics are the first things that players see when they look at the game, so ensure that you place a lot of attention on designing your environment and characters as they will help make a good first impression.



This does not mean that other aspects of the development process are not important, but if you do the above three right you have a much greater chance of creating an outstanding game.



Conclusion

As you have learned, game development is not an easy process and if you have a game idea that you wish to develop you will need to keep the factors mentioned in this eBook in mind during the pre and post development process. To refresh your memory here are some key takeaways.

- Immersive gaming and streaming are some of the hottest trends in gaming.
- Keeping player preferences in mind is a must during the game development process.
- Strategy is key to a successful game.
- Testing and research are a must in the game development process.

Storytelling, Game design and game play are key elements that can make or break your game.

If you wish to develop a game from scratch or hire a development company to help you during the process, then this is the guide for you.



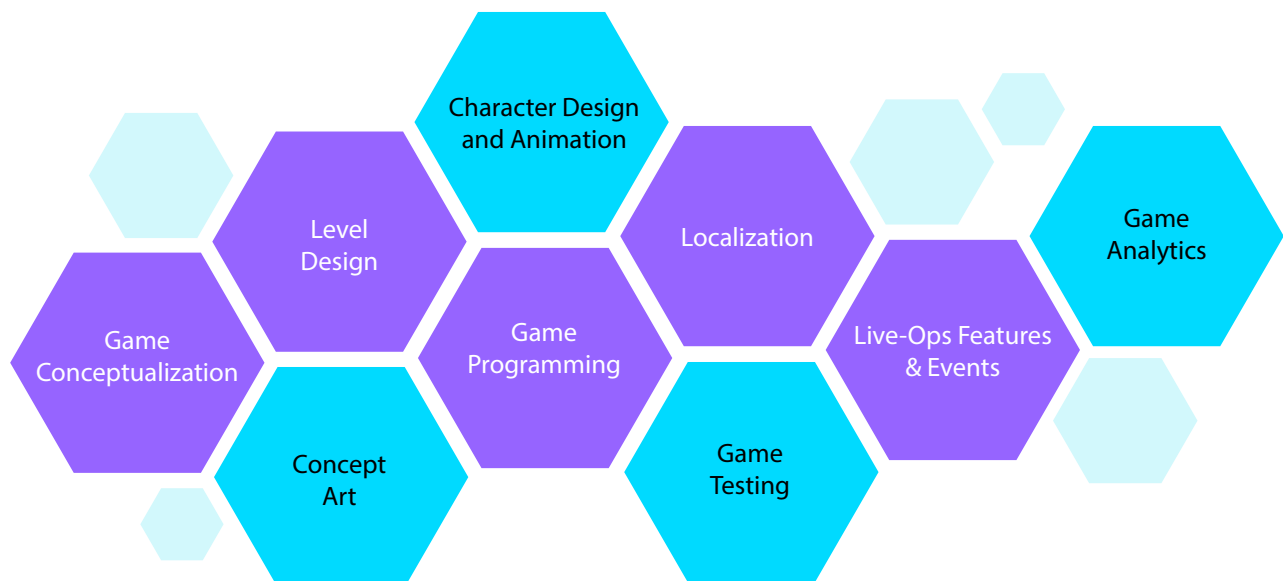


Why iXie?

iXie is a one-stop shop for all your game development needs. With over a **10+ years in the industry** catering to some of the biggest names in gaming, our flexible engagement model and rapid scalability gives you the option to develop games as you want it.

iXie started end-to-end game development services comprises of a team of industry veterans who cumulatively have over **20 years of game development experience** and have released titles across various platforms and have worked on titles that have over **100M+ downloads**.

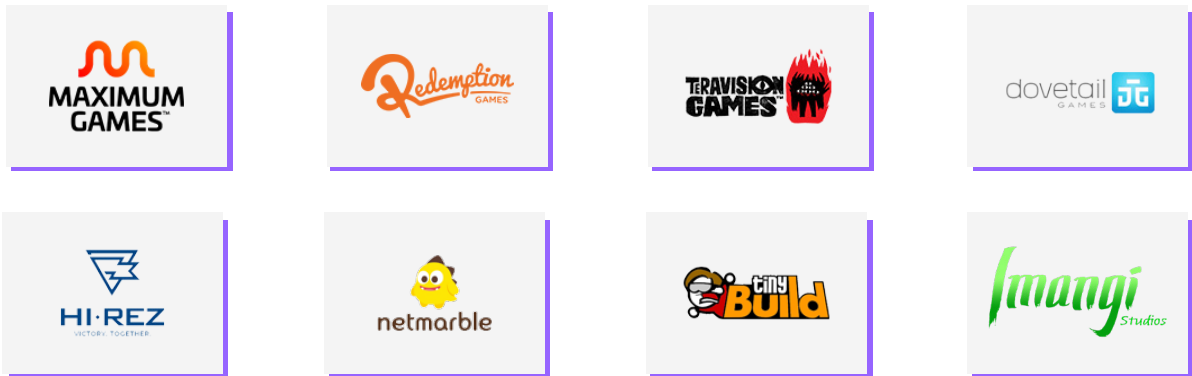
We believe you can truly benefit from working with a reliable partner, who can help you give seamless gaming experience to gamers around the world, guaranteeing your game's success. We provide a range of co-development services using our full spectrum of available resources, experience and creativity to deliver gaming projects on time, within budget and maintaining highest levels of quality.



iXie's team of programmers, artists and designers have vast experience of developing games from the concept stage across various genres such as Match-3 games, puzzle, action, board games, platformers, etc, and are comfortable in designing and developing games across genres. The team has experience in implementing features that are a mainstay in the casual gaming genre, such as In-App purchases, Ad integration, varied movement mechanics, reward collection, power-up implementation, Leaderboards (Global and local) and social media integration.



Our Clients Trust Us



Our Advantages

Multi-Engine Expertise:

Our team of developers are experienced in cross-platform development and help create solutions for any game genre with maximum flexibility and efficiency.



Scalability:

Xie has multiple channels through which we meet the workforce required. Before every new hire, the candidates go through a series of tests before they become part of our resource pool. The programmers go through a series of assignments to test their coding abilities, while the artists are given a set of art related topics to create within a certain time frame.

The following are our sources to address resource replacement:

Pool of Resources - Bench Strength:
Given the size of the organization with skilled resources over 700+ in the iXie division, we always maintain a 5-10% bench strength at any given

point of time ready to be put into the production team as per the project requirement.

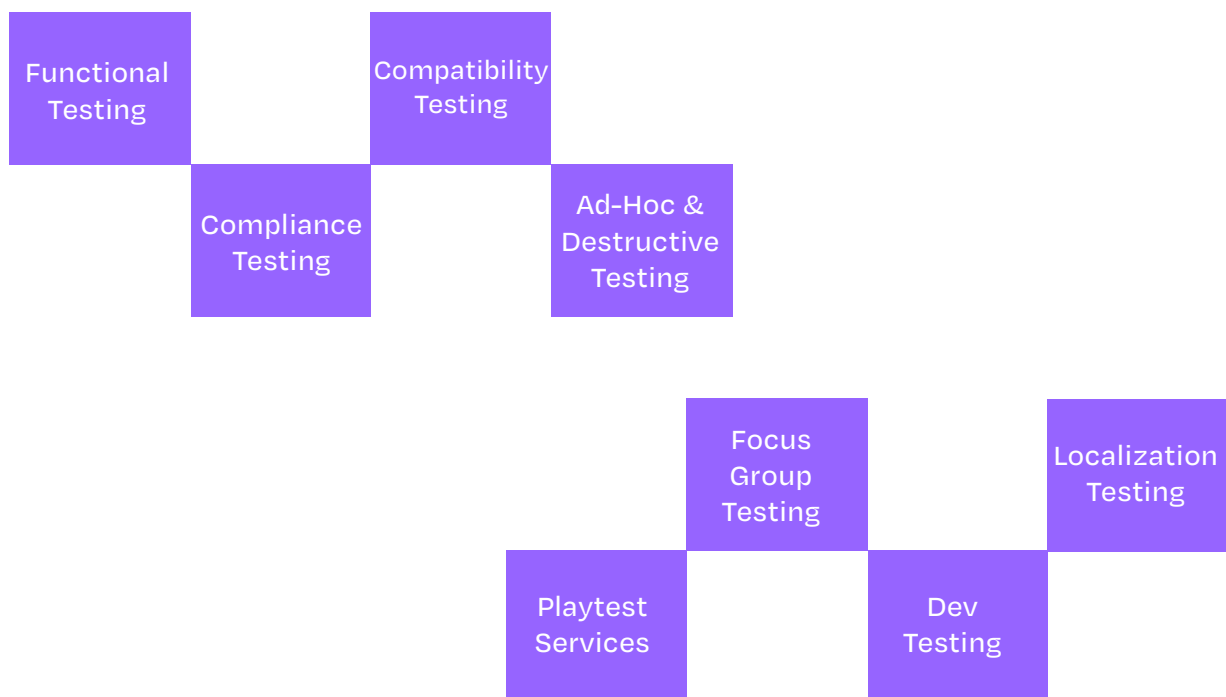


iXie Academy: We develop and nurture full-time, passionate gaming talent who undergo exhaustive training at iGTA [Indium Game Training Academy] – our training academy that helps graduates / young professionals / gamers to build their career with us. This further helps with quick turnaround times

required to setup a team for any engagement. Towards this we foster a collaborative and continuous learning culture where our industry veterans play a consistent role in nurturing and growing the team. Our workplaces are large, safe, and full of fun for our vibrant talent to have a blast while at work!

In-House QA

iXie Gaming provides game testing solutions across all the platforms like PC, mobile, tablets, consoles, AR / VR and cloud gaming. Our flexibility in terms of testing approach and staffing requirements has taught us how to address any customer's needs. Our vast experience and testing techniques ensure that no bugs go missing. Our end-to-end game testing services include:



[Inquire Now](#)



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