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The Novel Role of Artificial Intelligence Utilization by Concept Designers in Video Games

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Abstract:

Artificial intelligence will bring a revolution within the video games that are going to be developed in the upcoming years. It is expected that the appropriate utilization of the technologies will lead to creating more opportunities for developing an enhanced version of the system. As a result, it is being considered to be the most crucial component while designing a new system. With the speedy development in the fields of computer technology, artificial intelligence (AI) has been widely influencing performance. It has been observed that the design of computer technology in video games designing will provide opportunities for development. This paper will focus on analyzing the influence of artificial intelligence on the designing of characters in video games. The concept artists are considered as a key player in the video games industry. Concept artists and designers are capable of conveying the associated project mood, ideas, and style. The research will carry out detailed analysis over the topic for obtaining fruitful results.

Keywords:

**Concept designer,
Video games,
AI,
Character design**

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Introduction

Artificial intelligence has become one of the most efficient technologies in the present century. It has been observed that the technology is at its peak. Every designer looks forward towards the artificial intelligence for the purpose of meeting the new expectations of the gamers. The designers in video game has also impacted rapidly with the influence of artificial intelligence. It has been observed that artificial intelligence has also been widely utilised in field of art design that brings the designers and consumers with a much more diversified and intelligent experience. The objective of the research is to successfully evaluate the role played by AI in influencing the operations associated with video games.

The aim of the paper is to reflect on the designers while developing the video games. It is also crucial to evaluate the way artificial intelligence is going to influence over the game designing. With the help of analysis, it will become easy to understand role of AI.

Influence of AI on concept designer

Concept art is a form of art which is used in the commercial production process in video games. Artificial intelligence is a new technology which is developed with the motive to offer a stimulating environment for expanding human intelligence. The purpose of developing artificial intelligence is to explore the essence of intelligence. This helps in carrying out the task with much efficiency and also offers a better way of meeting the changing nature requirements (Skinner & Walmsley, 2019). The application of artificial intelligence in image generation is capable of providing a good bridge towards the introduction and development of AI into the design field. According to Ahmed

Elgammal, creative adversarial networks can reproduce the artwork that is responsible for imitating the artist's style. The use of artificial intelligence is to handle the concept designers in video games. The concept designers will not only enhance the experience towards the users but will also bring better efficiency. It is important for concept artists to work with the new technologies so that the new generation can experience the use of technologies. Researcher states that the use of development of computer technology will allow artificial intelligence to make the designers. The concept designers focus on exploring new designs and methods on the basis of artificial intelligence. The responsibility of the concept artist is to develop a new style and look of a game (Nawalagatti & PRAKASH, 2018). It is expected that with the utilization of artificial intelligence new technologies can help in producing efficient game look.

The development in design will not only reflect the culture of times but will also help in evaluating the trends associated with the factors of the culture (Brynjolfsson & McAfee, 2017). It has been observed that the cross integration between natural science and humanities will help in managing the relationship between art and science. It has been observed that the algorithm helps in analysing the experience in data. According to Elliot Lilly, experienced concept designers are the starting engine within the production of video games (Lankoski, 2004). Concept artists focus on managing the purpose of conveying the mood, art style, designs and ideas among different departments. Before the final assets are being evaluated, the need to address the technology is crucial.

Artificial intelligence needs proper assistance from

the concept of a designer so that it becomes easy to develop a new approach. It can be stated that artificial intelligence will be helpful for designing a website that will be capable of creating better opportunities. The focus is to manage the capabilities for designing video games efficiently (Han, 2021). It can be stated that the need to introduce rapid development into video games with the help of new technologies is very crucial. These will provide concept designers with the ability to develop better working versions. Artificial intelligence has brought better development in the improvement of video games (Kontkanen, 2021). This has created opportunities for the purpose of bringing better experience towards the gamers. As a result, the need to forward the concept design is very crucial. In these objectives, the main focus is to utilise development for achieving better performance. This also includes the analysis of the competitive landscape for the development of better technology. The increasing demand of the users has created a huge pressure over the concept with the utilization of new technologies. This will help in developing the video game much more effectively (Seidel et al., 2020). It is expected that artificial intelligence introduction advances the gaming process and also offers a better visual instruction. Once the concept designer implements the new technologies along with artificial intelligence it will become easy for them to develop a smarter game with a realistic feel.

According to Mahadevan, (2018), concept designers will be able to provide the gamers with smart technology. These will create opportunities for the developer to reinforce learnings and pattern recognition for the purpose of evolving self-learning through actions. With the help of a vast difference a better environment can be developed towards the key users. It has been observed that artificial intelligence has become more interesting with the successful utilisation of approach. One of the most efficient feature of using Ai is that it allows the players the opportunity to manage and engage new techniques (Yannakakis & Togelius, 2018). Apart from these, artificial intelligence introduced by the concept artist and designers will bring a realistic feel within the games. The revolution will start with the introduction of artificial intelligence. It has been observed that with the 3-D effects and other visualization techniques will develop a new gaming era. These will introduce new graphics for the purpose of

enhancing the players actually (Dignum, 2019). New technologies will allow designers to create an environment where players will not feel like playing a game. The attention will be on minor details. The visual appearance and graphics of the game will be designed in such a way that it will act as an original environment.

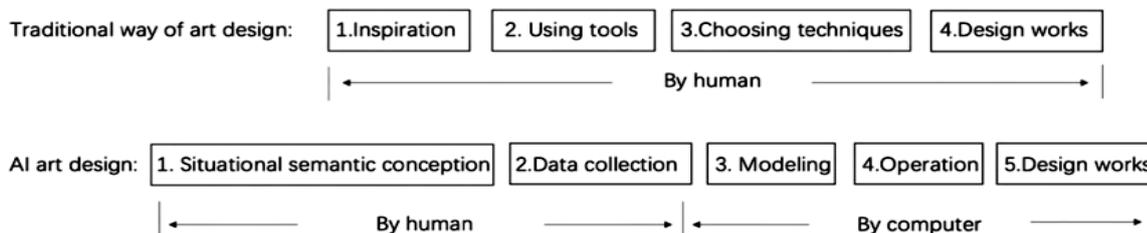
Artificial intelligence also has the potential to transform the skills for developers. Concept designers will have the ability to enhance the utilisation of new techniques and will also ensure that infrastructure has been taken to a next level. The high-tech environment is the need for the current generation (Schaul, 2013). As a result, it can be stated that the concept designer should be introducing appropriate technology so that these can contribute effectively towards the development process.

Beside these authors and researchers have also stated that they need to meet the artificial intelligence expectations is crucial as these will help in saving the budget and time while designing a new game. The entire procedure can be shot in with the introduction of appropriate technology (Saputra & Manongga, 2021). This helps in resolving the issues and reduces the cost needed for managing the labour. As a result, at present the focus is to develop a new technology that will help in designing games much more efficiently.

Methods and materials

Research design

The use of artificial intelligence and other technologies will allow the concept of designer to carry out the development successfully. In order to identify the impact over video games with the introduction of artificial intelligence it becomes very crucial to carry out a proper research analysis. The research design that has been selected for the purpose of understanding the requirements is a descriptive research design (Abutabenjeh & Jaradat, 2018). Definitely, parallel to the research designs, it becomes easy to have a detailed analysis regarding the research objective. This creates opportunities for better understanding the requirements. The focus of the approach is to have a detailed evaluation regarding the way new technology can help with the concept thinkers and designers.



Research philosophy

The research approach that is selected for the purpose of carrying out the study is deductive approach. The deductive approach helps in building theory with more detailed analysis of data. This helps in adding specification regarding the topic which helps in understanding the data in a much detailed manner. It has been observed that the concept of artificial intelligence is a very crucial requirement for gamers (Zangirolami-Raimundo, Echeimberg & Leone, 2018). As a result, the need to organise all the necessary aspects becomes equally important. With the help of the selected research approach it will become easy to obtain better performance.

Research approach

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Data collection procedure

Secondary source of data are being collected with the motive to understand the topic aspect. It is important to explore the new technologies and the way technologies will impact the game development. With the help of secondary analyses method it will become easy to obtain better information. The use of qualitative data analysis it will become easy to add proper description in exploring the contents in a detailed manner (Mohajan, 2018). Hence, it can be stated that sufficient amount of information will help in managing data much successfully.

Results

Artificial intelligence will create new level gaming opportunities. Players will be offered with the opportunity to achieve new heights. It is expected that the concept designers will be capable of obtaining high performance with the introduction of artificial intelligence and new technologies. The new technology will provide opportunities for helping the game developers (Skinner & Walmsley, 2019). It is expected that this will create a better an exciting game towards the gamers, makes it easy to play efficiently, offers opportunity to manage unpredictable data, offers various reactions analyses much efficiently and also helps in offering character analysis. The artificial intelligence needs to be adopted by the designer so that the video

games can be developed with high-level technology. After carrying out evaluation of different articles and research papers it can be stated that the role of a concept designer is to develop an active game for offering better opportunities. It has been observed that with the use of artificial intelligence will create a situation of offering better interaction (Brynjolfsson & McAfee, 2017). The conflicts can also be resolved with successful creation of new technology. Hence, the obtained result helps in obtaining information associated with the role of AI among concept designers.

The articles evaluated help in understanding the most efficient technology which will offer great experience. It is dominant to utilise the technology in such process that it can offer better assistance (Han, 2021). This will also create opportunities to manage new inventions. As a result the situation of the gaming process can be enhanced with the utilisation of strong strategy.

Discussion

The research explored the importance of video games. The research aims at stating the way video games are impacted for meeting the artificial intelligence expectation and the new technologies. In order to achieve a high-performance it is important to strongly use artificial intelligence will allow easy collaboration and will also enforce better efficiency. The gaming industry has been changing in the past few years. In order to meet the demand for new and improved technology it is very crucial for the concept to introduce new technologies efficiently. It is expected that they do not want a traditional game. As a result the focus should be on introducing a new technology that will boost the performance.

The need to focus on AI requirements for the concept designer is very essential. This will help in holding clear objectives and will also provide collaborative sessions. It can be stated that the AI is relevant as it helps in meeting the target with simpler technology. The need to have proper feasibility is crucial as this offers a better way of tracking the project status. Further, the analysis also states that the need to spend time on gathering relevant data regarding AI is equally important. This helps in boosting the analysis. It is expected that the overall performance can be boosted with the help of accurate data sets. Thus, the gathering of relevant data becomes essential. Artificial intelligence will allow the designers to cope up with the situation for the purpose of developing enhanced games. The use of an existing format can help in boosting the performance of the way games are being designed. At present, the focus is entirely on utilizing suitable approaches that will be capable of contributing towards the concept designers in video games.

The impact of artificial intelligence over the development of video games is thus considered to

be high. It is important to ensure that proper alignment is introduced for meeting the games requirement. The need to know the limits before developing the design is essential as this offers better understanding. The developer must have a detailed understanding of artificial intelligence. The focus should be on establishing a detailed set of data which will help in offering better support towards the development of video games.

The concept designer will be impacted with the successful introduction of artificial intelligence. With the help of appropriate designing methods, it is expected that high efficiency can be achieved. Therefore, the detailed research analysis has sufficiently provided data regarding the role of AI in video games developed.

Conclusion

Currently, deep integration of AI and art design has not evolved much. It is expected that in order to improve the performance of video games, it is crucial for the concept design to introduce AI in the development of video games. The research paper has successfully evaluated the necessary concept for art designing. It can be stated that the use of proper technology will create enhancement in user experience. The research has helped in exploring the different impacts those are created with the help of AI. It is expected that in future AI and other emerging technologies will become one of the most important components for developing video games. The research has acknowledged all necessary factors which must be utilized while designing the video games. Hence, it can be stated that concept designers must be efficient enough to integrate new technologies for developing real time experience for users through video games.

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