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## **HOW GAME INDUSTRY WILL CHANGE FILMMAKING FOREVER**

Every few decade new technologies come in cinema industry and renew it. The appearance of colour and sound, computer graphics, a green screen, motion capture technology, 3D all these innovations completely changed the approach to shooting large studio projects.

Now we have a new technology that completely changes the approach to the filmmaking. This is a real-time game engine, which has name Unreal Engine 4.

What is Unreal Engine 4? Unreal Engine was developed by Epic Games in 1998 to create first-person shooters. In the next versions, the engine was simplified and became more universal, and therefore now it is possible to create projects of any genres in it for all popular platforms.

An important feature of this software is a tool called Sequence which solves problems in real time. It can move fragments of the scene, select suitable lenses, adjust lighting and set focus. Thanks to Sequencer, the most popular way to use UE4 on set is creation a realistic background. The technology can be used as a green screen - in real time, so now it takes not hours, but just a couple of minutes and a few clicks.

Another useful movie tool is Stagecraft technology, which creates and changes a realistic background right on the set.

It will be new age without chromakey. Because the generated backgrounds are broadcast on huge LED screens and creates the illusion that the actors are inside this space. It means that directors don't need to put actors in front of green screen, then adjust lighting, then delete and change background. Thanks to Unreal Engine 4 we

already have realistic background and lighting. It can save a lot of time and a lot of money.

Except realistic background Unreal Engine 4 can renders visual effects in real-time. For example it can change one car to another or generate explosions, crushes and other visual effects. It is truly real time magic.

Thanks to it, actors are not surrounded by annoying green screen. It is easier for them to imagine what must happen and how they need to move.

In addition unreal Engine 4 opens wide range of opportunities for directors. Except saving a lot of time on post-production it helps to directors in pre-production when they plan future scenes. They can use virtual reality to move into their future film and see where different scenes must happen.

So far, the use of Unreal Engine in the filmmaking is still a rarity. Disney once again became a pioneer here. They used this technology in new "Star wars" episodes, in serial "Mandalorian", in remake of "Lion king" and some other projects.

This technology makes film production easier and cheaper. That is why, I think more and more companies will use it in their future projects. In addition, it opens a lot of opportunities for young directors and creative people to make good films.

#### REFERENCES

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