REAL-TIME **CGI**

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ARE YOU AN SUPERHERO FICTION OR ANIMATION FAN

HAVE YOU EVER WONDERED HOW THE MOVIE CREATOR
ARE PUTTING LIFE IN THEIR IMAGINATION

CGI

CREATING GRAPHICS

First of all the creator make the movies graphics which are based on the imagination.

DETAILS AND RIGHT FITTING

After the completing of the graphics those graphics are given perfect details to make it feel real.

Then those graphics are added to the video and these have to be fitted properly in the every scene or we can say that each movement of the graphics has to be same as the movement in the video.

VFX WORK

After these all VFX is done to manipulated outside the context of a live-action shot in filmmaking and video production.

GREEN SCREEN AND CGI

Till now all the work of **CGI** is done on the green screen and without the green screen **CGI** is not possible.

CGI refers to VFX works including 3d models put into action.

ABOUT REAL TIME CGI

- Real - Time CGI combines of artistry and technical knowledge to bring CGI world to life.

- It allows for interactivity, which means users can interact with the 3D environment in real-time.

- It refers to the use of computer-generated images or animations that are generated in real-time, in response to user input or other dynamic factors.

- It works on frame generation while traditional CGI uses ray tracing. So Real-time CGI is fast and efficient, allowing for instant feedback and changes to be made on the fly. It is also reduce operation time.

But all these work covers 90% of the total budget of the movie

COST OF CGI

The cost of **CGI** per minute is about 800$.

THEN HOW IT CAN BE REDUCED

So , to bring down the cost of using **CGI** is to replace all those work by **REAL TIME CGI.**

REAL-TIME CGI SPEICIALITY

REAL- TIME CGI doesn't need any prior graphics or models.

ACCURACY

It provide immediate results with higher accuracy communication all the work become a lot easier.

PROGRAM MODEL

IT OPERATES ON REAL-TIME AND 3D MODELS WILL ALL OVER FROM ITS DATABASE

Features of Real Time CGI

It operates on real-time and database is used to create 3D effects rather than making then all over again from scratch.

Whereas Real-time graphics systems renders each image in less than 1/30th of a second.

It doesn't need creating complex visual effects as in VFX.

Real-time CGI is increasingly being used in film and television productions to create realistic and high-quality special effects.

Movies production budget is reduce up to $20 million

HERE ARE IT'S SOME EXAMPLES

MARKET COMPARISON

SIZE OF THE ANIMATION MARKET WORLDWIDE FROM 2020 TO 2030

PRECEDENCE RESEARCH

ANIMATION MARKET SIZE, 2020 TO 2030 (USD BILLION)

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
$ 354.7	$ 372.44	$ 391.19	$ 411.04	$ 432.05	$ 454.29	$ 477.85	$ 502.82	$ 529.28	$ 557.33	$ 587.1

Pitch deck

ADVANCEMENT OF REAL TIME CGI

- The advancement of real-time CGI technology is playing a significant role in the development of the metaverse, a virtual world where people can interact in real-time. Real-time CGI is essential for creating the immersive and interactive environments that will make up the metaverse.

- Real-Time CGI for the metaverse is the use of volumetric capture and rendering, which enables the creation of realistic 3D models of people and objects. This technology uses a combination of cameras and sensors to capture real-world objects and people and create a digital representation that can be rendered in real-time.

- CGI development is the use of spatial audio, which creates a more immersive and realistic audio experience by simulating sound in 3D space. This is important for creating a sense of presence in virtual environments and enhancing the overall immersion of the user.

CONCLUSION

- Real-time CGI technology has advanced significantly in recent years, enabling the creation of more sophisticated and realistic visual effects in film, television, video games, and virtual environments. With the development of game engines, machine learning algorithms, and AI, real-time CGI has become more powerful and versatile, allowing for the creation of interactive and immersive experiences that were once only possible in the realm of science fiction.

- Real-time CGI is playing a critical role in the development of the metaverse, a virtual world where people can interact in real-time. Through the use of volumetric capture, spatial audio, and dynamic and interactive environments, real-time CGI is creating a more immersive and engaging experience for users.

THANK YOU