**SCREEN
DIRECTORS
GUILD
OF IRELAND**

Considerations for Directors:

Metaverse, AI & Blockchain

A Handbook for Screen Directors

Contents

Introduction: The Hype Cycle

In the fast-paced world of technology, it can be difficult to keep up with the latest trends and advancements. The Gartner Hype Cycle is a tool that can help us understand where different technologies stand in terms of their maturity and adoption. Developed by the research and advisory firm Gartner, the Hype Cycle is a graphical representation of the life cycle stages that technologies go through from conception to mainstream adoption.

The Hype Cycle is divided into five stages: the Innovation Trigger, the Peak of Inflated Expectations, the Trough of Disillusionment, the Slope of Enlightenment, and the Plateau of Productivity. Technologies are plotted on the cycle based on their potential impact and the level of hype surrounding them. This helps us understand which technologies are likely to have a significant impact on our lives in the near future and which ones are still in the early stages of development.

While it is good to be aware of new technologies, one must be aware that any new technology could be plotted on a graph as this one, and while may be termed "overhyped" - new technology tends to persist.

As storytellers, retaining an informed awareness of not just the capabilities of innovative technology could be important, but also the knowledge that the context of the technology will inevitably shift.Therefore, this document will attempt to address some emerging technologies that may not be commonly discussed in regards to filmmaking such as producing 360 video for use in VR headsets or AI technologies in cameras or in post-production.

Hype Cycle for Emerging Tech, 2022
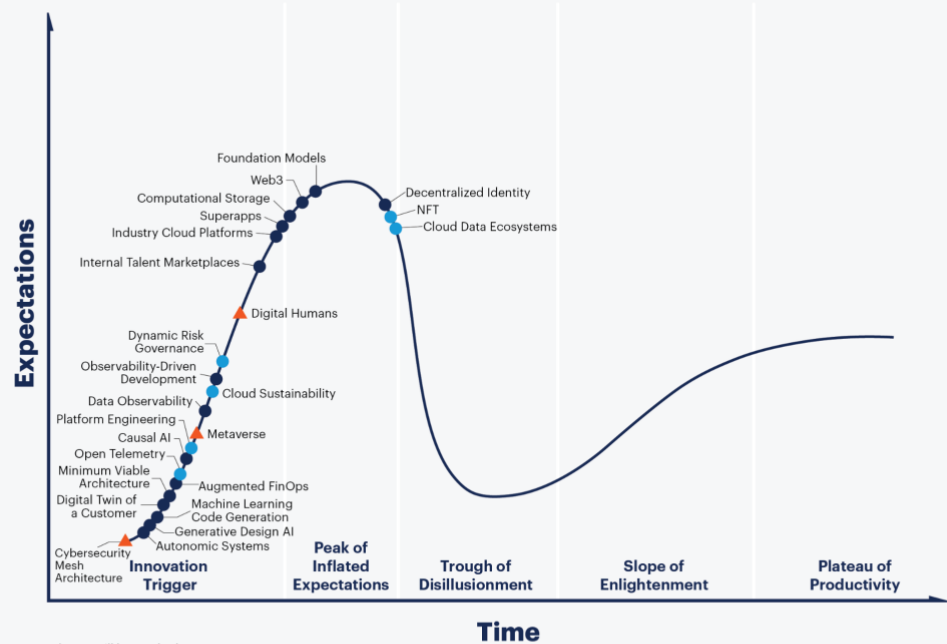
Metaverse

The metaverse, a term coined by science fiction author Neal Stephenson, refers to a collective virtual shared space created by the convergence of physical and virtual reality. It is a vast and complex world that includes virtual reality (VR), augmented reality (AR), gaming, and other forms of immersive experiences. As the metaverse evolves and expands, it presents unique opportunities for film and TV directors to create new forms of narrative storytelling and engage audiences in exciting new ways.

1. Adding Value to Game Properties

The metaverse includes game design, and games vary widely in their scope for narrative storytelling. However, this does not mean that directors have no opportunities to add value to game properties. In fact, there are plenty of ways in which directors can leverage their skills to enhance the storytelling potential of games.

For example, directors can work with game developers to create cinematic cutscenes or develop character arcs that add depth and complexity to the game's story. They can also help design interactive elements that engage players and keep them invested in the game's world. By collaborating with game developers, directors can create immersive experiences that blur the line between film, TV, and gaming.

2. Digitized Assets and Ownership

Directors tend to create assets as they design their productions, such as props, costumes, and sets. In the metaverse, these digitized assets would be valuable and highly sought after. As such, negotiating who owns these assets is crucial, especially as the metaverse expands and becomes more complex.

By ensuring that they own the digital rights to their assets, directors can protect their intellectual property and ensure that they receive proper compensation for their work. Furthermore, by sharing their digitized assets with other creators, directors can build a collaborative network that enhances the creative potential of the metaverse.

3. Utilising 3D Scanning Technology

One of the challenges of creating content for the metaverse is the need for high-quality 3D assets. Fortunately, 3D scanning technology has made it easier to capture temporary production assets such as sets and costumes. This technology allows directors to capture the physical details of real-world objects and turn them into digital assets that can be used in the metaverse.
By using 3D scanning technology, directors can create more detailed and accurate representations of physical objects in the metaverse, which in turn enhances the immersive experience for audiences.

A 3D scan of a set from Banshees of Inisherin

4. Engaging VR Audiences

The usual engagement filmmakers have with VR is that they may want to create a VR film either in 360 video or realtime 3D - or a combination of both. Or by creating VR experiences that complement their films or TV shows, directors can provide audiences with immersive experiences that deepen their connection to the story. For example, a director could create a VR experience that takes audiences behind the scenes of their film or TV show, giving them a glimpse into the production process. This kind of experience would provide audiences with a deeper understanding of the creative decisions that went into making the film or TV show, and enhance their appreciation of the final product.

However, VR has emerged as an extremely popular way to screen content in virtual screening rooms and apps such as Bigscreen are some of the most popular on the platform. Directors could use these apps to easily organise high fidelity "cinema" like screenings of their work, with a potentially international audience available on tap. This is potentially the easiest way for a director to engage with the medium.

5. Using VR as a Creative Tool

Finally, VR can also be a powerful creative tool for directors. VR allows directors to sketch out sets and shots in a spatially intuitive way, giving them a deeper understanding of how their vision will look in 3D space. This can be especially useful during pre-production, as it allows directors to experiment with different visual styles and make changes to their design in real-time.

By using VR as a creative tool, directors can create more immersive and visually stunning experiences for their audiences. Furthermore, by incorporating VR into their creative process, directors can stay ahead of the curve and take advantage of the latest technological advancements in the metaverse.

Meta Quest 2
Meta Quest 2: Immersive All-In-One VR Headset | Meta Store | Meta Store

The Best Art & Design Apps
The best art and design apps on Oculus Quest 2 - Gravity Sketch

3D Scanning Using Smartphones
How to 3D scan with a phone: Here are our best tips (sculpteo.com)

Bigscreen App
Bigscreen - Software (bigscreenvr.com)

AI

Artificial intelligence (AI) is already being used in various aspects of film and TV production, from pre-production planning to post-production editing. However, to maximise its potential, it is essential to be aware of the other capabilities of AI.

Generative AI, such as OpenAI's ChatGPT, has the ability to generate new content based on a given prompt or input. This technology can be used to generate dialogue, create storylines, and even develop characters. By working with generative AI, directors can save time and energy in the creative process, as well as explore new ideas and possibilities that they may not have considered before.

AI image generation is another area where directors can benefit from AI technology. With AI image generation, directors can generate photorealistic images of sets, characters, and props before even filming begins. This allows directors to make informed decisions about the visual design of their productions, without the need for costly physical prototypes or elaborate set designs. Additionally, AI image generation can be used to create images of scenes or locations that are difficult or impossible to film in real life, such as underwater environments or otherworldly landscapes. By using AI image generation, directors can streamline the pre-production process, save time and money, and ensure that their productions have the visual impact and coherence that they desire.

ChatGPT
https://chat.openai.com

Stable Diffusion
Stable Diffusion Online (stablediffusionweb.com)

The Value of Prompt Design

Prompt design is the key to using AI in a way that gives the most value. A well-designed prompt can help guide the generative AI model towards generating content that is relevant to the director's vision. By designing prompts that are specific and nuanced, directors can ensure that the AI-generated content aligns with their creative goals.

For example, if a director wants to use ChatGPT AI to generate dialogue for a specific character, they could design a prompt that includes details about the character's personality, background, and motivations. This would help guide the AI model towards generating dialogue that is in line with the character's traits and motivations, rather than producing generic or irrelevant content. The same principle applies to image generation.

Prompt design platforms have begun to appear, and some are selling particularly effective ones. A good way to understand is to check out the AI platforms and try some existing prompts and edit them to see how the results differ.

Prompt Design/Prompt Engineering
[How to perfect your prompt writing for ChatGPT, Midjourney and other AI generators (theconversation.com)](theconversation.com)

Blockchain

Blockchain technology is beginning to have an impact on the film and TV industry, with its ability to create secure, transparent, and decentralized systems for managing assets and transactions. One of the most significant areas of interest in the film and TV industry is the use of non-fungible tokens (NFTs) to manage and monetize digital assets.

Last year, Ethereum went green. The second-most popular crypto platform transitioned to proof of stake, an energy-efficient framework for adding new blocks of transactions, NFTs, and other information to the blockchain.

When Ethereum completed the upgrade, known as "the Merge," in September, it reduced its direct energy consumption by 99%. This may not have been widely reported, but generally puts to bed the idea that NFTs are terrible for the environment - but the question remains whether they are something artists should use.

Advantages of NFTs

NFTs are unique digital assets that are stored on a blockchain network, providing an immutable record of ownership and provenance. In the film and TV industry, NFTs can be used to manage and monetize assets such as scripts, music, and digital artwork. By using NFTs, directors can ensure that their digital assets are secure, traceable, and cannot be duplicated or copied without permission.

Moreover, NFTs can be used to create new revenue streams for directors and content creators. For example, NFTs can be sold as collectibles or used to grant access to exclusive content or experiences. This can help directors monetize their creations in new and innovative ways.

NFTs as a form of Collecting

Owning NFTs can be compared to collecting stamps or other rare items. Each NFT is unique, and the act of collecting them can provide a sense of satisfaction and ownership. Furthermore, owning NFTs can also be a way to support content creators and show appreciation for their work.

However, it is important to note that the current ecosystem for NFTs in the film and TV industry is still relatively weak. While there are some early adopters and pioneers, there is still much to be done to build a robust and sustainable ecosystem for NFTs in this industry.

The Future of NFTs in Film and TV Production

Despite the current weaknesses in the NFT ecosystem, there is reason to believe that NFTs will play an increasingly important role in the film and TV industry in the future. As the technology matures, more directors and content creators may start to see the benefits of using NFTs to manage and monetize their digital assets.

Moreover, the use of blockchain technology can help to create new models for revenue sharing and content distribution. For example, blockchain-based platforms can enable creators to retain ownership of their content while still receiving fair compensation for its use. This could help to address some of the long-standing issues in the film and TV industry, such as unfair compensation and lack of creative control.

Line Goes Up: The Problem with NFTs

https://youtu.be/YQ_xWvX1n9g

Takeaways

- Create assets for use in the Metaverse.
- Play with virtual worlds to understand them.
- Run small low friction experiments - promotions, screenings etc.
- If you see a demand for NFTs of your products, it is easy to meet that demand, however the ecosystem is currently weak.
- AI is your very talented, generous and young new friend and colleague.