# POLICY REVIEW

# Film and TV industry embracing VR

## Guideline urges application of virtual technology in productions

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In an answer to China's call for embracing the digital age, officials in the film and television industry have launched a series of guidelines to promote the application of virtual reality and augmented reality in the production of movies and TV shows in recent months.

Last November, the Ministry of Industry and Information Technology, the Ministry of Culture and Tourism, the National Radio and Television Administration, the Ministry of Education and the General Administration of Sport jointly released a five-year plan to boost the development of VR in various industries. According to the plan, the overall scale of China's VR industry — including hardware, software and applications — should exceed 350 billion yuan ($47.8 billion) by 2026.

The National Radio and Television Administration released a detailed guideline in September specifying 10 types of applications it encourages, including virtual production and digital avatars in filmmaking and TV shows to offer audiences more immersive experiences.

Cao Shumin, director of the administration, said that the annual output of China's TV drama series ranks first in the world, with about 56,000 production companies.

"Technologies such as virtual reality, AI and big data have been fully used in all processes of programs and dramas, including scriptwriting, shooting, producing and broadcasting. We're now accelerating the digital update of our whole industry to offer better experiences and services for audiences," Cao said at a news conference in Beijing at the end of September.

According to Li Fude, a veteran producer who has worked in the industry for about 20 years, VR has been warmly embraced by producers over the past three years due to COVID-19 prevention and control measures, which frequently confined people to their homes.

Li's company, Century UU, offers virtual production services for filmmakers. In 2017, the Tianjin-based company established a powerful virtual production space that allows actors to see various environments all around them while filming by viewing a series of massive LED screens that can display pre-prepared backdrops.

Over the past three years, 19 big-budget TV series have used Century UU's virtual production services. Li said that with the help of technology, it's possible for actors to perform in as many as 84 virtual environments in a four-day period.

"It's not only convenient and efficient, but also affordable," he said. "The technology can help a production company save as much as 30 percent on its filming costs."

He made a TV series *Call Me Wuya* last year with a Thailand production team. More than half the scenes shot relied on virtual production. Thanks to the technology, the team was able to shoot at a lower cost and with fewer crew members.

"With more people joining the virtual production industry, more production companies will be able to save on costs," Li added.

In fact, major production companies in China have already set up their own virtual production bases. Tencent, iQiyi and Youku, three leading streaming platforms in China, have all established such bases, with Tencent's base in Shenzhen, Guangdong province, iQiyi's in Jinhua, Zhejiang province, and Youku's in Beijing and several other cities.

For *Reset*, a hit Chinese TV suspense series produced by Tencent Pictures about people trapped in a time loop on a bus that's about to explode, nearly half the scenes were shot with the help of virtual reality. When a video showing how the series was shot aired on Tencent video, viewers expressed their surprise because they thought the scenes had been filmed in a real city in China.

Guo Fan, a filmmaker who earned his fame through his blockbuster franchise *Wandering Earth*, is a trailblazer in applying high tech in his films. In *Wandering Earth II*, he used AI and virtual reality to create a digital avatar to serve as the older version of the leading character. He also applied AI to mimic the voice of one of the actors in the film after the actor injured his vocal cords.

"It's an inevitable trend that our industry must face and accept. Virtual production will reform all the processes needed when we produce a film or drama," Guo said.

He and his team spent three months in the United States visiting video game companies, film studios and tech giants such as Google and Microsoft to learn how Hollywood is dealing with the digital age.

"After three months there, I can say that China's application of virtual reality and AI in the film and drama industry is as good as their counterparts in the US," said Guo, adding that Chinese officials acted very quickly to embrace technology reform.

Chen Hongwei, a veteran of the showbiz industry who has been closely observing emerging trends, agreed with Guo. Chen said that three years ago, virtual production and digital actors were concepts that many in the industry were not very familiar with. But now that the National Radio and Television Administration has published the guideline, they can learn more about related technology.

Last year, Chen co-produced a TV series for which he used a digital actress generated by a computer as "an experiment to try the new tech".

Chen said based on his talks with many showbiz insiders, most people are open to these avant-garde technologies. He said many filmmaking companies are also creating their own digital actors, which are seen as cheap and convenient, to further push the development of the technology in film and TV industry.

"I'm very excited about the digital age and can't wait to see what the future brings," he said. "The whole world is at the starting line, and we Chinese producers and filmmakers are taking action."


SHI YU / CHINA DAILY

## Policy Digest

### Progress being made in climate change response

China has made progress in tackling climate change amid sustained efforts to scale up its climate change response, according to the Ministry of Ecological Environment.

Last year, China's carbon emissions' intensity decreased more than 51 percent from its 2005 level. The share of non-fossil energy in the country's total energy consumption reached 17.5 percent, according to the 2023 report on China's policies and actions to address climate change released by the ministry on Friday.

By the end of June, the installed capacity of renewable energy had reached about 1.32 billion kilowatts, accounting for approximately 48.8 percent of the country's total installed capacity, the report showed. It was the first time that the installed capacity of renewable energy surpassed that of coal-fired power.

Ministry official Xia Yingxian said that China has attached equal importance to adaptation and mitigation in addressing climate change, and has made overall plans and arrangements for climate change adaptation through 2035.

### Fatal accident prompts elevator safety review

Chinese authorities launched an operation on Thursday to screen for hidden safety risks that may lead to elevator accidents, after an elevator plunge in Yunnan province killed three and injured 17 on Oct 18.

The operation, which will last until December, aims to avoid the occurrence of similar accidents in the future through a nationwide investigation into potential risks of the country's in-service elevators, according to a notice issued by the State Administration for Market Regulation.

The country's top market regulator has called on local authorities to carry out the investigation in a stringent way without blind spots, the notice said.

Cases that violate the law must be made known to the public in a timely manner so that such breaches will serve as a warning for others, it said.

### More people indicted for money laundering

Prosecutors have maintained their tough stance on money laundering, with 1,718 individuals indicted for such crimes from January to September, up 14.8 percent year-on-year, the Supreme People's Procuratorate said on Thursday.

During the period, 62,336 individuals were involved in money laundering crimes, up 92.7 percent year-on-year, data from the SPP shows.

The SPP attributed the increase to the high incidence of crimes such as telecom fraud and cross-border gambling.

Through the use of online payments, blockchain and other information technologies, money launderers have been taking advantage of new methods such as virtual-currency transactions, making it harder to crack down on such crimes, according to the SPP.

The SPP said it will enhance collaboration with other organizations and pledged greater efforts to prosecute money laundering cases.

# Digital actors to feature prominently in future, producer says

**By DENG ZHANGYU**

Viewers of the web series *My Chinese Chic Boutique* could be forgiven for thinking that the tall, slender and beautiful "actress" Guo Guo is a real person. On a Chinese social media post about the show, only a few commented that she looks a little different from "normal" actors.

Guo is a virtual, computer-generated actress and an experiment of producer Chen Hongwei, who has worked in the showbiz industry for 20 years.

Once he obtained the rights to use Guo from another company, he looked for a series to produce so that he could use the digital actor alongside real actors.

He joked that Guo is like an actress who "donated money to a film in order to win her a role".

The 24-episode online drama tells the story of a wealthy girl who travels into a video game world and runs a business there with her boyfriend. Guo has a key role in the series, helping the lead character adjust to the game world.

Last year, Chen's friend introduced him to several digital avatars his company created. The producer then got the idea that they should turn those avatars into digital actors.

"We planned to give Guo Guo the lead role and let another digital actor play the role of her boyfriend. But other crew members thought it was risky," said Chen, co-producer of the series, which only took the team three months to complete.

He said it only cost 3 million yuan ($410,000) to produce the series, and the scenes involving Guo took less than a month to finish.

"With the development of technologies such as virtual reality and AI, everyone can make their own films in the future. There will be more and more digital actors," he said.

A tech savvy person who describes himself as a passionate "crab eater in the film industry" — meaning he likes to be the first to try new things — Chen said many established filmmakers are not very open to using such high-level technologies. However, the younger generation, especially those born after 2000, are active users of the technologies because they grew up with the internet. In other words, they are the original residents of the virtual world, he said.

Chen has joined an online group where young producers communicate with each other about how to make films in the virtual world. There were about 30 members in the group when it was set up last year. Now, there are more than 100.

A female filmmaker in the group using the pseudonym Xiao Tiepian got Chen's attention with a 30-minute drama she made using virtual tools. She was still a college student when she produced the film.

Impressed, Chen decided to fund more of her work.

"They're so talented and good at using these technologies," he said, talking about Xiao and other young filmmakers in the group. "I was totally conquered by their innovation and productions."

Embracing the era of virtual technology, the National Radio and Television Administration launched a guideline to encourage the use of virtual reality in the film and TV industry last month in response to a five-year plan initiated by five ministries last year. The plan aims to boost the development of VR in various industries.

As a tech-driven industry, the film and TV industry is a pioneer in the application of these technologies. Virtual production and digital actors have been increasingly used in films and TV series in recent years.

Chen said that people in the industry are still experimenting with these new technologies.

"It's not only about the actors. Whole films will be shot in virtual worlds," said Chen, who is pursuing a doctorate at the Beijing Film Academy.

"In the future, people can be filmmakers in the virtual world without needing much money. What we are doing now is setting up the virtual world for them," he added.

Chen also runs a tech company that focuses on developing digital assets, creating virtual versions of people and objects in the real world.

"The country is rapidly embracing new technology, and the key drivers are definitely young filmmakers," he said.

He added that young animation filmmakers in China will be the group that makes it big because they possess the knowledge of both film and the new technologies.