Research on the application of video technology under the digital media technology

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Abstract. Digital media technology is one of the most important information technology, which plays an important role in video technology. At present, video technology is the focus of the development of new generation electronic technology. Therefore, we must optimize the video technology, which will improve the visual effect of video. However, there are many problems in traditional video technology, such as poor visual effect and long running time, which need to optimize the video technology in the digital media technology environment. By analyzing the overall structure of the video technology structure, we can analyze the digital media processor, which will optimize the video technology. First of all, this paper analyzes the characteristics of digital media technology. Then, this paper analyzes the optimization technology of video technology. At last, this paper introduces the application of video technology.

Keywords: video technology, the digital media technology, optimization

1. Introduction
With the advent of digital media era, video processing technology has become an important research topic. At present, intelligent digital media technology has been widely used in video, which has changed the working and living habits of human society. In recent years, intelligent video technology has become a key topic in the field of image processing, which has been widely used in many fields, including public security, military, traffic monitoring and so on [1]. At present, the traditional video technology is to deal with a single video format, which will not meet the development needs. Through digital media technology, we can develop and support a variety of general video formats, which will make the general processing platform more practical.

2. Characteristics of digital media technology
Digital media technology has always maintained an important advantage in the development process, which has gradually formed the unique characteristics of digital media technology, as shown in Figure 1.
2.1. Digital features
Traditional digital media adopt more analog measures, which is mainly reflected in the way of communication. At present, modern digital media technology has become an important computer media, which is characterized by digitization [2]. With the help of computer media, mathematical and chemical media can realize the digitalization of information dissemination, which will better guarantee the storage and management of digital media information.

2.2. Interactive features
Digital media technology is a kind of comprehensive technology, including computer technology, video technology, information transmission technology, network technology and so on. The integration of various technologies reflects the interactivity of digital media technology, which well realizes human-computer interaction [3]. Compared with the traditional analog field, digital media technology embodies the interactive characteristics of information.

2.3. Interesting features
Digital media has broken away from the limitations of traditional communication, which has a wide range of applications, such as digital electronics, mobile streaming media, the Internet and so on. Digital media provides a variety of entertainment space, which better reflects the interest of digital media [4]. Through reasonable display, we can really entertain the public, which will form a diversified media development.

2.4. Integration features
The application scope of traditional media will be greatly limited. However, digital media technology integrates a variety of information, such as text, image, sound, animation, etc., which embodies the characteristics of high integration [5]. Through digital processing technology, we can form integrated application, which also provides a good application space for digital media technology.

3. Video technology analysis based on digital media technology

3.1. Video technology structure
By combining the high efficiency of fixed function period and the flexibility of programmable period, we realize the video presentation system of digital media technology. By using the digital media processor, we can optimize the video technology. Digital media processors are diverse, which meet the diverse needs of video technology. The video technology structure is shown in Figure 2.
3.2. Digital media server

Through the digital media server, we can find the local resources that video can use, which will supply video materials to other devices. A digital media server needs to be responsible for many tasks, including video content directory, video connection management, video transmission services, etc. In physical mode, digital media servers are often used as video recorders, DVDs, and video tuners. The structure of the digital media server is shown in Figure 3.

4. Application field of Internet video technology

4.1. Podcasting and video sharing application

In the 21st century, video sharing websites mainly focus on short films, including funny short films, original films, foreign short films, etc. However, if the video technology of later websites can’t adapt to the development of the times, it will affect the normal application of video websites. Some video websites do not require high-quality image quality, which does not need a special client. Through the ordinary browser, users can watch videos through P2P. At present, most of the Internet video website servers use B / S mode and flash file format, which differentiates the websites such as tudou.com, youku.com and aiqi.com. Some video services adopt a variety of technologies, such as intelligent video acquisition, independent video editing, video rebroadcasting and so on. With the free video sharing of the website, the website has a large number of market share, which has a huge impact on online video on demand.
4.2. Online video on demand
Domestic VOD online mainly rose around 2000. With the popularization of broadband technology, it has gradually become an online video on demand video content service provider. Through large and small monthly business, we can get video revenue share, such as Youdu, Xinhua broadband, Phoenix Broadband, etc. Through telecom operators, they can set up servers, which will provide VOD video on demand services. In this mode, the video VOD on demand website adopts B / S mode, which breaks through the bottleneck of server I / O. Through online video on demand, users will get more local video experience services.

4.3. P2P download and streaming
With the rapid development of broadband technology, BT and donkeys have no account restrictions, which pushes P2P applications to a new height. Through web, P2P files can be shared and downloaded. P2P video streaming software mainly adopts the algorithm principle of BT download, which mainly plays through DHT algorithm. By connecting the corresponding intelligent nodes, the video operation effect will be better and better. At present, the main reason that restricts the development of P2P streaming media is the broadband access mode, which is mainly due to the asymmetry of ADSL and cm. In addition, operators use two technologies to solve the problem of insufficient bandwidth. The first is firewall penetration technology. The second is local buffer memory.

5. Conclusions
Digital media technology has laid a good technical condition for video technology. In modern video technology, digital media technology improves the effect of video processing and technology application, which provides a good technical environment. Through digital media technology, video technology not only reduces the cost, but also improves the efficiency of processing, which lays the foundation for the update and upgrading of video technology. Based on digital media technology, video technology has been improved and optimized, which is conducive to the good development advantages of video industry. Through the optimization of video technology, we can promote the development of digital media technology, which in turn promotes the update and change of video technology.

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