Research on the Development and Application of Digital Media Application Technology in the Internet Environment

Kai XIE

Jiangxi Vocational Technical College of Industry&Trade, Nanchang, 330038 Jiangxi, China

xkshumashijue@163.com

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Abstract: Owing to the constant progress and improvement of the Internet environment, digital media application technology has accelerated the industrial integration of various industries, and has been widely applied in the production and operation activities of various industries, which has become a crucial boost to enhance productivity. This paper analyzes the progress and application scope of digital media application technology under the Internet environment, and studies the progress prospects of this technology, aiming to enhance the value and role of technology and push social progress.

1. Introduction

The progress of Internet technology has, to a certain degree, transformed the way people live, study, work, and play, providing people with many conveniences. After the reform and opening up, China has vigorously carried out the research and development of Internet basic services. At this stage, in the economically developed regions of China, the network has basically achieved full coverage[1]. In this environment, the new industrial structure integrating digital media, network technology and industry is growing. The progress of digital industry benefits from digital media application technology. It can be seen that under the Internet environment, digital media application technology will be more widely and long-term applied.

2. Analysis of the Progress of Digital Media Application Technology in the Internet Environment

First, digital media acquisition and production equipment has been diversified under the Internet environment. Its voice recognition technology, image and video acquisition and production technology, audio compression and decoding technology, image high-definition processing technology and other technologies have been continuously innovated, especially the integration of virtual technology and digital media technology, and its application fields have been expanding[2]. Second, emerging digital media communication technologies such as network media and wireless media have been constantly enhanced, which has increased the efficiency of information transmission and strengthened the interaction between information dissemination, among which online TV, video conference, live broadcast, etc. have developed rapidly. Third, content retrieval, integrated distribution of digital media, storage and other digital media content management technologies have been constantly enhanced and optimized, especially the integration of cloud storage, artificial intelligence technology and digital media application technology, which effectively pushed the personalized progress of digital media. Fourth, interactive services, customer information management, and various kinds of We Media are constantly forming and developing. Fifth, the consumption mode of digital media terminal devices has diversified. In addition to TV, computers and other terminal devices, mobile phones, smart watches and other devices have also been widely applied. The progress of virtual reality technology has promoted the diversification of digital media terminals. Owing to the progress of China's Internet environment and the innovation

of information technology, intelligence, networking and digitalization will be integrated into all aspects of people's lives, and further push the innovative application of digital media technology.

3. Application Scope of Digital Media Application Technology in Internet Environment

3.1 Education

As information technology is widely applied in production and business activities in all walks of life, and has achieved remarkable results, the field of education has also begun to shift towards informatization[3]. Using digital media application technology to enhance teaching quality and efficiency has become the focus of current education. At the initial stage of the formation of digital media application technology, education has made use of multimedia teaching technology. Teachers can use projectors to play teaching courseware and videos online with computers, effectively enriching teaching resources, inspiring students' interest in studying and classroom participation. Multimedia teaching technology integrates video, text, pictures and sounds, breaks the boring atmosphere of traditional teaching mode, and realizes the first leap in teaching field. Owing to the continuous maturity and improvement of digital media application technology, the education department has also increased its application. Currently, the education field has realized the comprehensive coverage of digital media application technology.

3.2 Film and Television Production

Digital media application technology has also been effectively applied and innovated in the field of film and television production, which not only reduces the cost of film and television production, but also strengthens the film and television effect[4]. Compared with traditional cartridge film and television works, digital media technology can not only enhance efficiency in production and distribution, reduce costs, but also effectively increase the clarity of film and television works, and the works can be preserved for a long time, which is greatly crucial for inheriting culture and art. In the 1980s, the United States was the first to use digital media application technology to produce film and television works. Owing to the deepening reform of China's opening up policy and technological progress, China has also begun to gradually produce digital film and television works, and introduced advanced broadcasting equipment, which has promoted the innovative progress of China's film and television industry. Currently, in the Internet environment, digital film and television works are more popular, and their forms of expression, audio, video and other production effects are getting more. People can use intelligent devices to watch film and television works anytime and anywhere, greatly pushing the prosperity and progress of culture[5].

3.3 Business

The application of digital media application technology in the business field is a progress trend with the progress of the Internet environment in recent years. It is mainly a model that combines digital technology and network organically to form a new information communication media and develop commodity marketing on this basis. Currently, online marketing has occupied a crucial position in the business field, and will continue to deepen the reform with the constant progress of the Internet. In particular, the e-commerce industry is a crucial product of the application of digital media application technology in the commercial field[6]. Its business activities and behaviors are based on digital media technology. Digital media application technology provides technical support for business activities, and business activities also effectively expand the application scope of digital media, pushing the improvement of digital media application technology. Currently, digital media application technology in the Internet environment can be divided into various forms in the commercial field, such as Taobao platform, Tiktok live broadcast, microblog live broadcast, and even special live broadcast platforms such as Yingke, YY, which have laid a technical foundation for the progress of the commercial field.

3.4 Field of Daily Life

The fast-paced life has led everyone to face great pressure. People expect to have leisure and

entertainment and relax after work and study. Owing to the progress of the Internet, various intelligent products, software, games, etc. have become crucial ways for public leisure and entertainment[7]. Whether it is WeChat and QQ for communication, microblog and headlines for news and current events, or short video software Tiktok and Kwai for killing time, have become a crucial part of people's life, greatly enriching people's spiritual world and entertainment life. The formation and progress of the above digital products and software are inseparable from the help of digital media application technology. However, in this environment, some people have become addicted to the Internet, which affects their physical and mental health. Therefore, digital media application technology is a double-edged sword in the field of life, which needs people to use flexibly and grasp appropriately, so as to fully play the significance and value of digital media application technology in the field of life.

3.5 Radio, Television and Media

In the Internet environment, the radio and television media field has also been innovated and developed, and has penetrated into all aspects of people's lives. Digital media application technology, as a crucial foundation for the innovative progress of radio, television and media under the Internet environment, can provide necessary information technology support for it. The application of digital media technology in advertising can break the traditional forms of TV advertising and paper advertising, and achieve a new form of three-dimensional advertising. This dynamic way of information dissemination is more likely to attract people's attention, which is greatly crucial for promoting the sustainable progress of the radio and television media industry. In addition, owing to the constant progress of the Internet, advertising under digital media application technology can also be played on intelligent devices, further expanding the progress scope of radio and television media.

4. The Progress Trend of Digital Media Application Technology in the Internet Environment

4.1 Augmented Reality Technology

Owing to the constant progress and improvement of digital media technology, its application scope is also expanding, which has realized the diversified application and progress of film and television, education, life, commerce and media. As the industry matures, the application scope of digital media technology begins to develop in the direction of improving user experience. In the context of the Internet, the progress trend of digital media technology will shift to the direction of augmented reality technology. It is expected to effectively break the limitations between time and space, expand the range of human perception through augmented reality technology, and increase the amount of human exposure to information. This is a crucial manifestation of social needs, and it is also the progress trend of digital media technology.

4.2 Integrate It Industry

The progress prospect of digital media application technology is very promising. In the current electronic market, IT and IPIV industry have a strong correlation, but there is no corresponding connection in the actual application process. Therefore, it is impossible to provide perfect services for users. User needs cannot be met, and the application scope and effect of digital media will also be greatly reduced. Digital media application technology can effectively integrate IT and IPIV industry integration, strengthen relevance, and then provide users with better information services to meet their diversified needs. In this way, personalized services can be formed, and user data can be collected in time to improve the pertinence of services and push the progress of the industry.

4.3 Refine Services

Digital media technology can also effectively analyze the communication objects through big data, understand user needs, hobbies, etc., so as to provide users with better personalized services. The progress of digital media technology can develop technical research in the direction of social needs, follow the progress of the times to enhance the pertinence of services, and provide users with

formulated services. In addition, it can also classify the types of communication objects, meet customer needs, improve satisfaction, create a new industrial chain, and enhance people's quality of life.

5. Conclusion

In a word, after years of progress, digital media application technology has successfully infiltrated into education, film and television production, commerce, real life, radio and television media and other fields, providing many conveniences for people's study, work and entertainment. In the Internet environment, digital media application technology will continue to play a greater role and value. Relevant departments should strengthen technology research and development and innovation, thus promoting the progress of the country and society.

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