Research on the Application Countermeasures of the New technology in TV Programs

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Abstract: With the advancement of science and technology, the era of digitalization and new media has come, the number of programs has increased and the scale has increased, and the penetration rate has been higher in the field of television. The demand for TV programs in the whole society has been continuously improved. Therefore, it is necessary to comprehensively apply various new technologies in television programs to improve the utility of television programs. This paper first describes the necessity and importance of the application of new technologies in TV programs, then analyzes the current situation of TV program development, re-analyzes the problems existing in the application of new technologies in TV programs, and finally the paper tries to explore new technology application strategies in TV programs.

1. Introduction

There is a lot of literature on the application of new technologies in television programs. Xiaoyan Zhang (2010) proposed that traditional educational TV program creation tends to ignore its interest and visibility when it focuses on knowledge and science, resulting in dull, inactive, and unattractive audiences. CG technology provides a solution that combines the characteristics of science, education authority, artistry, fun and entertainment for the creation of educational TV programs. CG technology can better serve the creation of educational TV programs and reflect the educational communication function of programs. It clearly conveys the scientific and educational essence of the program, satisfying the needs of the society and the curiosity and curiosity of the audience. Guangjun Luo (2018) pointed out that CG technology has a very good development prospect in the integration of educational TV programs. Compared with traditional educational TV programs, it has greatly improved the visibility, interest and timeliness of programs. It also better conveys the educational and scientific spirit that educational programs should have. Guohuan Zhang (2016) pointed out that in the production of TV programs, TV editing is an important part, and it has a great impact on the entire TV program. Therefore, it is necessary to base on the characteristics of the digital era, face the development of current TV editing, and promote TV editing technology to meet the present demand and meet the requirements of the development of the era, to improve the satisfaction of the audience, and fundamentally promote the sustainable and healthy development of the television industry. Livu Jiang, Shannong Li (2007) pointed out thatthe "TV graphic commentary broadcast" system and the VGA to VIDEO signal converter were used to connect with the original image-aware system of the studio, using a combination of color key and DPM in order to adapt to the revision of the TV column. The newspapers, publications, pictures, and streaming media materials were directly applied to the TV program, which expanded the expression of TV programs, enriched the program content, and achieved good results. It can be seen that the application of the new technology can enrich the expression form of the television program, is conducive to the expression of the content of the television program, and improves the attention and influence of the television program.

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2. The necessity and importance of the application of new technologies in television programs

2.1 The necessity of the application of new technologies in television programs

With the development of the economy, the technology based on network technology has been generally developed. Under the new media environment, the application of various new technologies in the live broadcast of TV news has become an inevitable trend, which has led to a strong trend in the development of television communication. TV program producers need to apply new technologies to produce high-quality, high-level TV programs that meet the needs of a wide range of audiences.

2.2 The importance of the application of new technologies in television programs

People continue to adopt new technologies to improve the production methods of TV programs in the development of the television industry for nearly a hundred years. At present, digital technology and satellite live broadcast technology are widely used in the field of television production, forming a variety of TV program production methods; satellite transmission, network transmission, interactive platform and other new technologies support the fundamental improvement of the quality of TV news live programs, it can effectively form the production advantages of TV programs. Taking the program playback order as an example, computer software can be used to adjust and set the sequence in real time, and there is a problem in distorting a certain program.

3. The status quo of TV program development

Network and TV are like two magnets in two directions that attract audiences. Nowadays, the network has a strong attraction to the audience with its unique advantages, and the attraction of TV is gradually getting smaller. This has led to more and more people investing in the network embrace. One of the important reasons for the decrease of the attractiveness of TV programs to the audience in China is that there are many problems in TV programs in China, that is to say, TV dramas lack individuality in the broadcast arrangement, and TV programs lack innovation in production. With the wide application of emerging media such as the Internet and mobile phones in people's lives, new vitality has been injected into the production of TV programs, especially in the production, production, transmission and playback of TV programs.

4. Problems with the application of new technologies in TV programs

The degree of integration of TV programs with other media is not high, the application of new technologies is insufficient, and the popular and homogenized problems of TV programs are outstanding. These problems need to be resolved In the new era.

4.1 The insufficient media integration

In the fierce competition of the media, the exchange and integration of new and old media is inevitable. With the development of media technology, media organizations have further moved toward unity. Media convergence has become a phenomenon that is ubiquitous and has great influence. Media integration will become a major trend in the future development of the media. However, TV programs rely on their authority, and they are not integrated enough with other media. The application of new media technologies is not enough.

4.2 The inadequate application of new technology in TV programs

New technologies for TV programs are emerging in the new era. Although Internet technology and new media technologies have been used in TV programs, under the development of various new technologies, new technologies for TV programs have not been fully utilized, and the effects of new technologies on TV programs have not been fully utilized.

4.3 TV programs are popular and homogenized

In the context of economic globalization, a certain degree of mutual text phenomenon has appeared in television programs worldwide. TV broadcast, the program form is popular and homogenized. Copy thinking hinders the innovation of TV programs, and it is difficult to effectively encourage TV program workers to introduce new technologies to enhance the effectiveness of TV programs.

5. Countermeasures for applying new technology in TV programs

TV program production process should be integrated with a variety of information applications in the new era, such as application network transmission technology, interactive platform, CG technology, non-linear editing technology, new smart TV technology.

5.1 The application of network transmission technology

With the rapid development of information technology, the application of 3G and 4G technologies in TV programs has received much attention. In the Internet+ era, the audience has put forward higher requirements for TV programs. The application of network technology can not only meet the needs of the audience to watch TV programs in a timely manner, prevent the limitations of objective conditions, and enhance the interactive nature of TV programs. Avoid the impact of false reports on the audience.

5.2 The application of interactive platform

One aspect that cannot be ignored in TV programs is the participation of the audience. It can be seen from the sudden emergence of new media that more and more audiences are willing to choose new media to watch TV programs, which is largely inseparable from the interaction with their TV programs. Therefore, TV programs in the Internet era need to effectively use interactive platforms such as Weibo and WeChat to engage the audience. The dissemination of audiences participates in the live broadcast of the news through the interactive platform, in order to pay more attention to the unique advantages of TV programs.

5.3 The application of CG technology

CG technology is the result of the integration of computer technology, film and television technology, and graphic image processing technology. The application of CG technology in TV program production can realize CG special effects such as screen space position, shape transformation and screen movement and deformation; synthesis of real-life video and 3D animation; virtual reality image design based on 3D animation; The combination of technology, and so on, has made the selection of TV programs less and less affected by the technical factors of production. Using CG technology, we can visualize the abstract invisible scientific scene, and use flash animation, virtual reality technology, 3D animation and other CG methods to integrate the creation of the program, so that the program is centered on the audience, enhance interaction, and teach Yule enhances the solution of the science, education authority, artistry, fun and entertainment of TV programs. How to make CG technology better serve the creation of educational TV programs, embody the educational communication function of the program, clearly convey the scientific and educational essence of the program, meet the social needs and the curiosity and curiosity of the audience.

5.4 The application of nonlinear editing techniques

Non-linear editing techniques can be applied in the production of television programs. A lot of materials need to be used in the non-line editing of TV programs. At the beginning of the program production, some related materials can be selected and then simply browsed, and some features of the non-linear editing are comprehensively considered. This process is flexible, so you can choose a variety of ways to compare faster and more convenient browsing. After browsing the selected material, you need to make a preliminary adjustment to the material. You can usually take a more

precise method to edit and adjust each frame of the image to change the length of the entire material. The front and rear of the lens must be fully considered in the important part of the time, based on the timeline to very well organize the order of the lens. The position of the material in the specific editing process can be adjusted according to the actual situation. In addition, when editing, the materials and lenses that need to be inserted and deleted should also be noted. Otherwise, it is easy to have a great influence on the front and back of the program. Some materials can be used again to improve the beauty of the picture. At the same time, it also avoids the disadvantages of not being logical. The biggest advantage of non-line editing is that you can add some special effects in the production of the program in real time. For example, our common PR software can add some special effects and artistic effects in the process of program production, and change the color tone and style of the picture. A very complete non-linear editing system requires very good processing modes for subtitles and graphics to meet the needs of TV producers.

5.5 The application of smart TV new technology

Through the network and the system as the carrier, the new technology of smart TV is applied, and the displayed content can interact with the user. When viewers watch TV programs, TV program intelligence technology can automatically load subtitles and recognize picture characters. The audience can also automatically retrieve customized programs and other content according to their own needs, without affecting the viewing effect.

6. Conclusion

All in all, with the development of computer technology and Internet technology, it is necessary to comprehensively apply various new technologies in the process of TV program production, promote a new mode of TV program production, improve the efficiency of the production of TV programs, and enhance the knowledge and interest of TV programs. Sexual and interactive, which brings better economic benefits to TV programs.

References

- [1] Xiaoyan Zhang. Application of CG Technology in Educational TV Programs[J]. Film Literature, 2010(10):82-83.
- [2] Guangjun Luo. Application of CG Technology in Educational TV Programs [J]. Television Technology, 2018(6): 74-76.
- [3] Guohuan Zhang. Discussion on TV Editing Technology and Application Countermeasures in Digital Era [J]. Western Radio and Television, 2016(21):190-190.
- [4] Huihui Chen. The Impact of Network New Technology and New Application on Internet Content Ecological Governance and Countermeasures [J]. Information Security and Communication Confidentiality, 2018(4): 20-27.
- [5] Liyu Jiang, Shannong Li. Application of IT New Technology in Zhoushan TV Station Dialect Current Events Review Program [J]. Modern Television Technology, 2007(3):96-98.
- [6] Xiaoliang Li.Application of Nonlinear Editing System in TV Program Production[J]. China's New Technology and New Products, 2009(21):37-37.
- [7] Wenjun Gu, Xiaojing Li. Application of New Technology in TV2.0 Era in the Production and Communication of British TV Programs [J]. Modern Communication (Journal of Communication University of China), 2012, 34(12): 155-156.
- [8] Yanqing Du. On the New Technology of TV Program Production [J]. Computer Knowledge and Technology, 2011, 07(19): 4703-4704.