PIONEER
ACADEMIC PUBLISHING LIMITED

Journal of Linguistics and
Communication Studies
ISSN 2958-0412
www.pioneerpublisher.com/jlcs
Volume 2 Number 3 September 2023

Exploration of Digital Media Applications in the Internet Context

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doi:10.56397/JLCS.2023.09.08

Abstract

Amidst the accelerated progression of contemporary scientific and technological advancements, the Internet has comprehensively permeated all sectors of society, offering manifold conveniences to both production and daily living. As the Internet continues its evolutionary trajectory, digital media emerges as one of its most emblematic outcomes. Predominantly, digital media leverages computer systems and network technologies to proffer more dynamic communications for enterprises and individuals, substantially catering to the information requisites of the populace. This paper embarks on an exhaustive analysis of the application strategies of digital media against the backdrop of the Internet.

Keywords: Internet, digital media, applications

1. Introduction

In this contemporary epoch, the swift proliferation of Internet technologies has incrementally magnified the societal emphasis on computer networks. The Internet, renowned for its capacity for real-time information dissemination, has been judiciously integrated across diverse domains, markedly amplifying operational efficiency. It facilitates myriad tasks ranging from academic pursuits to professional training and pivotal conferences. Concurrently, the digital age witnesses the commendable utilization of digital media (Li Yongli, 2022).

2. Digital Media Development in the Context of the Internet

Digital media is a new discipline that emerged against the backdrop of the rapid development of the Internet and the widespread use of big data. Its scope is very wide, and its influence is extensive. Digital media has a close relationship with information science and computer majors, and it also involves the field of art disciplines. It mainly relies on computer software engineering, media, and information technology to achieve information dissemination. Its forms of expression are diverse, such as videos, clips, animations, pictures, etc. Whether in the field of education or in social production and residents' lives, it plays a vital role (Chen Qian, 2021). Simply put, digital media is a kind of information communication technology, which is widely used in people's daily life and work, and plays a crucial role in information processing. Current research on digital media also covers various aspects, such as information

integration, information dissemination, and information storage. It can be said that digital media is a particularly comprehensive discipline.

Digital media has characteristics such as diversity, digitization, interactivity, integration, etc., and also has lively, artistic, interesting, and real-time features (Ran Qiu, 2021). It has good applications in many industries. In the era of the Internet, the development and application of digital media mainly rely on the following points:

First, the rapid development of the network provides room for digital media advancement. The Internet not only supports the dissemination of digital media application outcomes but also provides essential data support for digital media. Especially in the broader context of mobile internet, the characteristics and advantages of 5G technology make internet data transmission highly efficient, laying a solid foundation for the application of digital media. Moreover, with the support of cloud computing and big data, the development of digital media can be further promoted.

Second, the development of new digital media application technologies such as virtual reality and augmented reality. Virtual reality technology integrates technologies from various fields, including sensors, multimedia, innovative displays, the internet, and artificial intelligence. It can effectively broaden user perceptions and transform product forms and service models, offering users an immersive experience. The profound integration of the internet across various domains and industries will continuously drive innovations in new digital media technologies (Zhang Xiaopei, 2021).

Third, the enhancement of network security and online civility provides a safeguard for the development of digital media. In the internet era, information security is becoming increasingly crucial. Issues related to network software and hardware, digital media databases, digital media information protection, digital rights, etc., might lead to information leaks, information tampering, virus infections, thus affecting the application of digital media across fields. The continuous improvement in network security and the construction of online civility, coupled with the progressive perfection of the internet-related legal system, have laid a solid foundation for the widespread application of digital technology across domains.

3. Applications of Digital Media in the Context of the Internet

3.1 Application in the Educational Field

In the new era, with the deepening of teaching reforms, the application of digital media in the field of education is becoming more and more widespread. In recent years, innovative online teaching modes like flipped classrooms, MOOC, and micro-classes have been gradually applied in the educational field, achieving satisfactory results. In traditional teaching modes, teachers combine professional knowledge to systematically advance teaching activities, where the teaching process forms a comprehensive and integrated procedure (Liu Rui, 2021). However, in the internet era, students have multiple channels to access information. Coupled with the accelerating pace of knowledge updates, teachers need to pay particular attention to the application of new methods in teaching. Integrating digital media into the educational field allows teachers to use information technology to promote classroom teaching activities, ensuring the effectiveness of the teaching process. For instance, using the new teaching method of micro-lessons has the following features: it requires a short span of just 5-8 minutes to impart relevant knowledge to students, changing the past issues of long classroom duration and large knowledge volume. The resources of micro-lessons are easy to access and are aligned with classroom teaching segments. Teachers need to integrate and collect teaching resources to form instructional micro-videos, guiding students to watch videos based on their needs, ensuring that students' learning activities are not constrained by time and space.

3.2 Application in Film and Television Production

Digital media, with its capabilities of dissemination, recording, and processing, can achieve excellent results in film and television production. From the perspective of post-production in film and television, the introduction of digital media can endow film and television works with unique visual and artistic effects. Production personnel can combine digital media technology with computing software during post-production, creating various virtual digital images, offering the audience an immersive experience. In current film and television works, many

characters are 3D virtual figures, closely linked to the extensive application of digital media technology (Pei Lei, 2022). Moreover, apart from the character creation segment, digital media technology can also be combined with software to construct scenes required for the plot or rearrange various materials to achieve a harmonious blend between real and virtual characters, presenting a distinctive visual experience of the characters. Generally, in animated film and television works, character design and performance are the most captivating aspects for the audience. A good combination of character emotional traits and the storyline can effectively express the emotions of the work. During post-production of animated films, it's essential to control the emotional mainline of the entire work. This process can utilize digital media technology to clarify plot development and character emotional changes, adjust character tone and mood, enrich character movements and costumes, holistically control the atmosphere, convey character emotions, and showcase the emotions of the work, thereby enhancing the effects of animated film and television works.

3.3 Application in E-Commerce

The development of e-commerce is closely related to the internet, playing a vital role in realizing high economic value efficiently. E-commerce offers great convenience and universality. Individuals, enterprises, and government departments can all participate in the e-commerce module, integrating a new transaction mode into modern economic life. E-commerce is not constrained by time and space, and business activities can be completed in a very concise manner. In the computer network environment, digital media technology is also widely applied to the field of e-commerce (Zheng Huiwen, 2019). Firstly, in the diversified design of websites, digital media technology plays a crucial role. Websites are the image of e-commerce. Diversified website design can enhance consumers' desire to purchase, offering a strong visual experience. To attract consumers, websites need to design features with their own style based on product content. Utilizing digital media technology, the design of structural frameworks can be completed with high quality, vividly showcasing products. For example, using 3D technology to display product effect diagrams can intensify consumers' desire to purchase, satisfying consumer needs and experiences, thus promoting consumer loyalty.

3.4 Application in Agricultural Product Marketing

In the era of the Internet, new media has played a significant role. With the continuous development of Internet technology, new media, with the advantages of a wide range of dissemination and a vast audience, has been favored by many users. Agricultural products can use digital media technology under the background of e-commerce, combining the advantages of new media to promote agricultural products, further expanding the popularity of agricultural products. Agricultural products can use digital media technology to promote agricultural product information on digital TV, mobile phone clients, microblogs, new media platforms, etc. (Xia Longyan, 2021). Under digital media, information is transmitted very quickly, coupled with the inherent shared and interactive nature of the information. This allows agricultural product brand enterprises to fully utilize consumers' curiosity, combine digital media technology with multiple platforms, and conduct abstract promotions to attract consumers' attention, forming a stable consumer group. The wide application of digital media technology can make brand operation more flexible and diverse. The marketing model of traditional agricultural products will completely change, building a diversified sales system, and promoting the improvement of agricultural product marketing effectiveness.

Additionally, for agricultural product enterprises, they can establish corresponding platforms on Weibo and WeChat official accounts in practice, timely releasing information about agricultural products, allowing consumers to fully understand the advantages of the agricultural products themselves, and thus complete the sale of the products. Relevant enterprises can widely apply digital media technology and data model technology, combined with graphics and videos, to provide consumers with diversified agricultural product information, enhancing consumers' trust in agricultural products, and laying a foundation for subsequent agricultural product marketing.

In the promotion of agricultural product brands, traditional methods mostly involve label advertisements, wall advertisements, and broadcasts. These methods come with high economic costs and low efficiency. Additionally,

agricultural products have unique natural properties and require significant storage, leading to low marketing efficiency. However, with the aid of digital media technology, the promotion of agricultural products can achieve good results. Taking the high-audience Weibo as an example, agricultural product enterprises can set up Weibo accounts, regularly push agricultural product information, or hold corresponding lottery events to attract consumers' attention and form a stable consumer group (Zhu Yue, 2021). The extensive application of digital media technology allows for more flexible and diverse brand use, such as festival marketing, event marketing, and precision marketing, effectively drawing consumers' attention and achieving good agricultural product marketing results.

3.5 Application in Public Art Creation

Digital media is a relatively abstract concept that is intangible and invisible to the naked eye. It can only be transformed into specific visual and auditory sensations through images, videos, sounds, or digital control. Many elements in the field of public art interact with each other in digital media, such as in light art. Projections can also be regarded as an application of light. It can be said that in public art creation, digital media has good advantages. Public art works have a strong interactivity. With the help of digital media technology, the interactive advantages of public art creation can be better enhanced. During the interaction, through actions, touch, sound, etc., interaction between video images, sound, lights, and other elements can be realized, enhancing the space for public art creation. In the current popular holographic projection technology, the focus is on using a semitransparent film with a reflective effect. After some light passes through, the object behind the screen can be clearly seen. At the same time, it also has a certain diffuse reflection function, which can make people see the pattern shape on the projection clearly (Tan Lei, 2021). If the film cannot be seen clearly in relatively dark ambient light, the projected image appears to be suspended in the air, with a strong sense of science fiction. In the field of public art, the application of digital media technology can achieve good results. Relevant personnel can use four semitransparent films to form a 360° non dead angle rotating pyramid scheme, and use digital media technology to model and shine, thereby achieving good demonstration effects. In order to highlight the effect of the work, manufacturers can also use multi-color self-luminescent materials to achieve good integration between the work and the environment.

The application of digital media technology in public art creation can convey rich information and produce different effects over time through changes in form, color, lighting, and other factors. At the same time, the same public art works may also have different visual sensations due to color changes. For example, blue works can make people feel calm, while red works can make people feel passionate and unrestrained.

4. Conclusion

In summary, against the backdrop of the Internet, the development of digital media must be combined with the characteristics of the new era, breaking the limitations of traditional media, enhancing the authenticity and effectiveness of information, and enhancing the influence of digital media on the Internet. In practice, we must fully utilize the advantages of digital media, such as its ease of operation, convenience of access, and fast information dissemination. We should guide the use of digital media well, avoid some defects inherent in digital media, and thus promote the healthy development of the digital media industry.

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