

Research Article

Analysis Methods for the Planning and Dissemination Mode of Radio and Television Assisted by Artificial Intelligence Technology

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In the context of the development of artificial intelligence (AI) technology, the planning and dissemination of radio and television must not only learn to quickly and deeply process a large amount of content and extract structured information such as classification, themes, tags, and styles from information sources, but also learn to use audience behaviors to explore and discover potential content, jump out of the editor's subjective vision, and realize personalized content presentation. On the basis of summarizing and analyzing previous research results, this study expounded the research status and significance of the planning and dissemination mode of radio and television, elaborated on the development background, current status, and future challenges of AI technology, introduced the methods and principles of computer vision, natural language processing, semantic analysis, and video generation, discussed the content production, interview, and editing of radio and television, explored the review, archiving, and system solutions of radio and television, proposed the planning strategies for radio and television assisted by AI technology, analyzed the smart distribution, reception, and feedback of radio and television dissemination, discussed the interactive application and virtual reality of radio and television dissemination, analyzed the dissemination mode of radio and television assisted by AI technology, and finally carried out a case application and its analysis. The study results show that AI technology can be used for smart lyrics, smart writing, smart broadcasting, smart translation, smart recommendation, smart stripping, and smart retrieval, and so on. The AI-assisted radio and television planning gives audiences the right to choose news, provides them with more targeted news content by means of data capture and resource integration, and caters to audiences' all-round and in-depth information needs through a question-and-answer method, innovating dissemination logic and expression approaches, and enhances the audience's sense of experience and leadership in obtaining information. The AI-assisted radio and television dissemination mode has the advantages of improving the effectiveness of information communication, promoting the optimization and integration of news resources, and enhancing audience stickiness.

1. Introduction

Artificial intelligence (AI) is a theory, method, technology, and application system that uses digital computers or computer-controlled machines to simulate, extend and expand human intelligence, perceive the environment, acquire knowledge, and use the knowledge to obtain the best results [1]. The application of AI technology in the field of radio and television can further release and optimize human resources, maximize the production efficiency of news editing, improve the timeliness of news reports, and assist editors to complete the report content that is difficult for manpower to quickly and comprehensively optimize,

thereby freeing up more labor costs to do the news that requires deep excavation and thinking [2]. Based on data collection, modeling capabilities, and data analysis, the AI-assisted radio and television dissemination mode is building a variety of smart recommendation scenarios. It can also smartly and automatically select some of the content and products that audiences may like and present them to audiences in an appropriate way [3]. The recommended content is closer to audiences and more diversified, which can help reduce human decision-making errors and shorten manual scheduling time. The planning and dissemination model of radio and television needs to improve the audience viewing experience, increase audience stickiness, increase

revenue from value-added content, etc., and focus on data collection, data analysis, and audience portraits, covering the entire radio and television business from the audience side, content side, and channel side [4].

AI technology brings more opportunities to the media industry in terms of news production, content collection, information distribution, and audience experience, while causing new problems and challenges, but this will not affect the development process of smart radio and television [5]. The technical application of AI will focus on the development of knowledge maps, the construction of content databases, and the development of special algorithms according to the needs of the public in the field of information dissemination [6]. The AI-assisted radio and television planning must not only learn to quickly and deeply process many contents, and extract structured information such as classification, themes, tags, and styles from information sources, but also learn to use audience behaviors to explore and discover potential content, jump out of editor's subjective vision, and realize personalized content presentation [7]. In terms of smart information production, AI can not only realize the aggregation and use of massive data at the physical level but also allow each information content element contained in a wider range of data to automatically and spontaneously realize the integration with other information content elements. High-speed computing smart screening provides planners with planning solutions and can even directly recommend writers to editors, which greatly reduces the early manpower investment of radio and television organizations and can improve the gold content of topic selection and planning [8].

On the basis of summarizing and analyzing previous research results, this study expounded the research status and significance of the planning and dissemination mode of radio and television, elaborated the development background, current status, and future challenges of AI technology, and introduced the methods and principles of computer vision, natural language processing, semantic analysis, and video generation, discussed the content production, interview, and editing of radio and television, explored the review, archiving, and system solutions of radio and television, proposed the planning strategies for radio and television assisted by AI technology, analyzed the smart distribution, reception, feedback of radio, and television dissemination, discussed the interactive application and virtual reality of radio and television dissemination, analyzed the dissemination mode of radio and television assisted by AI technology, and finally carried out a case application and its result analysis. The detailed chapters are arranged as follows: Section 2 introduces the methods and principles of the methods and principles of computer vision, natural language processing, semantic analysis, and video generation; Section 3 analyzes the planning strategies for radio and television assisted by AI technology; Section 4 discusses the dissemination mode of radio and television assisted by AI technology; Section 5 carry out a case application and its result analysis; Section 6 is the conclusion.

2. Methods and Principles

2.1. Computer Vision and Natural Language Processing. Computer vision is the construction of clear and meaningful descriptions of objective objects in images, the computation of properties of the three-dimensional world from one or more digital images, and the making of useful decisions about objective objects and scenes based on perceptual images. Application fields such as face recognition, image retrieval, games and control, monitoring, biometrics, and smart cars are derived from computer vision. Natural language processing is the most important and active research field in AI research, whose ultimate goal is to make machines simulate, extend, expand, and even surpass this ability on the basis of clarifying the mysteries of human natural language understanding and generation [9]. The task of natural language processing, a field of AI research, is to build machine systems that can simulate human language abilities. Natural language processing has the following two major research topics: one is to study natural language understanding and the other is to study its generation. From a semantic point of view, the problem to be solved by the former is how to complete the mapping from text to meaning, and the problem of the latter is how to complete the mapping from meaning to text.

The text that is currently being photographed is directly recognized by the text recognition engine, and the captured text is used as a keyword to call the background operation management platform to obtain the activity or network content associated with the text and then interacts with the activity content on the client. Since the image processing-related algorithms are executed on the background server, the overall recognition rate can be improved through more complex preprocessing algorithms and postprocessing algorithms. When adding a new feature picture, the audience uploads the picture and key metadata information through the web page. After receiving the feature picture, the background server automatically calculates the feature code for the feature picture and stores the relevant information in the data warehouse. When the client needs to retrieve the image data, it is captured by the camera, and the characteristic code is generated and calculated in real-time for the collected image data. The client transmits the signature to the background server in real-time, and the background server quickly matches the signature with all signatures in the warehouse and finds the one with the highest similarity as the result. In order to improve the retrieval accuracy, according to a certain threshold, when the matched similarity result is lower than the threshold, the server considers it a retrieval failure.

2.2. Semantic Analysis and Video Generation. Video semantic analysis refers to the process of extracting information from the semantic components contained in a video. Video semantic analysis is an interdisciplinary research topic involving image processing, video data processing, pattern recognition, machine learning, and other fields, whose goal is to describe and characterize video content from both

visual and audible aspects. Between the vocabulary of the language and the relationship between the whole sentences, there is a language unit, that is, a collection of words. Usually AI is used as a whole in the sentence. The syllables recorded by digital recording technology are converted into codes that can be recognized by computers through analog-to-digital conversion. These codes are segmented to form components of AI speech with a voice signal that the audience can recognize [10]. When they need to be restored to sound signals, these components are reorganized through digital-to-analog conversion. Since the composition of these aggregates is flexible and changeable and not preset in advance, it is difficult to clearly explain the changes of these aggregates in the expression of preset chunks.

The number of manual interventions is limited and often focuses on the most popular head content, while machine distribution can cover information other than long-tail news reports related to audiences' lives and personal interests. The application mode of radio and television hosts assisted by AI technology should be that robots can replace some procedural, massive search, and other tasks that process a large amount of complex information, allowing the host to free up more time and energy to think more deeply or more warmly about the news expression. By recording and analyzing audiences' browsing behavior, extract structured information such as categories, topics, tags, and styles from information sources and use audience behavior to explore and discover potential content. AI technology can also automatically label articles and their related information according to the data structure after word segmentation, laying a solid foundation for subsequent selection of distribution channels or personalized recommendations for audiences. The AI technology can quickly extract core opinions, event development trends, public opinion sentiment orientation, and analyze event propagation paths, allowing news producers to understand the ins and outs of the entire event and provide creative ideas.

3. Planning Strategies of AI-Assisted Radio and Television

3.1. Content Production, Interview, and Editing. If AI-assisted radio and television want to provide news audiences with smart and accurate news products, they need to be based on a large number of vertically subdivided and fragmented content resources. In the actual situation, although the radio and television media have professional news content production capabilities, the production of news content has not yet been scaled, standardized, and intensive. The labels of news products are too rough, and the degree of informatization of news products is not enough. The radio and television audience databases must have good compatibility to ensure that audience data on internal and external platforms can be diverted and deposited. In addition, the radio and television audience databases must have good scalability and can reserve interfaces for future new audience data generation platforms. Existing news products based on programs will gradually weaken and will be replaced by fragmented short news products; existing

frequencies and channels will also be replaced by vertical subdivision work units based on audience needs. Through in-depth processing of semi-finished news products containing data processing and analysis results, high-level professional journalists can provide audiences with in-depth news products that are both ideological and humane. In the algorithm programming stage, authoritative news experts from radio and television should work closely with algorithm engineers to optimize and model the party's requirements for news and public opinion work, prioritize the social benefits of news events, and realize the synergy between audience value and news value. Figure 1 shows the framework for the planning strategies and dissemination mode of AI-assisted radio and television.

Natural language generation technology builds narratives based on large-scale datasets, enabling features such as integrating keywords, search engine optimization, and delivering personalized content to audiences in bulk. Automatic generation of computational images can find the best frame in motion in real-time and seamlessly add or remove objects from the scene, change shadows, and more. The smart audit of information is to identify the content through the machine and judge the information on this basis; connection and collision are similar to the formation of a chemical reaction [11]. The use of news bots will further enhance this function, and through the processing of large amounts of text and real-time machine learning, it will find logical loopholes and fake news of relevant information in context. The AI technology can analyze and predict multi-channel data, such as read tracking and market analysis based on relevant data analysis models, obtain positive and negative comments on their content, and quickly select audience-oriented topics based on the dimensional analysis model. With the help of different data passes through real-time information structuring, data visualization, information smart identification, and more smart auditing functions, including not only logical loopholes in the context of text content, but also images, real-time review, and correction of various content forms such as videos.

The so-called AI synthesis refers to the improvement of the technical production level, and in terms of the specific broadcast content, the news creation level still needs to be controlled by a production team with deep human thinking ability, and an excellent live anchor will definitely be part of this production team. A radio or television program will be more vivid and good-looking because the host participates in the main creation or secondary creation, giving the program a fresh and lasting vitality. The core of algorithm sorting is to calculate the score of content in real-time according to the audience, content, and context information and sort according to the score. The advantages of AI in data processing capability and processing speed are unmatched by traditional algorithm technology [12]. For example, they can set up an AI anchor and a real host in a news program, let the robot broadcast the news that happened that day, and for hot topics, the real host will complete it. In this way, a news program not only has the fastest, latest, and most complete news information but also has a standpoint full of depth, intensity, and temperature, which can arouse the audience's

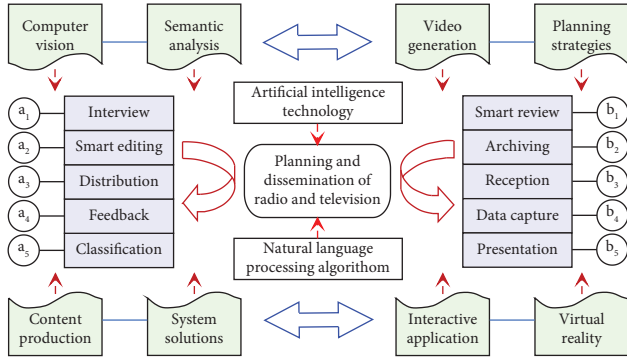


FIGURE 1: Framework for the planning strategies and dissemination mode of AI-assisted radio and television.

resonance. The AI technology can match the corresponding radio and television, so as to achieve the precision of radio and television delivery and the full coverage of highly targeted platform audiences.

3.2. Review, Archiving, and System Solutions. In the content production system, AI technology can be used for smart lyrics, smart manuscript writing, smart dissemination, and smart translation. The purpose of smart lyrics is to realize the automatic generation of video subtitles and improve the efficiency of manual lyric production. As shown in Figure 2, the content distribution system will complete the broadcast of corresponding content on traditional radio and television channels and the release of various platforms and terminals on the Internet. In the content publishing system, AI technology can be used for smart recommendation, smart stripping, and smart retrieval. With the assistance of AI technology, radio and television can reserve a library of anchors covering male and female voices, high school bass, and different voice characteristics. In the aspect of media asset storage, AI-assisted radio and television can realize automatic stripping storage based on semantics and achieve precise distribution through the smart content management platform. At present, smart recommendation and smart retrieval technologies have been widely used in various Internet products. For such mature technologies, radio and television can try to use them on their own Internet platforms and terminals to enhance the audience experience and viscosity. The smart monitoring and operation and maintenance of basic hardware and underlying systems, storage, and networks have been relatively complete and easy to manage by each cloud platform, but they cannot effectively perceive the monitoring and operation, and maintenance of upper-level business software and the maintenance work is relatively scattered, so smart monitoring and smart operation and maintenance will mainly explore the business software level [13].

The AI-assisted radio and television planning runs through the entire process of video upload, production, release, recommendation, and presentation, and is applied to each core system and business link of the content management and operation system of the new media platform. AI technology can be integrated with emerging technologies

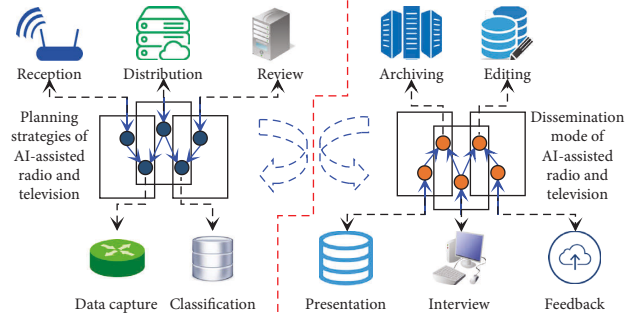


FIGURE 2: Content production, interview, editing, review, archiving, and system solutions in the planning strategies and dissemination mode of AI-assisted radio and television.

such as big data and new media dissemination to create more valuable radio and television dissemination modes. Video relevance evaluation and video quality evaluation are composed of multiple algorithms, adopting a multi-modal design concept and combining algorithms and business strategies to evaluate the similarity and quality of media materials and listed programs. The cover screenshot is composed of the following three parts: the frame drawing module, the image selection module, and the image forming module. Smart deconstruction and related quality models are used to improve the quality and qualified ratio of materials, and select more relevant pictures through star and scene recognition and feature algorithms to improve material diversity. Video cover image is the facade of television content, especially in major reporting activities, and video cover needs to be in line with the theme, aesthetics, and attract audiences, which play a vital role in video dissemination. Cover screenshot evaluation can automatically produce a beautiful cover image that meets the content requirements based on the video content and split subjective aesthetic issues into multiple objective issues.

In television programs, hosts and reporters are in open scenes and need to deal with emergencies from various factors such as program guests, interviewees, audiences, directors, equipment, and machines, and conduct complex coordination and interaction with each program link, so as to control the program effect on-site. For television audiences, the appearance of AI anchors on the television screen is first and foremost a gorgeous and novel visual spectacle, which is bound to arouse the curiosity and onlookers of the audience, thereby increasing the attention of the television program itself [14]. At the same time, some AI images appeared on television, and the show's witty quizzes often drew laughter and applause from the audience. In television programs, the AI anchors can work collaboratively with human announcers, hosts, and reporters in one scene, each applying their strengths. As the main body of the host and interview activities, the host is responsible for overall scene control, temporary responses, in-depth interviews, and decision-making responses, while the AI host acts as an auxiliary role, taking on tasks such as simple questioning, repetitive labor, and quick calculations. Smart dialogue robots may generate tendentious questions, guidance, and

answers in interview activities, which inevitably include the attitude and tendencies of the programmers themselves. Due to the opaque mechanism of the algorithm, the public is ignorant of the design and operation logic of the algorithm, resulting in multiple values that control the dissemination of information.

4. Dissemination Mode of AI-Assisted Radio and Television

4.1. Smart Distribution, Reception, and Feedback. AI-assisted radio and television can well combine human senses and create an immersive interactive environment through human-computer interaction, so that the audience can feel immersed. The biggest feature of AI technology-assisted networks is the smart identification of audiences; AI will record the behavior of Internet audiences and on this basis, will profile the audiences so as to summarize the audience's favorite things and paste them accordingly. On the basis of fully considering audience preferences, the recommended content makes audiences dependent on sense and trust. Through the new media matrix, AI technology has established multi-directional interaction, so that radio stations, programs, hosts, audiences, and businesses are organically connected. The interaction is closely coordinated with the program, which can run through the program before, during, and after the broadcast. The smart distribution, reception, feedback, and application in the dissemination mode of AI-assisted radio and television are shown in Figure 3. AI technology can reduce the overall cost of radio and television through smart push, and its effective combination with big data technology can push radio and television to audiences or potential customers of related products [15]. AI technology can realize the efficient allocation of resources, and smart radio and television can be launched at the time and place where consumers really are, despite some ineffective placement and dissemination.

Convergence media is the integrated operation of text, video, audio, pictures, animations, and other elements, and then distributes different content through different media properties, so it can be said that media integration is a necessary process for media integration. It is precisely because of media integration that journalists must organically integrate traditional dissemination channels and emerging media dissemination channels to achieve resource sharing [16]. The new dissemination mode uses different expression methods to generate works in different media forms, implying that traditional radio and television media audience must diversify the content of news reports, and the expression methods must be networked. Not just as news reporters, but corresponding content must be produced according to the attributes of the media, and the information arrival rate and the conversion rate of the dissemination content must be optimized to ensure that the audience can obtain relatively complete information on different media terminals. Diverse content must be distributed to the audience through different media channels, and the media attributes determine the audience's acceptance of the content. The audience of short video platforms focuses on the

timeliness and intuitiveness of news; the audience of subscription accounts focuses on the integrity of the news and the interpretation of relevant content. The frame extraction module extracts a large number of frames from the video as candidate frames and uses the clustering method to aggregate similar pictures together. Each category obtains a frame with a higher score as a key frame and enters the image selection module to generate a variety of candidate cover images (Figure 4).

AI-assisted radio and television can make full use of the technical achievements of AI automatic voice translation and semantic recognition function to produce a set of high-efficiency voice and text smart editing system. It realizes the basic text editing in the video and audio content production process. One-click audio synthesis on the Internet can greatly improve the work efficiency of editors and reporters and liberate productivity. Smart recognition includes voice and image recognition to realize the identification of key information or key images. Smart manuscript writing, smart dissemination, and smart translation have been tried by the media for a long time, and they are still being continuously improved and improved, which provides a reference for radio and television to cut into AI applications. These tags are the basis for this kind of radio and television to push related pushes. Since the whole portrait is generated based on the audience's long-term network behavior, it can better reflect the actual needs of the audience, so this kind of radio and television delivery is more targeted. The characteristics of AI technology to assist radio and television itself also form the advantages of smart radio and television. Realistic and expressive to achieve a perfect speech synthesis effect, and the host can control it at any time, and can receive feedback immediately, in which audiences can participate by simple operations with low threshold.

4.2. Interactive Applications and Virtual Reality. The collection nodes of information in the media are no longer limited to commercial or noncommercial organizations or specialized news organizations, and the content and form of news information have become rich and diverse. The fundamental purpose of the construction of the content platform is to realize the specialization of news information on the basis of rich information, that is, to achieve classification, screening, integration, and in-depth processing of different forms of news information such as text, pictures, audio, video, etc., to meet the audience's all-round and in-depth information needs [17]. As shown in Figure 5, the AI-assisted dissemination mode means that media organizations ensure the stickiness of audiences through the delivery of advantageous content and the development of online and offline special activities, and they realize the standardization and regularization of audiences' information needs, and then the relevant data of high-quality audiences. The planning of radio and television has a strict control system from the beginning of news topic selection to ensure the correctness and direction of public opinion guidance; there are professional teams in content production, all with high business levels and media literacy; and a strict content

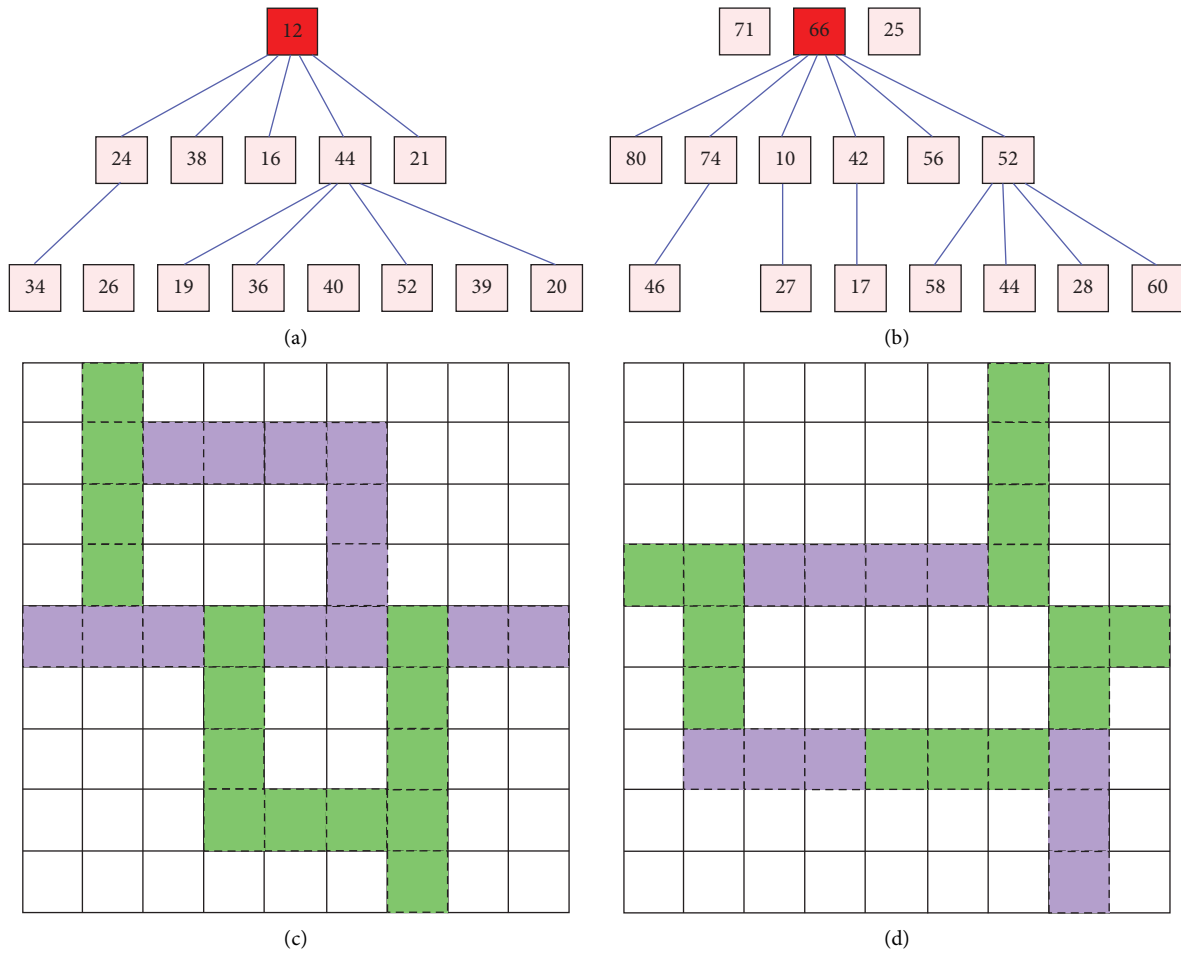


FIGURE 3: Schematic analyzes of smart distribution (a), reception (b), feedback (c) and application (d) in the dissemination mode of AI-assisted radio and television.

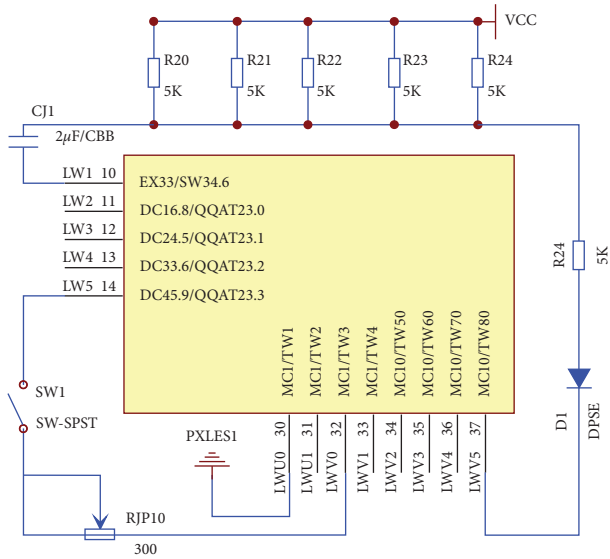


FIGURE 4: Frame extraction modules in the dissemination mode of AI-assisted radio and television.

production mechanism ensures the objectivity and accuracy of news information. The production and integration of data and the accuracy of big data algorithms have put forward higher requirements.

In the smart media environment, audience insight and data mining technology based on algorithms and big data have fundamentally affected the construction and development of the radio and television industry chains, and further established the important position of audience demand in the process of the reconstruction of radio and television formats. Media platforms use AI technology to analyze audience interests to achieve accurate content pushes, which has become an important feature of such information aggregation platforms. This kind of humanized service based on AI technology has the advantages of improving the effect of information dissemination, promoting the optimization and integration of information resources, and enhancing audience stickiness [18]. AI technology promotes the interactive development of media dissemination modes. Compared with traditional content platforms that push news information to the audience, interactive

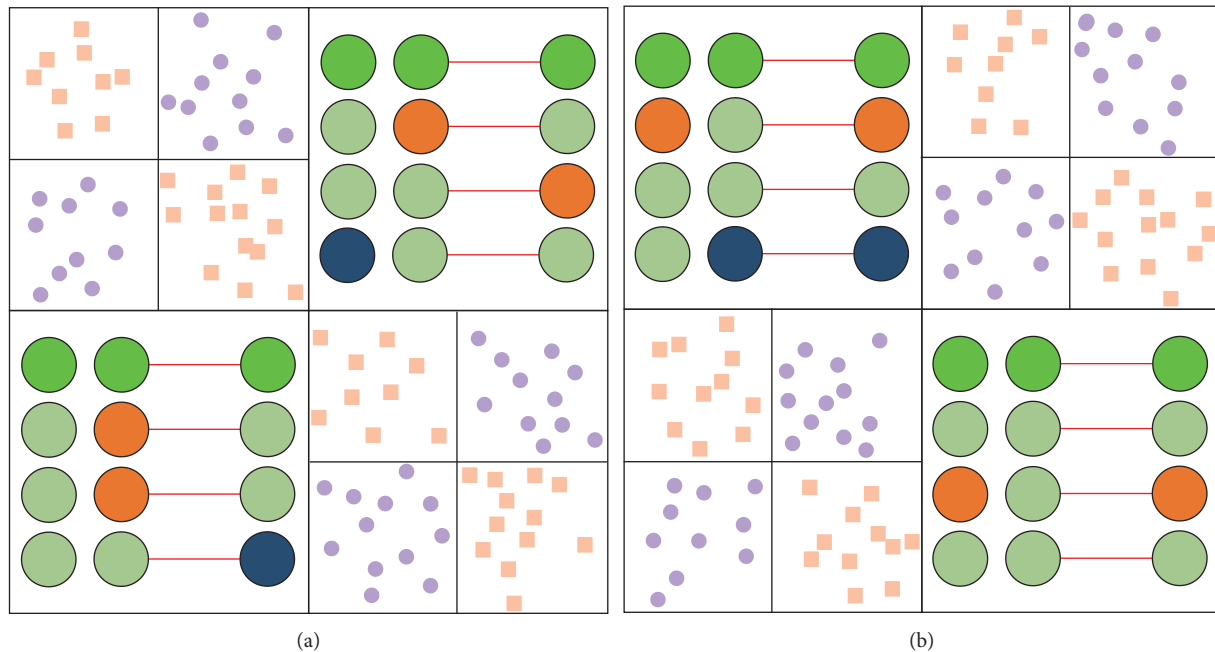


FIGURE 5: Computer vision and natural language processing (a) and semantic analysis and video generation (b) of the interactive applications and virtual reality in the dissemination mode of AI-assisted radio and television.

applications give audiences the right to choose news and provide audiences with more targeted information by means of data capture and resource integration. It caters to audiences' all-round and in-depth information needs through a question-and-answer method, innovating information dissemination logic and expression methods and enhancing the audience's sense of experience and leadership in obtaining information. AI technology brings more opportunities to the media industry in terms of news production, content collection, information distribution, and audience experience, while causing new problems and challenges, but this will not affect the development process of smart radio and television.

The core of virtual reality is to engage all the senses of the audience to enhance their sense of immersion and presence. In virtual reality news, audiences can immerse themselves in the news scene in a panoramic view, breaking through the limitation of the viewing angle of live television cameras, and can adjust the viewing angle according to their own needs and psychology, and then discover their interests in the news without having to accept everything unconditionally. Information, from passive acceptance to active participation, satisfies people's psychological needs for comprehensive understanding of objective information and a sense of existence in the process of understanding information. The advantage of radio and television dissemination assisted by AI technology lies in the higher quality and credibility of the dissemination content. Smart and personalized information and data services create a special news reading experience for audiences and improve audience participation and satisfaction. The establishment of an AI-assisted dissemination mode is the ultimate goal of future media development, which represents the stability of the relationship between audiences and the media. In this type of news, the creator's personal perspective is combined with the panoramic

perspective, and the role of the audience is further derived from the observer to the participant, emphasizing the audience's individual role and first-hand experience of events and scenes. The first level is the change of dissemination and narrative, and the second level creates a new dissemination space.

5. Case Application and Result Analysis

5.1. Case Background and Research Design. The role of AI technology is realized with the help of specific algorithms. In the process of news recognition, AI technology can use semantic analysis, image processing, language processing, and other technologies to evaluate the information content, and the final evaluation result can be used for judgment. The value of news is feasible. With the support of AI technology, the interaction between an audience, algorithms, and content has truly been realized in news. With the powerful data analysis capabilities of AI technology, various algorithms have gradually penetrated the Internet platform and become an important component of news information dissemination. Multimodal audit technology is an important part of improving the quality of radio and television programs; at the same time, advertising is also an important part of AI multimodal auditing [19]. It means that relevant personnel use smart technology to disassemble the entire radio and television program content and complete the inspection in the form of text mode, image mode, and screen mode, such as determining whether the relevant segments in the program meet the specifications, whether the host uses inappropriate words, etc. During the auditing process, the AI technology can quickly intercept noncompliant content in programs, ensuring that the use of radio and television programs can provide positive guidance for residents. In

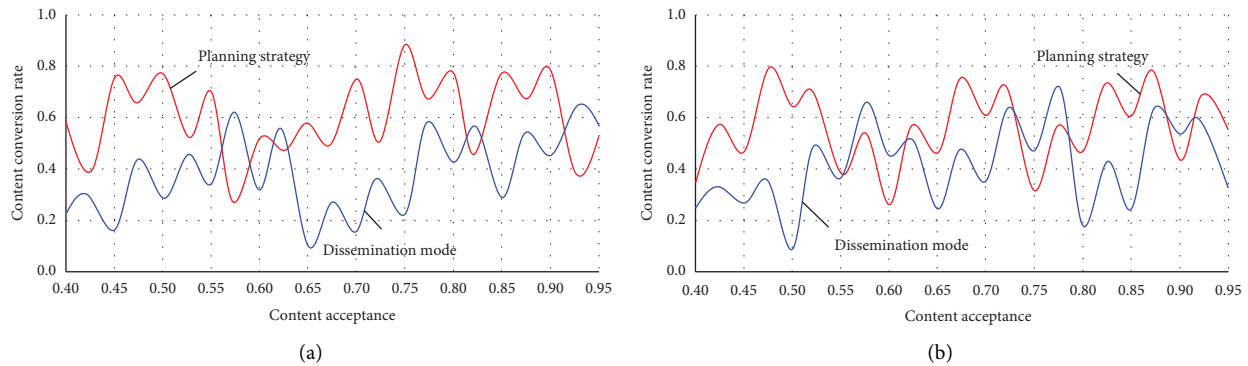


FIGURE 6: Relationship between content conversion rate and content acceptance in the planning strategies and dissemination mode of AI-assisted radio (a) and television (b).

contrast, AI technology, on the basis of data support, performs a series of tasks such as editing and arranging by simulating human work, improving the efficiency of program production (Figure 6).

Topic selection is the premise and foundation of radio and television planning. Only by realizing the innovation of topic selection can the innovation of the entire radio and television plan be driven. The audience's network usage behavior, page content, keywords, tags, etc. can all become an important basis for smart identification of audiences. AI-assisted radio and television can analyze the interests and hobbies of each audience through big data technology and push products that audiences may be interested in a targeted manner, which can greatly improve the possibility of audience experience. AI technology can use software programs to make the entire process of radio and television planning smarter and more digital. At the same time, it can automatically analyze colors, emotions, and experiences according to market goals, strategies, regions, and other conditions, and match the corresponding elements to automatically synthesize new radio and television plans. This kind of smart radio and television planning is of great significance for improving dissemination efficiency, shortening the cycle and reducing costs. AI technology reshapes the production mode of radio and television content is the basic content of AI technology to empower their media, which is conducive to improving the comprehensive operation efficiency of radio and television media. From the perspective of application logic, AI technology empowers radio and television media, which can effectively enhance the competitiveness of radio and television media, expand the influence of radio and television media, stimulate the innovation of radio and television media, and then help radio and television media achieve scientific and efficient, steady development.

5.2. Result Analysis. The relationship between radio and television and the audience has changed with the development of the times. Therefore, AI-assisted radio and television planning must meet the needs of the market, and the audience is the supervisor of radio and television assisted by AI technology. The integration of radio and television

with new media can effectively promote the dissemination and exchange of information between media and the interaction between programs and audiences. This interaction is the best dissemination channel. AI-assisted radio and television must attract attention, and the spread of radio and television media is a two-way dissemination process. The media environment is the social situation faced by the radio and television media, which is the result of the joint action of the media audience, investors, and producers [20]. Compared with manual distribution of news, the biggest advantage of smart recommendation is that it can rely on big data to collect audiences' habits and hobbies and conduct in-depth processing of massive amounts of information content, using data to guide distribution and redistribution, making distribution more accurate. A good radio and television theme and content are on the one hand, and on the other hand, they need the approval of investors and audiences. Major television stations must do market research before program planning and know what form of programs the masses expect through research. The attention of investment customers, strive to be recognized by investors, and then ensure the quality of the program. Figure 7 shows the relationship between efficiency and speed of data capture for smart distribution, reception, and feedback in the dissemination mode of AI-assisted radio and television.

The media scene setting can have an important impact on the audience's acceptance of psychology and feedback behavior. The interaction of traditional media hosts is limited to a small number of invited or arranged audiences, and the real-time interaction of nonlive programs is rare, and most audiences play the role of observers or bystanders. In short, discourse power in the traditional sense of presiding over dissemination is firmly in the hands of the communicator. However, with the decentralization of the right to speak to the audience, the audience community has begun to transform into the audience community, and high interaction has become a rigid requirement for hosting dissemination, which is more vertical and subdivided (Figure 8). In addition, the warm and ceremonial scenes in the host's dissemination are the breakthrough for the host to get through to the real needs and emotional value of the audience. In terms of the objective psychological needs of everyone, experience is indispensable, and experience is

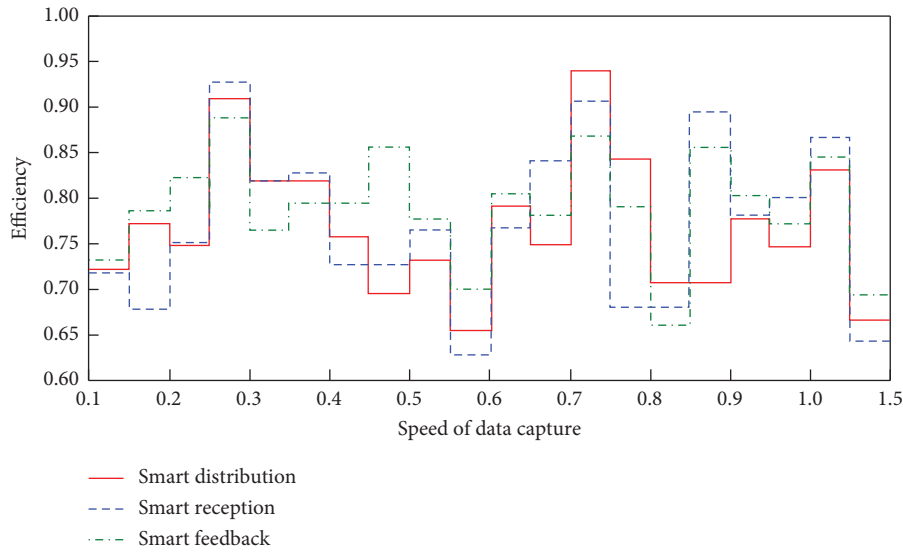


FIGURE 7: Relationship between efficiency and speed of data capture of smart distribution, reception and feedback in the dissemination mode of AI-assisted radio and television.

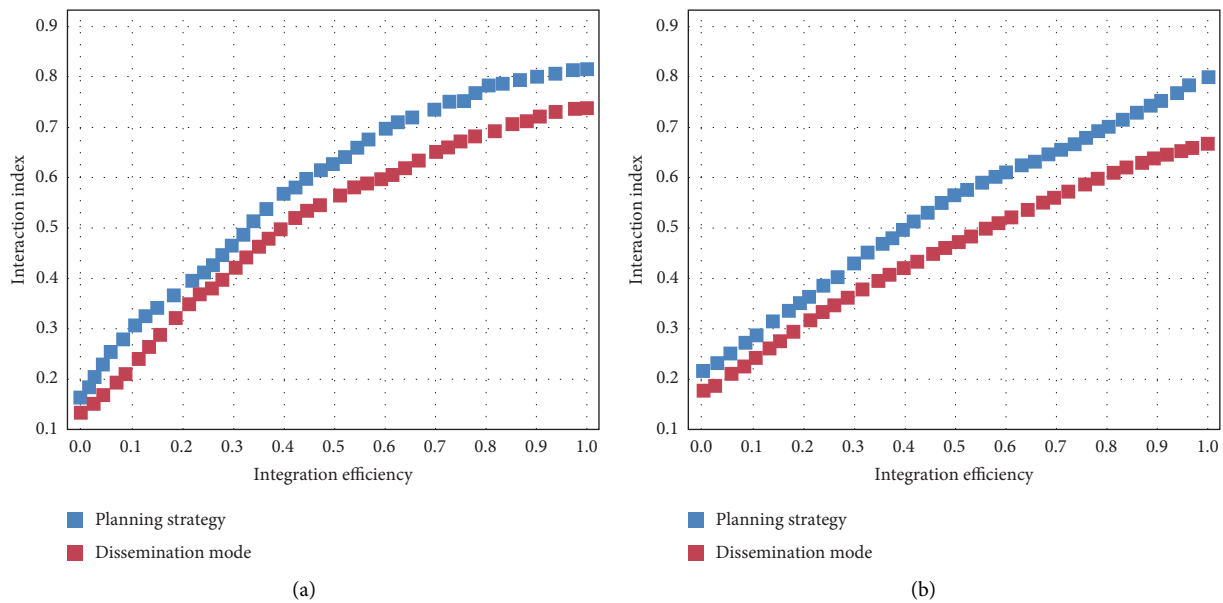


FIGURE 8: Relationship between interaction index and integration efficiency in the planning strategies and dissemination mode of (a) AI-assisted radio and (b) television.

often impressive. The introduction of experience determines the direction of the optimization and upgrading of host dissemination. The multifrequency and multiconnected experiential moderator dissemination, combined with the moderator’s sincere and enthusiastic moderator attitude, can often enhance the sense of respect and trust between the communicator and the audience, and make the audience feel a high sense of participation and ownership. From the audience’s point of view to a certain extent, it lacks a harmonious relationship with the audience to form a friendly interaction. Even if there is interaction, the interaction is not vivid enough, and the audience’s recognition is not high [21].

With the assistance of AI technology, radio and television can carry out audience management, audience behavior analysis, audience rating analysis, advertising effect analysis, and data mining, so as to provide audiences with more accurate, personalized, and customized content, achieve a better audience experience, and get a better dissemination effect. The AI decomposes and splits the content through video recognition technology, labels each commodity element that appears in the content, and decomposes it into specific elements, that is, through semantic recognition, the advertising keywords in the characters’ conversations are sorted out, and then assisted with content, presented to the audience [22]. These are not only part of the content but can

also be directly converted into advertisements, and audiences can buy them directly on television. At the same time, with the maturity of virtual reality technology, audiences can also experience the experience of using products. The platform can accurately identify the audience's information needs and make smart recommendations. Marketing is the key to increasing the market share of radio and television, assisted by AI technology. AI-assisted radio and television require efficient marketing strategies to publicize and promote, thereby increasing public attention and achieving the value of television, which can extract and discover information and make the recommendation more humanized and personalized, and more in line with the actual needs of audiences.

6. Conclusions

This paper discussed the content production, interview, and editing of radio and television, explored the review, archiving, and system solutions of radio and television, proposed the planning strategies for radio and television assisted by AI technology, analyzed the smart distribution, reception, and feedback of radio and television dissemination, discussed the interactive application and virtual reality of radio and television dissemination, analyzed the dissemination mode of radio and television assisted by AI technology, and finally carried out a case application and its result analysis. The syllables recorded by digital recording technology are converted into codes that can be recognized by computers through analog-to-digital conversion. The multifrequency and multiconnected experiential moderator dissemination, combined with the moderator's sincere and enthusiastic moderator attitude, can often enhance the sense of respect and trust between the communicator and the audience and make the audience feel a high sense of participation and ownership. In the content production system, AI technology can be used for smart lyrics, smart writing, smart dissemination, and smart translation. In the content publishing system, it can be used for smart recommendation, smart stripping, smart retrieval, and so on. With the powerful data analysis capabilities of AI technology, various algorithms have gradually penetrated into the media platform and become an important component of news information dissemination. AI technology can be used for smart lyrics, smart writing, smart broadcasting, smart translation, smart recommendation, smart stripping, smart retrieval, and so on. The AI-assisted radio and television planning gives audiences the right to choose news, provides them with more targeted news content by means of data capture and resource integration, and caters to audiences' all-round and in-depth information needs through a question-and-answer method, innovating dissemination logic and expression approaches, and enhances the audience's sense of experience and leadership in obtaining information. The AI-assisted radio and television dissemination mode has the advantages of improving the effect of information communication, promoting the optimization and integration of news resources, and enhancing audience stickiness.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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