

Original Research Article

10.14456/jdl.2024.38

Marketing Communication for Mobile Radio in Guangdong

Liang Yingyin,¹ Sukanya Buranadechachai,^{2*} & Sakdina Boonpiam³

ARTICLE INFO

Name of Author & Corresponding Author: *

1. Ms. Liang Yingyin

Faculty of Communication Arts,
Bangkokthonburi University, Thailand.
Email: liangyin@gmail.com

2. Assoc. Prof. Dr. Sukanya

Buranadechachai*

Faculty of Communication Arts,
Bangkokthonburi University, Thailand.
Email: sukanyab@buu.ac.th

3. Dr. Sakdina Boonpiam

Faculty of Communication Arts,
Bangkokthonburi University, Thailand.
Email: sakdina.boon@gmail.com

Keywords:

Mobile Radio; Marketing Communication;
YueTing APP; In-Car Audio

Article history:

Received: 16/02/2024

Revised: 07/03/2024

Accepted: 18/07/2024

Available online: 28/07/2024

How to Cite:

Yingyin, L. et al. (2024). Marketing Communication for Mobile Radio in Guangdong. *Journal Dhamma for Life*, 30(3), 76-101.

ABSTRACT

This article examines the transformation and development of traditional radio in the context of "Connected Vehicles" and "Smart Integration" in China. As the Chinese smart automobile industry continues to grow, traditional FM radio is losing its influence within the in-car environment. Concurrently, the usage habits of new media by individuals are extending into this space, with a preference for apps to access news and audio content. Consequently, the transformation of traditional radio into new media formats is becoming increasingly urgent. The study focuses on the YueTing app, an audio platform under Guangdong Radio and Television Station, which launched a version tailored for the "Connected Vehicles" era in November 2023 and is currently in its promotion and brand-building phase. This research explores the national and radio station policy orientations, user needs, and motivations to understand the demand for information and audio content in the in-car environment of the "Smart Era" and to propose effective market promotion strategies. The objectives of this research were to (1) examine the development of mobile radio in Guangdong, (2) investigate audience demands within the in-car setting, and (3) develop marketing communication strategies for the YueTing app. A mixed-methods approach was utilized, involving a survey of 400 YueTing app users, determined through Cochran's (1953) sample size formula and convenient sampling, and qualitative research involving in-depth interviews with eight experts from Guangdong Radio in various positions. Key findings include: (1) The primary users of the YueTing app are aged 18-30, followed by those aged 31-45, with a preference for in-car audio products primarily for entertainment, and a desire for rich content; (2) Most users seek information about new audio products online, indicating that online publicity could effectively promote the YueTing app; (3) Users generally believe that the YueTing app meets their needs for news and traffic information, but they find the entertainment content insufficient. To align with the brand strategy of Guangdong Broadcasting Station and national guidelines, efforts should focus on enriching the app's content.

Introduction

Research Background

In 2014, with China officially elevating "media convergence" to one of its national development strategies, after a decade of media convergence development, we have transitioned from "deep integration" to the stage of "intelligent integration." Technology has become a crucial engine driving media progress, and emerging concepts like metaverse, big models, and artificial intelligence have opened up new creative possibilities, expanding the boundaries of content expression. The traditional broadcasting industry in China widely perceives the development of "Internet of Vehicles" as a crucial turning point for radio media centered around audio broadcasting in the era of intelligence. On July 30, 2023, the Radio Professional Committee of the China University Film and Television Society held its annual meeting and the 8th China Radio Innovation and Development Symposium in Guangzhou, focusing on the theme of "Traffic Broadcasting in the Internet of Vehicles Era." The development of traffic broadcasting, as a specialized channel within traditional Chinese broadcasting, holds significance and serves as a reference point against the backdrop of China's "Internet of Vehicles" development. However, it is equally important to focus on the overall development of traditional broadcasting media under the trends of "Internet of Vehicles" and "intelligent integration." Technological trends, user experiences, market demands, and other factors are diversifying audience choices, requiring traditional media to accept and actively embrace the evolving societal landscape.

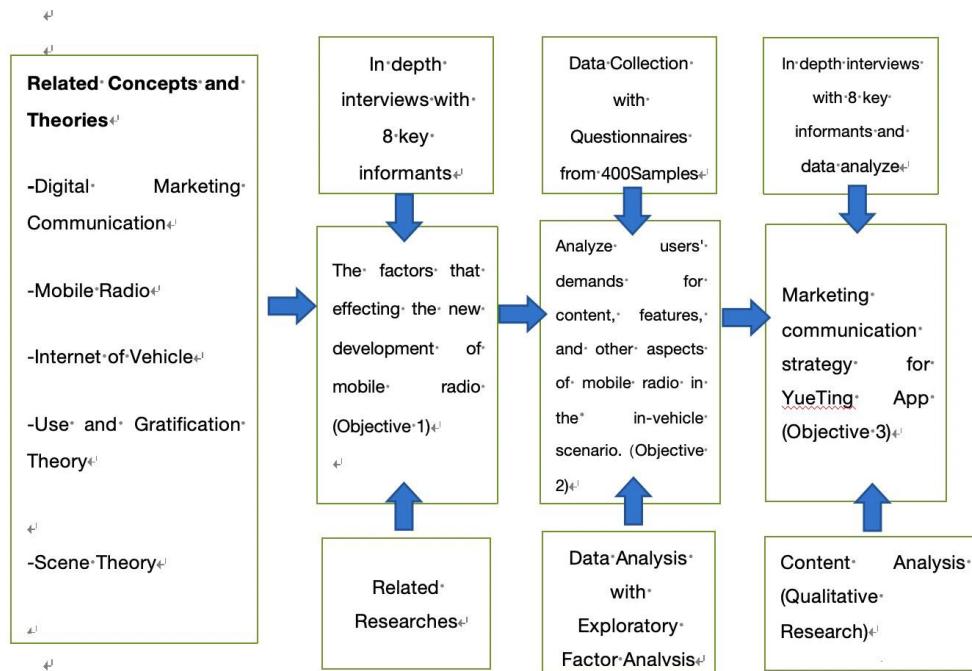
This paper concentrates on the reform and development of traditional broadcasting media in China in the era of intelligence and amid the vigorous development of China's Internet of Vehicles industry. From the perspective of traditional broadcasting media, the development of the Internet of Vehicles represents a reallocation of audiovisual resources within the in-car space among traditional broadcasters and the newly emerging commercial mobile radio stations such as Himalaya FM and Qingting FM. This paper takes the new media mobile app "YueTing App" of Guangdong Broadcasting as a case study. Based on the theories of usage and gratification, and media environment, and utilizing survey questionnaires and in-depth interviews as research methods, the paper aims to develop a market communication plan for YueTing App from the perspective of user needs, ensuring its better development in the in-car audio industry.

Significance of the Study

The development of the "Internet of Vehicles" represents another pivotal development point for traditional broadcasting in the process of media convergence. Against the backdrop of technological innovations in China's intelligent automobile manufacturing industry and the continuous development of the mobile audio market, the open rate and usage frequency of traditional broadcasting in in-car spaces have gradually declined. For traditional broadcasting to thrive, it must change its traditional operational mindset. In addition to "content is king," it must also conduct product research and development and promotion with a new media-centric "user-centric" mindset. The study focuses on YueTing App, which officially entered the in-car audio sector in November 2023, primarily providing traffic information with entertainment content as a supplementary feature, aiming to capture a larger market share in the in-car space.

On the other hand, China's commercialized mobile audio market platforms already have established business models. As a new audio product, YueTing App, as a national media entity, needs effective strategies for promotion and publicity—an aspect that has seen limited research in China. Through in-depth interviews and survey research, this paper aims to study YueTing App from the user's perspective, aligning with national policy directions, and proposing new plans for its promotion.

Theoretical Framework



Excepted Benefit

This paper focuses on the new transformations and developments of traditional Chinese broadcasting media under the backdrop of the Connected Vehicles (IoV), media intelligent integration, and the overall development of new media, guided by national policies. Using Guangdong Broadcasting Station and its affiliated new media product, the YueTing APP, as a case study, the research delves into both media-centric and audience-centric aspects, aiming to explore market promotion strategies tailored to the characteristics of YueTing APP, considering the direction of Chinese media development and user demands.

This paper anticipates the following benefits:

- 1) Analyzing the continuous transformation and integration of traditional Chinese broadcasting media in the process of technological and market demand development to make predictions about future developments.
- 2) Real-world applications of user demand in the mobile radio and mobile audio industry: The paper may research user motivations, usage demands, and expectations from YueTing APP to optimize its market communication model.
- 3) Strategic optimization: The paper will choose Guangdong Broadcasting Station's YueTing APP as a case study, conducting an in-depth analysis of its development strategies in the Connected Vehicles and mobile audio market. It aims to contribute insights into strategic

adjustments for traditional broadcasting media in the mobile audio domain, making a meaningful contribution to the broadcasting industry in Guangdong and the Greater Bay Area.

Literature Review

The main focus of this paper is to explore the market communication strategies of traditional Chinese broadcasting media in the new digital era. The relevant literature review is as below:

Marketing Communication

Marketing is the component of marketing that uses the Internet and online-based digital technologies such as desktop computers, mobile phones, and other digital media and platforms to promote products and services (Financial Times, 2015, American Marketing Association, 2016). Its development during the 1990s and 2000s changed the way brands and businesses use technology for marketing. As digital platforms became increasingly incorporated into marketing plans and everyday life (Nielsen 2016), and as people increasingly used digital devices instead of visiting physical shops (Dahlen, Micael, 2010), digital marketing campaigns have become prevalent, employing combinations of search engine optimization (SEO), search engine marketing (SEM), content marketing, influencer marketing, content automation, campaign marketing, data-driven marketing, e-commerce marketing, social media marketing, social media optimization, e-mail direct marketing, display advertising, e-books, and optical disks and games have become commonplace. Digital marketing extends to non-Internet channels that provide digital media, such as television, mobile phones (SMS and MMS), callbacks, and on-hold mobile ringtones (Techopedia, 2015). The extension to non-Internet channels differentiates digital marketing from online marketing (Warwick, 2019).

The importance of digital marketing is self-evident, and for the YueTing app, as a new media product in the transformation of traditional media, its promotional strategy is particularly crucial. As mentioned earlier, media economics categorizes the economic behavior of traditional media into a "dual selling model." Traditional media relies on the dual selling model of advertising and content for survival and development, with the competitive focus on advertising marketing and content attractiveness. The revenue model of traditional media can be summarized as "content—attention—attracting new users—advertising—conversion to purchasing power."

The current promotion strategy of the YueTing app relies on the inherent credibility of its national official media to attract users. Subsequently, it gradually cultivates user usage of the YueTing app through program content, host promotions, offline events, and other methods, completing a "user acquisition" process for a new media product. However, whether there are more optimized models to use is a question that this paper needs to investigate.

Development Process of Mobile Radio

In China, mobile radio is referred to by various terms such as online radio, mobile broadcasting, mobile audio platform, and online audio media. The international term for it is podcast. The initial form of mobile radio was established by traditional radio stations on the Internet. Online radio moved the traditional concept of radio to the web, breaking through geographical and terminal limitations for radio listeners. This allowed users to listen to their favorite radio stations while browsing web pages or shopping online. Leveraging the advantages of online communication, it transformed and optimized the broadcasting methods

and effects of traditional radio. Online radio programs can be stored on the web for an extended period, facilitating audience choices for listening and repeated playback, addressing the shortcomings of traditional radio's linear broadcasting and fleeting nature.

Broadly analyzing, whether it is mobile radio, online audio, or mobile audio, their core lies in uploading audio to the internet or a platform through technological means, allowing users to listen online or offline through different receiving terminals.

Narrowing down the analysis, they are semantically similar, but there are distinctions in terms of the disseminated content and the receiving terminals when examined more closely. This paper does not delve into detailed distinctions. For ease of understanding, in this paper, the author categorizes mobile radio based on its attributes. One category is commercial mobile radio/mobile audio platforms like Himalaya FM, Qingting FM, Lazy Audio Books, etc. This type of commercial mobile radio primarily focuses on business operations, with mature development chains for content production, diverse operations, and business models, making them favored by users. Another category is the new media model explored by traditional broadcasting during the "media convergence" process. The core of national media remains unchanged, integrating different expressions in the context of new media, enabling traditional media to better adapt to the information dissemination patterns in the new media society and meet the high demand for information in a fast-paced society.

Mobile radio is a product of the internet, and with the continuous advancement of internet technology, devices, and hardware, both its content production and dissemination models are constantly evolving. Below, the author will outline the development of mobile radio in conjunction with the development of the internet. It is worth noting that there are various ways to categorize the development of the internet, such as by decade, by major events, and the development process of internet technology may differ from country to country. However, in general, the overall stages of internet technology development are similar. In this section, the author will primarily outline the development process of "online radio" in China.

The extensive development of China's mobile audio industry began with the launch of Douban FM in 2010. Before this, the development of online radio and mobile radio could be seen as the networked evolution of traditional broadcasting. The operational model and content production of online and mobile radios were similar to traditional broadcasting, representing a new development empowered by technology and the internet. However, by 2010, it gradually evolved into two models: commercial mobile radio and traditional online radio.

Research on mobile radio in China has largely focused on the business models, content production models, and user usage patterns of commercial mobile radios. There is limited research on the transformation of traditional broadcasting into mobile radios, and such studies often revolve around strategic considerations related to national policies, achievements of specific channels or programs in media transformation, etc. The fundamental attribute of mobile radios established through the transformation of traditional broadcasting remains as media regulated by the state, providing public services, conveying party policies, and consolidating the national public opinion direction as its primary goal. Commercialization is a secondary objective. The dual nature of these entities hinders their commercial development.

The subject of this study, the "YueTing APP," is an audio product of Guangdong Radio and Television Station. However, traditional media still face significant challenges in terms of

market promotion and commercial revenue. This is an area that is less explored in existing Chinese research and constitutes a key focus of this study.

Internet of Vehicle

The Role of Media in the Internet of Vehicles (IoV) Industry

It should be clear that whether it is traditional broadcasting or mobile audio platforms, the in-car space serves as a significant channel for disseminating their content. In the era of the Internet of Vehicles, connectivity, real-time information, high-quality audio products, and emergency broadcasting constitute the advantages and focal points of traditional media in the in-car space.

The in-car space has always been a crucial listening area for traditional media, especially for niche channels like traffic broadcasting. Due to the provision of real-time road information, professional automotive knowledge, and timely news updates, it is highly favored by car owners, maintaining high listenership rates among radio frequencies at provincial and municipal levels. The development of the Internet of Vehicles is seen as a new communication channel for traditional media. Under the guidance of relevant policies in China, it manifests in the dissemination of audio and video information through in-car smart systems, product operations, and the overall development and commercial operation model as an audio-video platform. In this context, the basic attributes of media have not changed, but the development model has shifted from mass communication covering society to targeted communication within the in-car space. There is a transition from content production for public services to content creation centered around audience demands and guided by societal needs. For traditional media, this represents a new task and a new avenue for development.

Traditional broadcasting excels due to the vast number of in-car audio users in China. The enclosed nature of the in-car setting, the intrinsic association with audio, the interactivity of broadcasting, and its community-oriented communicative properties make it the preferred medium within the in-car environment. In fact, up to the present day, whether in terms of listenership or advertising revenue, traffic broadcasting targeting the mobile (in-car) audience remains a cornerstone for radio stations at various levels and across regions.

However, with the restructuring of the in-car environment by the Internet of Vehicles (IoV), the mobile listening advantage of broadcasting is facing unprecedented challenges.

Uses and Gratifications Theory

The theory employed in this paper belongs to the field of communication theory. In fact, as early as the 1940s, scholars began studying the reasons why audiences use media and the satisfaction they derive from it. H. Herzog was among the earliest scholars to examine and research media. The scholar analyzed three needs of the audience in the context of a competitive knowledge-based radio program: firstly, the need for competition psychology; secondly, the desire for acquiring new knowledge; and thirdly, self-evaluation. In 1949, B. R. Berelson researched the use and gratification of print media, identifying six forms of newspaper use: first, obtaining external information; second, a daily life tool; third, a means of relaxation; fourth, a means of gaining social prestige; fifth, a means of socializing; and sixth, purposeful reading. (Guo Qingguang, 2011)

This article utilizes the "Uses and Gratifications Theory" to explore what kind of experience users expect to gain when using the YueTing app. More importantly, in comparison to other similar audio apps, it examines what unique benefits users anticipate YueTing app to

provide them. Considering various factors such as the market and the current state of social development, whether as a national media or an audio product, our primary consideration should be the audience's level of acceptance. If the audience's needs are not met, there is a risk of being phased out by society and users.

China's national media has always been a mass media entity. Unlike the past unidirectional communication model, users in the context of new media have the autonomy to choose products they like. This implies that the right to choose lies in the hands of the public. Only by understanding the audience's needs can we create products that fulfill those needs, thereby achieving the core role and value of mainstream Chinese media in disseminating mainstream ideologies.

Media Scene Theory

The Media Scene Theory is a theoretical framework used to analyze the relationship between media and technology and specific contexts. This theory focuses on how media and technology interact with particular environments, social backgrounds, user needs, and cultural factors, shaping and influencing people's media experiences and behaviors.

The roots of this concept can be traced back to Erving Goffman's "Dramaturgical Theory," as proposed in his work "The Presentation of Self in Everyday Life." He posited that in different life situations, individuals choose to play different roles and adapt to changes in their environment through various performance behaviors. In social interactions and interpersonal communication, people often have specific expectations for their own and others' roles, and they engage in appropriate behaviors at the right times – a concept defined by Goffman as "situations." He also introduced the concepts of the "front stage" and "backstage" to differentiate between how people perform in their everyday lives. On the front stage, individuals conform to societal expectations, playing specific roles, while on the backstage, they drop the act and reveal their authentic selves. Goffman's "Dramaturgical Theory" discusses how people enact roles in various scenes.

The Media Scene Theory draws on Goffman's theoretical logic and explores the impact of "media scenes" on people's social behaviors and psychology. According to the Media Scene Theory, social scenes are merely spatial carriers for expressing language and behavior. Individuals define different scenes based on their subjective understanding and judgment, adhering to corresponding rules within these scenes and playing specific roles to adapt to the context.

Peng Lan, in her article "Scene: A New Element of Media in the Mobile Era," asserts that "the essence of mobile communication is service-based on context, that is, the perception of context and the adaptation of information (service)" (Peng Lan. 2015). Professor Peng Lan's viewpoint has inspired the author significantly. This paper primarily focuses on the transformation of traditional broadcast media in the development opportunities of the Internet of Vehicles (IoV). Corresponding to Professor Peng Lan's perspective, the essence is that in the era of smart media, broadcast media must provide adaptive information in the context of the in-car space.

Since the advent of automobiles and radio broadcasting, people have been exploring how to install radios in cars, allowing passengers to enjoy entertainment while driving or riding. The in-car space, as a specific scene, has evolved from its original function of driving or riding to become a more personalized and individualized space. According to the iResearch Consulting report "Insights and Trends of In-Car Space User Listening Behavior for 2022-2023,"

a new scene in the in-car space has emerged: post-parking stay. Due to women often facing heavier responsibilities and playing more significant roles in the family, the private in-car space becomes a quiet haven for them before entering the hustle and bustle of daily life, with 43.3% choosing to linger in this private space after parking.

It is foreseeable that the in-car space will witness more emerging usage scenarios in the future. As the Internet of Vehicles (IoV) is still in its early stages in China, the traditional broadcasting industry needs to continually optimize itself by integrating theories, market insights, policies, and operational strategies for better development in the present and future.

YueTing App

This paper takes the "YueTing App" from Guangdong Radio as a case study, focusing on the new developments of traditional radio media in China under the development of the "Internet of Vehicles" (IoV). Specifically, it explores the market dissemination model of the YueTing app in the in-car scene. Launched by Guangdong Radio in 2017, the YueTing app has gained over 40 million downloads to date. Centered around Lingnan culture, the app features a significant amount of Cantonese audio content, targeting the global Cantonese-speaking community. It is the first audio app in China that primarily disseminates content in Cantonese. While its unique language and cultural content have gained popularity among users in Guangdong Province, it has also posed a developmental bottleneck. The challenge lies in the difficulty of reaching users outside the province due to the predominant Cantonese content. Additionally, facing strong competition from commercialized audio products like Himalaya and Qingting FM, the app encounters a crisis in market development, especially with the gradual decline in the opening rate of traditional radio under the layout of China's "Internet of Vehicles."

In response to these challenges, Guangdong Radio swiftly adapted to changes and demands from the nation, society, and the market. In November 2023, they announced that the YueTing app would officially enter the Internet of Vehicles market. This initiative involves the establishment of a professional content production team and a series of public service activities for promotion, aiming to tap into the in-car audio market.

The reasons for choosing the YueTing App as the research subject are as follows:

1) As a newly introduced audio product in the Internet of Vehicles (IoV), the YueTing App is in the exploratory stage regarding its operational model, business model, user utilization, etc. It holds representative significance as a subject for study.

2) The products within the YueTing App are centered around Cantonese and Lingnan culture. The app is committed to disseminating Lingnan culture through high-quality Cantonese audio content, aiming to build a cultural ecosystem in the Greater Bay Area and reach Cantonese-speaking audiences worldwide. The research conducted in this paper is expected to contribute to the YueTing App and the promotion of Cantonese culture.

3) Guangdong Radio and Television Station holds a significant position in the history of media development in China. It has consistently been at the forefront of each media revolution, with the "Pearl River Model" centered around "innovation" becoming a hallmark in the Chinese broadcasting industry. Since the strong development of new media and the impact on traditional media, Guangdong Radio has been among the earliest to actively participate in the "integrated media" reform. It was the first to establish a radio station e-commerce mall—Hula Mall—and proposed the transformation of all radio station staff into "shop assistants" to serve enterprises and listeners. Today, in the context of the development of the Internet of

Vehicles and the integration of intelligent media, although Guangdong Radio and Television Station has entered the "Internet of Vehicles" market, its operational and business models are still in continuous exploration. As a traditional media professional, the author hopes that through this study, he can contribute to the development and transformation of Guangdong Radio and Television Station in the new era.

Objective

This paper would mainly focus on three research objectives.

- 1) to study the situation of development of mobile radio in Guangdong.
- 2) to study the audience's demand of the in-car scenery.
- 3) to guideline marketing communication strategy for YueTing APP.

Research Methodology

To find out the results, this paper would use mixed methodology, which combined quantitative research and qualitative research. In quantitative research, population was randomly choosing the audiences who used YueTing APP, totalling 400 samples. The sample size was determined by Cochran (1953), using a convenient sampling method. The tool used for collecting data was online questionnaire and SPSS for analyzing. And qualitative research used a purposive sampling with in-depth interview with 8 experts who work in Guangdong Radio as different positions.

Research Scope

The information collection regarding user usage patterns in this article is based on the survey conducted within Guangdong province. The study was carried out using a questionnaire survey, and in-depth interview, both collected in Guangdong Province, China.

Definition of terms

Marketing Communication in this research, since YueTing App is a new mobile radio product in new media, which started operation since November, 2023. It mainly focuses on branding and promote in this period, so in this research, we will more focus on its branding and promote as a new product.

Mobile Radio, the "mobile radio" studied in this paper represents a new media form explored by traditional Chinese broadcasting in the process of media integration and development. Its operational model prioritizes social benefits, emphasizing media credibility and social influence, with commercial benefits playing a secondary role.

Connected Vehicles/Internet of Vehicles (IoV), connected vehicles constitute a broad concept encompassing multiple industries and fields, which will not be extensively discussed in this paper. The focus of this paper is on the role played by traditional broadcasting media and its development direction within this context.

YueTing App, in November 2023, YueTing app officially announced its entry into the Internet of Vehicles market. Equipped with a professional content production team, the app is complemented by a series of public service activities as part of its promotional strategy to tap into the in-car audio market. This paper primarily investigates the promotion model of the YueTing app in the in-car audio market.

Result

Quantitative Research Results

Basic Information

Item	Option	Frequency	Percentage (%)
Gender	Male	245	61.25
	Female	155	38.75
Age	18-25	164	41.00
	26-35	106	26.50
	36-45	117	29.25
	56-65	13	3.25
Occupation	Public officials	53	13.25
	Freelancers	53	13.25
	Workers	120	30.00
	Unemployed	13	3.25
	Private business owners	13	3.25
	Others	148	37.00
Marriage	Single	244	61.00
	Married	130	32.50
	Others	26	6.50
Educational Background	College	65	16.25
	Bachelor	78	19.50
	Master Degree and above	257	64.25
State of Life	Live alone	135	33.75
	Live with family	160	40.00
	Live with partner	66	16.50
	Others	39	9.75
Salary per month	Under 1000 CNY	55	13.75
	1000-5000 CNY	173	43.25
	5001-10000 CNY	92	23.00
	10001-15000 CNY	53	13.25
	Above 15000 CNY	27	6.75

Item	Option	Frequency	Percentage (%)
Live in Guangdong Province	Yes	322	19.50
	No	78	80.50
Purchased cars	Yes	211	52.75
	No	189	47.25
Vehicle Type	traditional gasoline car	210	52.50
	new energy vehicle	70	17.50
	hybrid vehicle	67	16.75
	intelligent electric vehicle	27	6.75
	No car	26	6.50
Total		400	100.0

A total of 400 valid samples were collected in this survey. From the perspective of gender distribution, there is a higher proportion of male samples, accounting for 61.25%, while female samples make up 38.75%. In terms of age, the majority of respondents fall into the 18-45 age group and the middle-aged group, accounting for 41%, 26.5%, and 29.25%, respectively. Those aged 56 and above only account for 3.25%, indicating that the surveyed population is mainly composed of young and middle-aged individuals. Regarding occupation, ordinary employees have the highest proportion at 30%, followed by public servants and freelancers at 13.25% each, and those with unclear occupations at 37%. Business owners and individuals account for 3.25%. In terms of education, those with a master's degree or above constitute the majority at 64.25%, while those with a college and undergraduate degree make up 16.25% and 19.5%, respectively. In terms of living arrangements, the majority live with their families (40%), followed by those living alone or with partners. The monthly average income is mostly between 1000-5000 yuan, accounting for 43.25%. A majority of the samples, 80.5%, are from outside Guangdong Province, with only 19.5% from within the province. 52.75% of the samples own private cars, and nearly 70% have traditional gasoline cars or new energy vehicles.

Analyzing the sample characteristics, the random survey indicates that the user base of the YueTing app primarily consists of young and middle-aged individuals with higher education levels and moderate family monthly incomes who are local car owners. As an audio mobile app, YueTing can effectively reach its audience through this group of young and middle-aged car owners. They are more likely to be early adopters of innovative products and are particularly interested in in-car entertainment services. Higher education and income levels make them more concerned about factors such as content quality and user experience, posing requirements for app development and optimization. Non-local samples contribute to understanding the preferences and needs of users across different regions. Overall, the sample selection in this survey is representative.

Motivation and Needs Analysis

Item	Option	Frequency	Percentage (%)
When using news or audio mobile apps, what factor do you value the most?	Technological advancement	81	20.25
	Excellent user experience	280	70.00
	Subscription model	26	6.50
	People around me are using this app	13	3.25
When using online audio apps, what factors do you value the most?	Rich and novel content	55	13.75
	Good user experience	107	26.75
	Fast update speed	211	52.75
	Excellent interactive experience	27	6.75
The primary purpose for using online audio apps is?	Entertainment	201	50.25
	Information Retrieval	79	19.75
	Killing Time	79	19.75
	Social Interaction	41	10.25

Motivation and Needs Analysis

Regarding factors considered when using news and audio mobile apps, 70% of the samples prioritize content quality, 20.25% value user experience the most, and only 6.5% and 3.25% of the samples focus on business models and user stickiness. This indicates that content quality is the decisive factor in attracting users, and a good user experience is also crucial.

Regarding the most important factors in attracting users, 52.75% of the samples chose rich and unique content, 26.75% believe user experience optimization is most important, and only 13.75% and 6.75% of the samples selected extensive advertising promotion and technological innovation. This also emphasizes the importance of content, consistent with the results of the previous question.

In terms of the main purposes for choosing to use a network audio app, entertainment and leisure (50.25%), information acquisition (19.75%), and time-passing (19.75%) are the top three options for the samples, with social interaction (10.25%) coming after. This indicates that the use of audio apps primarily satisfies users' entertainment, information, and time-passing needs.

Demand Characteristics Analysis

From the above data, it can be observed that rich and unique content quality is the decisive factor in attracting users to choose and use mobile audio apps, which is the primary

dimension developers should consider. Simultaneously, optimizing user experience is also essential for increasing user retention. In comparison, technological innovation and business models are not the aspects users are most concerned about. The main user motivations are entertainment and leisure, information acquisition, and time-passing, and meeting these needs should be considered in content development.

In product design and user operations, priority should be given to thinking from the perspectives of content and user experience to better stimulate user interest and enhance platform value.

Multiple-choice question analysis

Assuming the survey sample size is n , and there are m options available for selection, with each respondent choosing an average of k options ($k \leq m$). The total number of times an option is selected is $n*k$.

For a specific option i , chosen by y_i respondents, the response rate for that option is defined as the ratio of the times the option is selected to the total number of selections, expressed by the formula:

$$\text{Response Rate}_i = y_i / (n*k)$$

The popularity rate for option i is defined as the proportion of the sample size that chose that option to the total sample size, expressed by the formula:

$$\text{Popularity Rate}_i = y_i / n$$

For example, with a sample size of $n = 100$ people, 5 options $m = 5$, and an average of 3 options chosen $k = 3$, the total number of selections is $100*3 = 300$. If a particular option is chosen by 60 people, then the response rate $R = 60/300 = 20\%$, and the popularity rate $P = 60/100 = 60\%$.

The response rate reflects the relative proportion of the option in the overall total, while the popularity rate reflects the absolute coverage within the entire sample.

Challenges Faced by Traditional Radio Stations

Item	Responses (n)	Response Rate	Popularity Rate (n=400)
Audience Attrition	348	34.25%	87.00%
Single Profit Model	229	22.54%	57.25%
Outdated Technology	213	20.96%	53.25%
Intensified Competition	213	20.96%	53.25%
Other	13	1.28%	3.25%
Goodness of Fit Test	$\chi^2=285.437$	$p=0.000$	-

Table 1: What do you think are the main challenges currently faced by traditional radio stations? (Multiple choice)

From the research results, the most significant challenge facing traditional radio stations is audience attrition, with the highest response rate and popularity rate being 34.25% and 87%, respectively. This indicates that nearly 90% of the samples consider audience attrition as

the primary threat to radio stations. Following closely are the challenges of a single profit model, outdated technology, and intensified industry competition. These three challenges exhibit similar response rates and popularity rates, all hovering around 20% response rate and over 50% popularity rate, highlighting their substantial impact as well.

This reveals that traditional radio stations are under significant pressure from various fronts. In the wave of digitization, they are experiencing severe audience attrition, particularly as younger demographics turn to online media for information and entertainment. Simultaneously, the singularity of their business models limits profit potential, making it challenging to adapt to the rapidly changing technological and competitive landscape. These challenges are intertwined, delivering a multi-faceted blow to traditional radio and compelling them to embark on a transformational journey.

Measures Traditional Radio Stations Should Take to Address These Challenges

Item	Responses (n)	Response Rate	Adoption Rate (n=400)
Strengthening Network Layout	215	21.72%	53.75%
Launching Mobile App Products	267	26.97%	66.75%
Implementing Organizational Reform	188	18.99%	47.00%
Increasing Content Innovation	307	31.01%	76.75%
Other	13	1.31%	3.25%
Goodness of Fit Test	$\chi^2=258.869$	p=0.000	-

Table 2: What measures do you think traditional radio stations should take to address these challenges? (Multiple choice)

Research results indicate that the most prioritized measure that the sample considers traditional radio stations should take is to increase content innovation, with a response rate and popularity rate of 31.01% and 76.75%, respectively. This strongly demonstrates that content remains the decisive factor in attracting users to radio. Subsequently, launching mobile app products, strengthening network deployment, and organizational restructuring are also highly responded to and popular measures. These data vividly reflect the urgency of digital transformation and the importance of mobile construction.

It is evident that traditional radio stations must keep pace with digitization and mobile trends. By continuously innovating through technological means and content, they can revitalize their service scenarios, communication channels, and business models, thereby gaining new impetus for survival and development. For example, creating high-quality mobile apps and actively expanding user bases, or engaging in content innovation and organizational restructuring are crucial steps. These measures are pivotal in driving their transformation.

Promotional Measures for Yueling App

Item	Responses (n)	Response Rate	Popularization Rate (n=400)
Large-scale Event Promotion	161	20.00%	40.25%
Influencer/Internet Celebrity Endorsement	242	30.06%	60.50%
Promotion through News Media Coverage	187	23.23%	46.75%
Mobile Advertising Placement	202	25.09%	50.50%
Other	13	1.61%	3.25%
Goodness of Fit Test	$\chi^2=191.441$	p=0.000	-

Table 3: In the future, what promotional measures should audio mobile apps focus on?
(Multiple choice)

From the research results, the samples believe that the top two promotional measures audio mobile apps should adopt in the future are influencer/Internet celebrity endorsements and mobile advertising placement. The former has the highest response rate and popularity rate, reaching 30.06% and 60.5%, respectively, while the latter is slightly lower at 25.09% and 50.5%. Following these are large-scale event promotions and promotions through news media coverage. This indicates that celebrity endorsements and mobile advertising will be the most direct and effective means of communication.

These data suggest that, to expand the influence of audio mobile apps, it is crucial to leverage the star effect of new media, mobilize various influencers and self-media for word-of-mouth promotion. Simultaneously, through precise mobile advertising placement, coverage of a broader range of potential users can be achieved. The combination of online and offline strategies is the optimal approach.

Specific promotional recommendations can include:

1. Collaborate with various influencers and self-media hosts through customized partnerships.
2. Establish a user system that invites registration through influencer endorsements to achieve secondary dissemination.
3. Utilize big data for precise mobile advertising placement.
4. Occasionally organize offline events to enhance brand influence.

Most Preferred Types of Online Audio Apps

Item	Responses (n)	Response Rate	Adoption Rate (n=400)
Music App	201	40.94%	50.25%
Audiobook App	211	42.97%	52.75%
Radio Live App	52	10.59%	13.00%
Podcast App	27	5.50%	6.75%
Other	0	0.00%	0.00%
Total	491	100%	122.75%
Goodness of Fit Test	$\chi^2=408.745$	p=0.000	-

Table 4: Which types of online audio apps do you use the most? (Multiple choice)

From the research data, it is evident that the two most frequently used types of online audio apps in the sample are Audiobook Apps and Music Apps. Audiobook Apps have the highest response rate and popularity rate, reaching 42.97% and 52.75%, respectively. Music Apps closely follow, with a response rate and popularity rate of 40.94% and 50.25%, respectively. This indicates that these two app categories collectively dominate users' usage time and represent the primary types of audio apps.

In comparison, Radio Live Apps and Podcast Apps have lower usage rates. This indicates that in the competitive landscape of audio apps, users prefer audiobooks and music entertainment as mainstream choices. This preference is likely associated with the richer content and diverse formats offered by these two types of products.

The most emphasized factors when using online audio apps

Item	Responses (n)	Response Rate	Adoption Rate (n=400)
Rich and Novel Content	254	28.70%	63.50%
Good User Experience	255	28.81%	63.75%
Fast Content Updates	214	24.18%	53.50%
Excellent Interactive Experience	162	18.31%	40.50%
Other	0	0.00%	0.00%
Goodness of Fit Test	$\chi^2=253.876$	p=0.000	-

Table 5: When using online audio apps, what factors do you value the most?

(Multiple choice)

From the research results, it is evident that users prioritize two factors the most when using online audio apps: having novel and rich content, and enjoying a good user experience. These two factors share the highest response rate and popularity rate, both standing at 28.7% and 28.81%, and 63.5% and 63.75%, respectively. This indicates that content and user experience are dual considerations of paramount importance to users. Subsequently, the emphasis on update speed and interactive experience is relatively lower.

Once again, this highlights that the key to attracting users to use audio apps lies in a combination of rich content and a satisfying user experience. Users desire fresh and diverse content while enjoying a smooth and seamless operational experience. Additionally, the frequency of content updates and support for social interaction are also deemed important. Relying solely on either content or experience is insufficient.

Qualitative Research Results

For the interview part, the author invited eight individuals from Guangdong Radio and Television Station, professionals in the broadcasting industry, and university teachers for one-on-one in-depth interviews. The interviews were conducted in an unstructured format, with the main topic being "The Development Status of Traditional Broadcasting Media in the Context of the Development of Connected Vehicles and Intelligent Integration." The interviews took place through various formats, including face-to-face meetings, one-on-one online conferences, and voice interviews. Data collection for the interviews occurred from August 1, 2023, to October 31, 2023, while the transcription and analysis of interview data were conducted from November 1 to November 10, 2023. The information of the interviewers are as below:

Name of Interviewer	Occupation
Mr Lu Minhua	Director of Traffic Voice Channel, Guangdong Radio and Television Station:
Mr Xue Hui	Technical Department Head of Guangdong Broadcasting and Television Traffic Radio Channel
Ms Feng Jieping	Senior Reporter of Guangdong Radio and Television Station, City Voice Channel
Ms Guo Xiaojie	Director of Traffic Voice Channel, Guangdong Radio and Television Station
Mr Chen Zilong	Guangdong Radio and Television Station "Hula Mall" Operations Team Leader
Mr Ji Rui	Head of Operations for the Pearl River Economy Channel's Official Account at Guangdong Radio and Television
Mr Dai Jianping	Dean of the School of Media and Arts, Guangzhou Huali College
Mr Wu Dong	Director of the Department of Journalism and Communication, Guangzhou Xinhua College

After the in-depth interview with the experts, it could be concluded into the opinions as below.

1) National Policy Orientation

Traditional Chinese radio, as a state media outlet and the voice of the Communist Party, disseminates the Party's ideology.

Traditional Chinese radio, functioning as a state media outlet and the voice of the Communist Party, holds significant advantages in terms of authority, credibility, emergency response, and public service. It plays a crucial role in information dissemination, Party propaganda, emergency services, and public education, making positive contributions to the stability and progress of Chinese society.

2) National Support for the Development of In-Car Audio Industry

On September 14, 2023, the State Administration of Radio and Television, the Ministry of Industry and Information Technology, and the State Administration for Market Regulation of China jointly issued the "Notice on Further Strengthening the Management of In-Car Audio-Visual Systems". The notice explicitly states that in-vehicle audio-visual systems are crucial channels for the general public to understand the Party's and the country's major policies, as well as to access news and entertainment information. In recent years, with the continuous development of car networking technology, intelligent connected vehicles have begun to incorporate network audio-video receiving modules on the basis of in-car wireless broadcasting reception terminals, continuously enriching the forms of communication and audio-visual consumption scenes. However, certain irregularities in the service behavior of some in-car audio-visual service providers have also emerged.

3) Steady Development and Significant Growth Potential in China's Audio Industry

In recent years, China's audio industry has undergone rapid development, showcasing robust potential and significant growth opportunities. The Chinese audio industry benefits from the growing willingness of users to pay for content. According to iResearch's "2023 China Network Audio Industry Research Report," over 80% of users are willing to pay for high-quality audio content to enjoy richer content and higher-quality experiences. Meanwhile, paid content such as knowledge-based subscriptions and audiobooks is also well-received by users. This contributes to the industry's sustainable revenue stream, enabling platforms to offer more high-quality content and services.

4) Commercial Market Development Matures, Difficulty for New Products to Seize Market Share

Existing commercial radio stations have accumulated a large number of loyal listeners. Major platforms such as Himalaya FM have established a broad user base, claiming a 73.5% market share as of 2022. These users are accustomed to listening to their favorite programs and content on these platforms. They may have already developed loyalty to a specific platform, making it challenging to easily change their listening habits. This implies that attracting these loyal listeners and capturing market share will become highly challenging for new products.

5) Social and Cultural Aspect

Traditional media also plays a crucial role in cultural inheritance, livelihood issues, and education.

Traditional media such as television, radio, and newspapers not only provide entertainment programs and news coverage but also convey cultural values and educational content. For instance, historical documentaries and cultural programs broadcasted on television contribute to the inheritance and promotion of Chinese culture. Newspapers and magazines offer in-depth analysis and commentary, aiding the audience in better understanding complex societal issues. Lifestyle programs, popular for assisting the audience in solving various life challenges, have gained significant popularity. The radio program "People's Livelihood Hotline" on Guangdong Radio and Television Station's Pearl River Channel has become a standout among broadcasting programs in Guangdong province.

6) Production Advantages

Traditional media holds a dominant position in the production of mainstream ideologies and high-quality content.

Traditional Chinese media has consistently held a leading role in the production of mainstream ideologies and high-quality content. This advantage is not only evident in the widespread influence of traditional media but is also reflective of its crucial role in social information dissemination and opinion guidance. This section will explore the advantages of traditional media in these two aspects and analyze its role in the media landscape of China.

7) Traditional media plays a crucial role in shaping mainstream ideologies.

China's traditional media, including television, radio, and newspapers, has accumulated rich resources and influence over its long-term development. These media outlets typically have a broad audience, especially in rural and remote areas, where traditional media remains a primary source of information. As a result, these media can effectively convey mainstream ideologies and guide public perspectives and values. Through regulation and guidance from regulatory and propaganda agencies, the government can often promote desired policies and ideologies through traditional media. This underscores the vital role of traditional media in maintaining social stability and shaping national identity.

8) Traditional media holds a significant advantage in producing high-quality content.

Due to their rich resources and experience, traditional media outlets can invest more time and personnel in in-depth reporting, investigations, and the production of high-quality news, documentaries, and distinctive programs. These media typically boast an experienced team of journalists and editorial departments capable of exploring complex issues from various perspectives. As a result, the reporting from traditional media is often more objective and thorough, providing comprehensive and reliable information to meet the audience's knowledge needs.

Discussion

In this section, we delve into the findings derived from both the quantitative and qualitative methodologies employed in this research. This mixed-method approach allowed for a comprehensive understanding of the impact and efficacy of YueTing App's marketing communication strategies, particularly in the context of the in-car audio market within Guangdong Province, China.

Quantitative Analysis

The quantitative data, gathered through an online questionnaire distributed to a sample of 400 YueTing App users, provided insight into user demographics, usage patterns, and perceptions of the app's branding and promotional efforts. The sample size, determined using Cochran's formula (1953) and a convenient sampling method, ensures that the findings are statistically significant and reflective of the broader user population.

User Demographics and Usage Patterns

The survey results indicated a diverse user base in terms of age, gender, and occupation, highlighting YueTing App's broad appeal. Most users fell within the 18-35 age bracket, with a nearly equal gender distribution. This demographic trend suggests that YueTing's marketing strategies effectively target young, tech-savvy individuals who are likely early adopters of new media technologies (Ismail, 2021).

Perceptions of Branding and Promotion

Users generally perceived YueTing App's branding as innovative and modern, aligning well with the app's positioning as a cutting-edge mobile radio service. The promotional strategies, including public service activities and targeted advertising, were seen as effective in raising brand awareness and engagement (Amarjyoti, 2021). SPSS analysis of user responses revealed a positive correlation between the app's promotional efforts and user satisfaction, indicating the success of these strategies in fostering a favorable brand image.

Qualitative Insights

The qualitative component of the study involved in-depth interviews with eight experts from Guangdong Radio, selected through purposive sampling. These interviews provided a deeper understanding of the strategic decisions behind YueTing App's marketing communication and its integration into the broader media landscape.

Expert Perspectives on Marketing Communication

The experts highlighted several key factors contributing to the app's successful market entry. First, they emphasized the importance of leveraging traditional broadcasting strengths, such as media credibility and social influence, to build trust and reliability in the new digital format (Baiguoshan, 2016). This strategic approach aligns with the operational model prioritizing social benefits over commercial gains.

Challenges and Opportunities

Interviewees also discussed the challenges YueTing App faces, particularly in differentiating itself within the competitive in-car audio market. However, they identified significant opportunities for growth through continued innovation and expansion of content offerings, especially in integrating IoV technology. The app's focus on public service activities

was praised as a unique and effective promotional strategy, enhancing its social impact and community engagement (Cang, 2019).

Synthesis of Findings

Combining quantitative data with qualitative insights provides a holistic view of YueTing App's market positioning and user reception. The data suggests that while the app has successfully established a strong brand presence, ongoing efforts are needed to maintain and expand its user base. Specifically, the app should continue to innovate in content production and explore further integration with IoV technology to stay ahead of competitors (AniruddhaR & Sambrani, 2018).

Moreover, the emphasis on social benefits and media credibility should remain central to YueTing App's operational model, as these factors significantly contribute to user trust and brand loyalty (People's Daily, 2023). By balancing these elements with strategic promotional activities, YueTing App can sustain its growth and enhance its influence in the rapidly evolving mobile radio and in-car audio markets.

Conclusion

This study employed a mixed-methods approach, combining quantitative and qualitative research methodologies. The quantitative research aimed to analyze the user profile of the YueTing app, including their preferences for mobile audio product selection, usage habits in in-car scenarios, and other relevant factors.

Qualitative research, relying on in-depth interviews and literature reviews, focused on obtaining insights into the key factors influencing the transformation of traditional broadcasting. Through interviews with professionals from Guangdong Radio and relevant academic institutions, the study aimed to identify crucial factors impacting the transition and conducted a detailed analysis from perspectives such as national policies and the overall development of radio.

The formulation of market promotion strategies involves various factors. In this research, a dual approach was taken, examining both the internal development strategies of the YueTing app and external factors related to user needs. The goal is to identify optimal entry points for promoting the development of Guangdong Radio and Television Station and the YueTing app in the new era.

Conclusion for Research Objective 1:to study the situation of development of mobile radio in Guangdong

According to the opinions of the interviewers, we could find out the situation of development of YueTing APP as follow:

- 1) Adhere to the rule that content is king.
- 2) Strengthen the development of the new media segment, with a particular emphasis on enhancing the awareness of new media among operators.
- 3) Emphasize "user demand," actively understanding various aspects of user needs, and moving away from the "unidirectional broadcast" model for programs.

4) Ensure the quality of news information, prioritize social benefits, with commercial benefits as supplementary. While meeting social benefits and public services, explore diverse channels for commercial revenue.

Conclusion for Research Objective 2: to study the audience's demand of the in-car scenery

From the results of interviews with 400 survey respondents, and the in-depth interview, it can be observed that the current user base of YueTing app primarily consists of young and middle-aged individuals with higher education levels and moderate family monthly income, mainly local car owners. This aligns with the characteristics of potential users targeted for YueTing app promotion. As an audio-oriented mobile app, YueTing app can effectively reach this user group of young and middle-aged car owners, who are more likely to be early adopters of innovative products and are more interested in in-car entertainment services. Higher education and income levels also imply a greater emphasis on factors such as content quality and user experience, posing specific requirements for app development and optimization. Non-local and local samples contribute to understanding the preferences and needs of users across different regions. Overall, the sample selection for this study demonstrates good representativeness.

In considering factors for using news and audio mobile apps, 70% of the samples prioritize content quality, while 20.25% emphasize user experience. Only 6.5% and 3.25% of the samples focus on business models and user stickiness, indicating that content quality is the decisive factor in attracting users, and good user experience is also crucial.

Regarding the most important factors in attracting users, 52.75% of the samples choose rich and unique content, 26.75% believe user experience optimization is most important, and only 13.75% and 6.75% of the samples select extensive advertising and technological innovation. This highlights the importance of content, consistent with the results of the previous question.

In terms of the main purposes for choosing to use network audio apps, entertainment (50.25%), information retrieval (19.75%), and passing time (19.75%) are the top three options for the samples, with social interaction (10.25%) following. This indicates that the use of audio apps primarily meets users' needs for entertainment, information, and time passing.

Demand Characteristic Analysis

From the above data, it can be seen that rich and unique content quality is the decisive factor in attracting users to choose and use audio mobile apps, which is the primary dimension developers should consider. User experience optimization is also important and can enhance user stickiness. In comparison, technological innovation and business models are not the aspects users are most concerned about. The main motivation for users is entertainment, information retrieval, and passing time, and these needs should be considered in content development.

In product design and user operations, priority should be given to thinking from the perspectives of content and user experience to better stimulate user interest and enhance platform value.

Research results show that the most prioritized measure traditional radio stations should take, according to the samples, is to increase content innovation, with response rates and popularity rates at 31.01% and 76.75%, respectively. This fully demonstrates that content remains the decisive factor in attracting users to radio. Following that are the launch of mobile app products, strengthening network layout, and organizational reform, with relatively high response rates and popularity rates. These data reflect the urgency of digital transformation and the importance of mobile construction.

It can be seen that traditional radio stations must keep pace with digitization and mobility, continuously innovating through technological means and content creation, expanding and upgrading their service scenarios, communication channels, and business models to gain new survival and development momentum. For example, creating high-quality mobile apps and actively expanding user bases, or engaging in content innovation and organizational restructuring. These measures are crucial for driving their transformation.

Conclusion for Research Objective 3: to guideline marketing communication strategy for YueTing APP.

Analyzing the survey data and results from various sections, and combining with the result of in-depth interview, the following approaches can be suggested for the promotion of YueTing app:

- 1). Emphasize compatibility with the in-car environment and ease of use. Develop car-specific devices or customized interfaces, simplify operation steps, and enable users to listen to broadcasts without taking their eyes off the road. This is a fundamental usability requirement. Regularly iterate and update to address any usability obstacles.
- 2). Provide rich and unique content. This is a decisive factor in attracting users. Collaborate with well-known musicians, podcast hosts, etc., and use user demand data to introduce personalized program lists to meet diverse needs.
- 3). Enhance user stickiness by on line and off line events. Organize offline events to gather user groups, build online communities to facilitate interaction, and use gamification and reward systems to foster user emotional attachment.

Recommendations

Media convergence in China has been developing for 10 years, with its core principle being the transformation of traditional media from content production, operational models, and communication methods. It must change the past one-way communication model to deliver news information and guide public opinion in the most widely used and easily accepted way. China's national media adheres to the leadership of the country, disseminating high-quality news information, documentaries, performances, interviews, and other cultural programs. Regardless of the medium, whether it is radio, television, newspapers, or the current new media (apps, online, etc.), the core of content production remains unchanged. What changes is that creators must adapt to new media characteristics and adjust the form and operational thinking of content accordingly.

In the process of media convergence in China, many excellent cases have emerged, but there are also many radio and television stations that have struggled due to operators not keeping up with development needs. It should be realized that social development does not

stop, and in recent years, technological development has accelerated. Media practitioners must continuously learn to keep up with the times.

Key Strategies

1. Adhere to the core of national ideology and produce high-quality content.
2. Focus on users, constantly understand market and user needs, and optimize operational and marketing strategies in a timely manner.
3. Leverage the advantages of traditional media, such as radio stations studied in this paper, which excel in emergency and real-time news dissemination. The core feature of sound is the preferred method for in-car space communication. However, with the increasingly diverse user demands today, the choice of in-car audio goes beyond news and music, with different degrees of demand for audiobooks, stories, courses, etc. As a traditional broadcaster, it needs to adapt to this development to avoid audience loss.
4. Promote and advertise own platforms through various channels and diversify to attract more new users. Own platforms are a product of China's media convergence. From the perspective of radio and television station operations, only the operation of their own platform can better obtain user profiles and data, making subsequent development smoother, and it is necessary for both platform promotion and revenue generation.
5. Traditional media relies on its own credibility to attract user attention, but in the era of new media, people's time is fragmented, and information is abundant. How to use the least amount of time to obtain the most useful information is a consideration for both users and operators.

In addition, new media products continue to emerge like mushrooms after rain. Relying solely on the credibility of traditional media to attract audiences is not enough to support the current stage of development. Therefore, it is necessary to research a set of strategies suitable for the promotion and publicity of state-owned media networks.

In summary, media development is unstoppable, with new developments and challenges awaiting each period. As a crucial guardian of national ideology and public opinion, media should be at the forefront of research in the use of communication media, application of new technologies, and study of communication paths.

References

Amarjyoti, A. (2021). The impact of market research on digital marketing.

American Marketing Association. (2016, April). The four faces of digital marketing. <https://www.ama.org/the-four-faces-of-digital-marketing/>

AniruddhaR, A., & Sambrani, V. N. (2018). A study on influence of sports celebrity advertisement over the perception and buying decision of the consumer – A review.

Baiguoshan. (2016). Mobile radio: The rising star in the "Internet+" era. *Shanghai Informatization*, (05), 19-23. <https://doi.org/CNKI:SUN:SHXX.0.2016-05-008>

bowie.net. (2008, September 26). A brief history of Virgin Radio. <https://www.bowiewonderworld.com/philgil.htm>

Cang, H. T. (2019). Research on community communication of mobile network radio (Master's thesis, Liaoning University). Retrieved from <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202001&filename=1019201720.nh>

Cerf, V., & Huddle, S. (2002, July 9). Internet radio communication system. US Patent 6418138.

Dahlen, M. (2010). *Marketing communications: A brand narrative approach*.

DiNucci, D. (1999). Fragmented future. *Print*, 53(4), 32. <https://dl.acm.org/doi/10.1145/324133.324142>

European Broadcasting Union (EBU). (2005, October 26). An introduction to internet radio. <https://www.ebu.ch/publications/introduction-to-internet-radio>

Financial Times. (n.d.). Definition of digital marketing. <https://www.ft.com/content/e8509f2a-7c56-11e2-bf52-00144feabdc0>

Graham, P. (2005, November). Web 2.0. <http://www.paulgraham.com/web20.html>

Guo, Q. (2011). *Communication studies tutorial*. Renmin University of China Press.

Ismail, M. (2021). Digital marketing 5-generation technology and its acceptance behavior.

Kiraly, J. (2001, June 19). Method and system for implementing an internet radio device for receiving and/or transmitting media information. US Patent 6249810.

Kshetri, N. (2022, March 1). Web 3.0 and the metaverse shaping organizations' brand and product strategies. *IT Professional*, 24(2), 11–15. <https://doi.org/10.1109/MITP.2022.3157206>

Lewis, P. H. (1995, February 8). Peering out a 'Real Time' window. *The New York Times*. <https://www.nytimes.com/1995/02/08/business/peering-out-a-real-time-window.html>

museum.media.org. (n.d.). Internet talk radio. Archived from the original on April 26, 2010. <http://museum.media.org/radio/>

Nielsen. (2016, January 20). Connected commerce is creating buyers without borders. <http://www.nielsen.com/us/en/insights/news/2016/connected-commerce-is-creating-buyers-without-borders.html>

O'Reilly, T. (2005, September 30). What is Web 2.0. O'Reilly Network. <https://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html>

People's Daily. (2023, July 15). A decade of integration, dedication to far-reaching goals – Overview of the 2023 China Media Conference. https://www.samr.gov.cn/zw/zfxxgk/fdzdgknr/rzjgs/art/2023/art_b75e0f72f71c447c95d6331e95744ee4.html

Quittner, J. (1995, May 1). Radio free cyberspace. *Time*. <http://content.time.com/time/magazine/article/0,9171,982188,00.html>

Rose, R. D. (2002, May 8). Connecting the dots: Navigating the laws and licensing requirements of the internet music revolution.

Sametz, K., Randall, N., & Lepage, Y. (1996). *MBONE: Multicasting tomorrow's internet*. John Wiley.

Techopedia.com. (n.d.). What is Web 1.0?

<https://www.techopedia.com/definition/27960/web-10>

thefreelibrary.com. (n.d.). Net.radio, AudioNet & ASCAP sign licensing agreement.

<https://www.thefreelibrary.com/Net.radio,+AudioNet+%26+ASCAP+sign+licensing+agreement.-a019510009>