

Paying for Ears: A Study on the Impact of Podcast Platform users' Willingness for Knowledge Payments

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Abstract:

With the development of the Internet era, the ways people receive information are becoming more and more diversified. While pursuing the breadth of information, people began to value the purity and directness of information, which directly led to the rapid development of podcasts and their carrier platforms. Perceived value is the overall value of a commodity or service that consumers feel subjectively. Perceived convenience covers a lot of aspects, which can be summarized as the total amount of money or energy consumed when consuming a certain product or service. These two important indicators are used by academics to measure consumer satisfaction and their overall impression of a product. Therefore, based on the characteristics of podcast platform, such as rich choices and one-way information, this paper introduces the concept of convenience perception through the theory of perceived value, and uses TAM model as the carrier to study the impact of value and convenience perception on consumers' willingness to consume paid programs on podcast platform.

Keywords: Podcasting, knowledge payment, perceived value, perceived convenience, TAM model

1. Research background and current status

Since the beginning of the vigorous development of the Internet, modern information technology and communication methods have narrowed the distance between people and caused earth-shaking changes in people's access to information. In recent years, with the gradual maturity of the Web2.0 era, people's consumption patterns have also developed towards "diversification," and the brand marketing model in the market has also expanded accordingly. [1] While modern technology has opened a new window for people to obtain information, it has also led to an excessive and uneven quality of Internet information, which has created barriers for people to obtain accurate, intuitive, and pure information to varying degrees. In this context, as a derivative of traditional radio, Podcast came into existence. Podcast is a type of audio media based on the Internet platform and distributed using RSS technology, which can be continuously subscribed to and tracked by users. Compared with the one-way communication mode of traditional radio stations, podcasting programs provide users with more choices and subjective initiative. Since its introduction in 2004, their quantity and quality have increased year by year, the audience has become more extensive, and their influence cannot be underestimated. Accordingly, different types of podcasting platforms have

emerged. Following the "low period" that began in 2009, the epidemic in 2020 presented a new development opportunity for several podcast platforms: comprehensive podcast platforms such as Himalaya, Litchi FM, and Small Universe APP have brought podcasts back to people's vision. [2].

Wu Lihua and Xu Bifang believe that knowledge payment is a process in which consumers purchase knowledge or information packaged and sorted by content creators (such as bloggers or authors) on knowledge sharing platforms [3]. Different from traditional media, the creation threshold and cost of podcast platform are lower, and the content released is more life-based. Users can choose the content they are interested in to listen to. The rich program content, multi-terminal, digital and personalized features of such platforms make them a new driving force for the development of "ear economy" in the mobile hearing era, and the commercialization of podcasts is becoming an irresistible trend.

2. Literature review and research hypothesis

2.1 Literature Review

2.1.1 Definition of perceived value

The concept was first proposed by Peter Druck in 1954.

Perceived Value, also known as Customer Perceived Value, is one of the common factors that affect consumers' judgment on products and purchase intention. To put it simply, different from objective value (that is, the value of the commodity or service itself), perceived value represents the overall subjective impression of consumers on a commodity or service based on the consideration of basic costs and benefits [4]. The perceived value is not only limited to the product itself, but also includes the additional value added by the seller to the product, such as a good purchase guidance experience, meticulous after-sales service, and the quality and amount of free gifts. The reason why the perceived value is directly linked to the purchase intention of customers can be explained by Selective Attention - in today's society, a large number of complex "fragmented" information surrounds people's lives, so people tend to focus on the part of information that is related to their own needs when processing information. A large number of studies have proved that there is a positive correlation between the perceived value and the user's evaluation of a consumption behavior: Li Xin concluded through research that the usefulness of consumers' perceived information (perceived value) on intangible cultural heritage products significantly and positively affects their satisfaction with intangible cultural heritage products [5]. Li Xiaoyan came to the conclusion that improving customers' perceived value is an important part of enhancing their purchase intention for electric vehicles [6]. Liu Xiaoyun and Zhang Xue came to the conclusion that consumers' perceived value of goods has a significant positive impact on their consumption intention in live-stream shopping [7]. Based on the scenario of "short video + live broadcast" model, Fan Ming and Tian Jixu proposed and verified the hypothesis that the characteristics of bloggers and the quality of comments (perceived value) have an impact on consumers' willingness to buy products [8]. From the perspective of the "ear economy", the perceived value of the podcast platform's paid products includes (but is not limited to) the quality of the audio program, the quality of the audio originator's previous programs, the subsequent use experience of the player or playback platform, and after-sales service. As mentioned above, the perceived value index is widely recognized by the academic community, but there is still a large research gap on the relationship between perceived value and podcast platform (podcast platform users' willingness to pay for podcast content knowledge). In other words, research on consumer perceived value of podcast platforms can provide references for paid podcasts to enter the most efficient mode of dissemination and development.

2.1.2 Definition of perceived convenience

Perceived convenience refers to the degree to which a

customer or consumer perceives the time or energy consumed by a particular consumption. Numerous studies have proved that the higher the perceived convenience customers feel for a product or service, the higher their satisfaction will be, thus driving up their consumption intention. According to Li Qiao, perceived convenience of service can be divided into five dimensions, namely decision-making convenience, accessibility convenience, transaction convenience, benefit convenience and after-sales convenience, which directly affect customers' evaluation of service (such as service quality, satisfaction and fairness) [9]. The academic community's view on the determinants of perceived convenience extends from time to the combined effects of time, comfort and simplicity. Later, some scholars suggested that psychological cost should also be included in the measurement range of perceived convenience. Summary by Hong Jiayao, Yang Wenxuan, Yao Yuan et al. : According to the definition given by the author of *Understanding Service Convenience*, perceived convenience refers to the time and energy consumers perceive to spend on the purchased or used services. It is mentioned in *Convenience: a services perspective* that convenience is an evaluation of consumers' sense of control, which comes from their management, utility and transformation of time and energy in the process of accessing and using services [10]. Simply put, the less time and energy consumers spend on a commodity transaction, the higher their willingness to consume the commodity. Wang Yun concluded that convenience of consumption is an important factor affecting consumers' consumption behavior in the study of factors affecting consumers' purchasing behavior in fresh e-commerce under the background of new retail [11]. Hong Jiayao, Yang Wenxuan, Yao Yuan et al. concluded that payment convenience and benefit convenience (perceived convenience) have a significant positive impact on consumers' satisfaction with shared charging banks and purchase intention [10]. Li Xuefei came to the conclusion that consumers' willingness to consume in restaurants and bars is significantly and positively influenced by their perception of convenience of goods and services in restaurants and bars [12]. It can be seen that the academic community has extensively studied and applied the positive relationship between perceived convenience, consumer satisfaction and consumption intention, but there is still a research gap on the existence of such a positive relationship on the podcast platform. To sum up, it is of great importance to study the impact of consumer perceived convenience on consumer willingness in the transaction of paid knowledge goods on the podcast platform. This research can provide reference for the characteristics of podcast platform, the characteristics of user portrait, and the development direction of podcast commercialization.

2.2 Research Hypothesis

2.2.1. Explanation of theoretical basis -- “TAM Model”

Wang Peipei and Chen Haitao believe that the core variables of TAM model invented by scholar Davis are perceived value and perceived convenience [13]. In this model, the two indicators of perceived value and perceived convenience mainly extend to three aspects of users’ attitude towards specific products or services, purchase intention and purchase behavior [14]. Zhang Xiaofeng, Yang Hui and Xu Huiliang used TAM model to verify that perceived value and perceived usefulness have a positive impact on consumers’ willingness to use self-service vending machines [15]. In his study on mobile medical users’ willingness to use apps for elderly patients, Fu Meiyu used TAM model to confirm the mediating influence of consumer attitudes on the willingness to use apps and the positive influence of perceived value and perceived convenience on the consumption willingness of this consumer group [16]. As with the two indicators presented above, there is still a shortage of information using this model about the impact of podcast platform users’ perception of product value and convenience on their willingness to consume. This means that based on TAM model and its internal logic, using maturity scale to measure perceived value and perceived convenience and then integrating them is crucial to effectively verify whether they show a positive relationship with podcast platform users’ willingness to pay for audio content.

Therefore, the following hypothesis is proposed:

H1: The perceived value of paid audio goods presented by podcast platforms has a positive impact on users’ willingness to consume knowledge.

H2: The perceived convenience of podcasting platform users for paid audio programs shows a positive relationship with their purchase intention.

3. Research design

3.1 Questionnaire survey and data collection

3.1.1 Questionnaire design

According to the two maturity scales (related to perceived value and perceived convenience), combined with the characteristics of the podcast platform and the usage habits of consumer groups, a questionnaire named “Podcast Platform User Questionnaire” was designed on this basis. The questionnaire is divided into two parts:

The first part is divided into basic information statistics of participants and product use and consumption preference survey. This part consists of ten questions, the first two of which investigate the gender and age of the participants; Questions 3 to 10: Survey respondents’ understanding

and use of common commercial platforms providing podcast listening services in the market, preferred podcast platforms, preferred types of audio programs, frequently listened to podcast program names, preferred podcast program topics (multiple choices), familiarity with the concept of “knowledge payment”, online purchase of knowledge payment (information or knowledge) The frequency of products and the frequency of consumption behavior on the podcast platform.

The second part is the scale part, a total of 18 questions. This part refers to two maturity scales, mainly investigating the value and convenience perception of podcast platform users for paid goods and paid after-sales services on the platform (See table below for details).

Table 1 Scales used in this questionnaire

In the past three months, I have often consumed digital knowledge products online.
In the past three months, I have often consumed digital knowledge products on the podcast platform.
I’m interested in what types of paid goods and their content can be purchased on the podcast platform.
I am willing to use the podcast software for further consumption and purchase paid products (e.g. special programs, previously removed programs).
I think listening to * pay * podcasts saves me a lot of thinking energy, broadens my horizons and cultivates my thinking skills.
I think listening to podcasts saves me a lot of thinking energy and can broaden my horizon and cultivate my thinking ability.
I am interested in learning about the trading process and after-sales service on the podcast platform.
I think the * paid * programs offered by the podcast platforms I used/used are rich and useful, and provide me with a different experience than free content.
I think it’s convenient for me to listen to podcasts and do the “pay for knowledge” (buying paid shows) on the podcasting platform, which is streamlined and quick.
I believe that the paid content purchased on the podcast platform is quality guaranteed (with quality guarantees and perfect after-sales service).
Using a podcast platform to listen to * paid * content for information saves me a lot of time (compared to other sources of information such as text).
I think buying paid content on my favorite podcast platform is a cost-effective option.

I think buying paid content on a podcast platform saves me a lot of confirmation (the information provided by the platform is comprehensive enough to understand the basic content of the product).
I would like to pay more attention to the “paid for knowledge” category of podcast platforms.
I think it’s reassuring that there’s security for trading paid content goods on a podcast platform.
I am willing to pay attention to the upgrading and updating of the “knowledge consumption” model and service of the podcast platform.

of the total number; 97 people aged 18 ~ 25, accounting for 17.73%; There were 65 people aged between 26 and 30, accounting for 11.8%; There were 78 people aged between 31 and 40, accounting for 14.26%; There were 128 people aged from 41 to 50, accounting for 23.4%; There were 32 people aged 51-60, accounting for 5.85%; There were 4 people over 60 years old, accounting for 0.73%.

Table 2 Age distribution of respondents

Age of Respondents	Number of Respondents	Percentage
under the age of 18	143	26.14%
18~25	97	17.73%
26~30	65	11.88%
31~40	78	14.26%
41~50	128	23.4%
51~60	32	5.85%
Over 60 years old	4	0.73%

3.2 Data Collection

A total of 547 online questionnaires were issued in this survey, and 547 valid questionnaires were recovered. The specific situation of the research subjects is shown in Table 3.4:357 women, accounting for 65.27%; There were 190 males, accounting for 34.73%. The number of participants under the age of 18 was 143, accounting for 26.14%

Table 3 Schematic diagram of respondents’ understanding of podcast platform






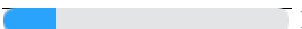

Option	Subtotal	Ratio
Heard of but never used	211	 38.57%
Infrequent use (have contacted the above platforms)	149	 27.24%
Frequent use (have regular favorite programs)	73	 13.35%
Never heard of	114	 20.84%

Table 4 Schematic diagram of respondents’ understanding of the concept and behavior of “knowledge payment”

Option	Subtotal	Ratio
Heard of this term before	356	 65.08%
Familiar with the term	103	 18.83%
Never heard of this term before	88	 16.09%

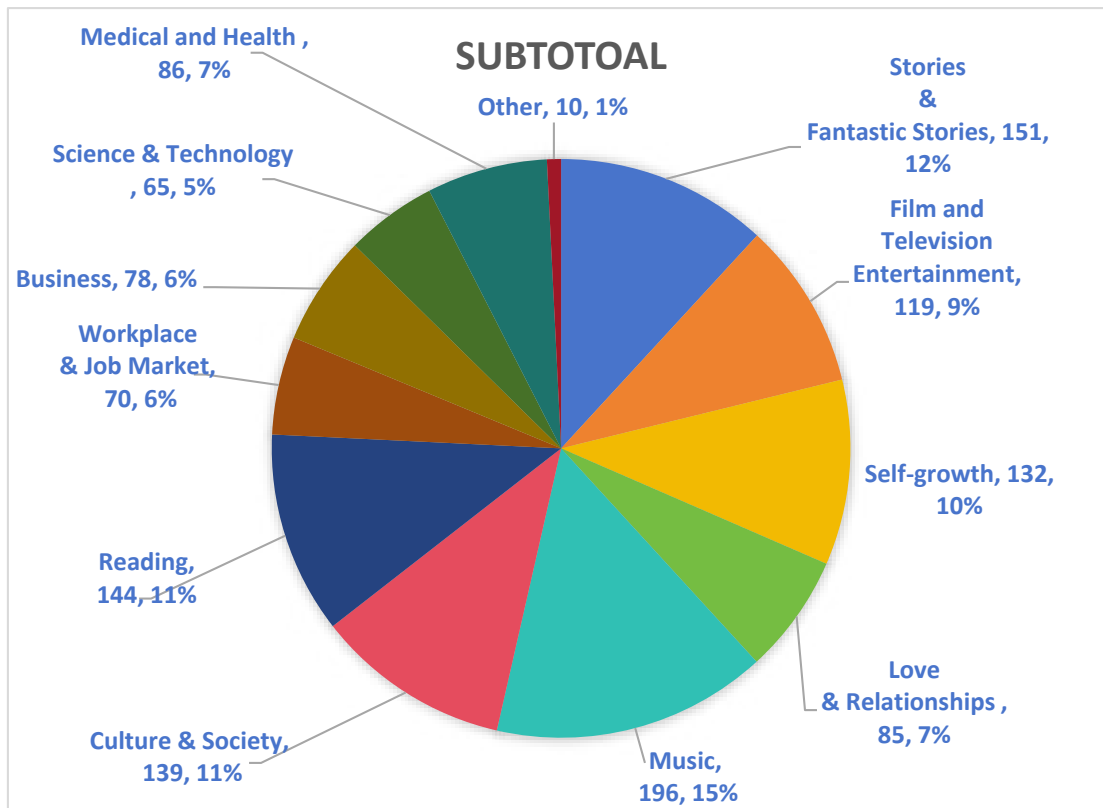


Figure 1 Audience preference pie chart

Among these categories, the majority of listeners like to listen to podcasts that are related to Stories & Fantastic Stories, Film and Television Entertainment, Self-growth, Love & Relationships, Music, Culture & Society, and Reading.

4. Data analysis and hypothesis testing

4.1 Reliability test

Reliability test is to check the stability of the data collected by the scale on which the questionnaire is based, which can reflect the reliability of the questionnaire. Cronbachs Alpha test was used to test the reliability of the scale data. Under normal circumstances, only Kronbach α coefficient equal to 0.889, greater than 0.8, can indicate that the questionnaire has a good reliability. Specific data are shown in the following table:

Table 5 Reliability test

Reliability statistics	
Number of Klonbach Alpha	Terms
0.889	17

After testing, the Kolombach alpha coefficient of this questionnaire is 0.889 (>0.8), indicating that the scale data collected in this questionnaire is reliable.

4.2 Validity test

Validity analysis can reflect the correctness and validity of a set of scale data. Generally speaking, validity is positively correlated with the correctness and validity of data, that is to say, the higher the validity, the more representative the sample data.

In Bartlett sphericity test, KMO value greater than 0.9 and p value less than 0.05 of Bartlett sphericity test can prove the representativeness of scale data. Detailed data are shown in the following table:

Table 6 Validity Test

KMO and Bartlett Test		
KMO sampling appropriateness measure		0.979
Bartlett Sphericity Test	Approximate Chi-square	4398.208
	Degrees of freedom	136
	Significance	0.000

After test, KMO value was 0.979 (>0.9), and p value of Bartlett sphericity test also met the requirements ($p=0.000<0.05$), indicating that the questionnaire had good structural validity.

5. Conclusions and Suggestions

5.1 Conclusion

The higher the value perception of customers (consumers) for the paid audio content of the podcast platform (that is, the perception of factors such as the theme and content of the paid audio, and the degree of trust in the consumption behavior on the platform), the higher their consumption desire for such paid blog content, and the two show a clear positive correlation. Secondly, the faster and easier it is for consumers to consume on a podcast platform, the more likely they are to consume audio content. In summary, both perceived convenience and perceived value have a significant positive relationship with podcast platform consumers' willingness to consume paid podcast programs.

5.2 Suggestions

Based on the questionnaire data collected by this research, the following suggestions are put forward for podcast platforms and content podcast creators:

5.2.1 For the podcast platform

Podcasting platforms should strive to simplify the process for consumers to consume paid podcast content, improve after-sales service, and (if necessary) establish an online customer service system. Second, podcast platforms can increase the promotion of paid content, and publish tweets, picture sharing, content previews, content demos, advertising push, etc., on platforms available for promotion (apps, social media accounts such as Weibo and wechat public accounts, etc.) to highlight the advantages of audio programs. Platforms can also encourage long-term listeners to listen to paid content by linking how much (or how long) they listen to it to other merchandise or cultural exchange eligibility.

5.2.2 For podcast creators

Broadcasters can use a show's appeal to regular viewers to launch premium content or specials. Podcast creators can also combine original content with deeper cultural exchange salons (offline exchanges) to give listeners an incentive to buy paid content. Secondly, content producers can increase the operation of personal (group, brand) social media accounts, to increase the sense of listeners to listen to the content and the sense of interaction with the broadcaster. The most important point is to improve the quality and uniqueness of original content, highlighting the gap between free and paid content, so as to attract more consumers.

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7. Appendix

Link of the questionnaire: <https://www.wjx.cn/vm/eid-MQVf.aspx#>