Technology Users AI In Intelligent Painting And Willingness To Use It:A Case Of Douyin Users In Shanxi,China

Yuan Qiao*, Anong Rungsuk**
School of Management, Shinawatra University

Abstract

As an artistic application of artificial intelligence technology, the emergence of douyin AI painting application has promoted the development of artificial intelligence in the field of art. As we all know, the application scope of artificial intelligence technology is increasingly expanding, and developing towards a higher level and more complex fields. douyin The emergence of AI painting application means that artificial intelligence technology can enter the field of artistic creation, and then realize more intelligent and more innovative artistic creation. Therefore, it is very necessary to study its application and its intention of use.

The paper aims to understand people's willingness to use douyin AI painting applications through empirical research, and explore the reasons behind it. This article from the following aspects: the first part of the douyin AI painting application introduction. The second part analyzes the willingness to use douyin AI painting application. The paper investigates the willingness to use the public through questionnaire survey, interview and other methods. The target population was teachers and students from universities in Shanxi Province, and sampling interview and questionnaire were adopted. The third part analyzes the reasons behind the willingness to use, some factors in the heart. The fourth part prospects the future research direction. The paper puts forward several suggestions.

Keywords: Artificial Intelligent (AI), AI painting, willingness to use Douyin

Introduction

In recent years, with the continuous development of artificial intelligence technology, its application in many fields has gradually increased. Especially in the field of art, the application of artificial intelligence technology has attracted wide attention and research. Machine learning, deep learning, computer vision and other technologies enable machines to imitate human artistic creation and produce works with unique style and creativity. douyin As the application of AI painting, as an application of artificial intelligence in the field of art, has important practical significance and application prospects.

Douyin Is a short video sharing platform, where users can shoot, edit and share their talent, life and creativity through short videos of 15 to 60 seconds, or even longer. douyin Provide a wealth of filters, music, and special effects, allowing users to easily create fun and creative video content. douyin Is also a social platform, where users can follow other users, like, comment and share videos, and interact with other users. douyin It is very popular worldwide, especially with a wide audience among young people.

douyin Artificial intelligence painting plug-in is a technical tool applied to the douyin platform. It uses artificial intelligence technology to convert photos or videos uploaded by users into painting-style images or videos. This plug-in can analyze the characteristics and styles of the image and transform it into works similar to different painting styles such as oil painting and watercolor painting. Users can use the plugin on douyin to convert their photos or videos into art-like paintings, adding to visual art and creativity. This plug-in is very popular on douyin, and many users like to use it to make unique works of art and show their creativity and artistic talent.

Artificial intelligence, as a cutting-edge technology, has attracted the attention and curiosity of the majority of users. There is a great interest in the application of artificial intelligence technology in different fields. douyin AI painting application, as one of the applications of artificial intelligence in the art field, has a certain innovation and entertainment.

The topic of my research is AI painting technology, which is a new function attached to douyin, and belongs to a new science and technology. This technology can increase the experience of douyin technology users. With the continuous progress of artificial intelligence (AI) technology, its application in various fields is also increasingly extensive. This paper aims to investigate how users of Douyin technology apply AI painting technology and whether they are willing to use it further. Douyin Being a top technology business, Douyin Technology has achieved technological and innovative advances in addition to having a sizable user base. The introduction of AI painting technology has brought new experiences and opportunities to douyin technology users, and has also triggered a series of interesting questions and research directions. In order to promote this technology and have a deeper understanding of users' willingness to use the technology (plug-in),As well as a better application of art teaching and learning,it is certainly necessary to choose this topic. The theory I chose this topic is the technology acceptance model and the flow theory, and the research framework integrates the technology acceptance model and flow experience, and studies the use and willingness of users to AI technology for douyin technology users.

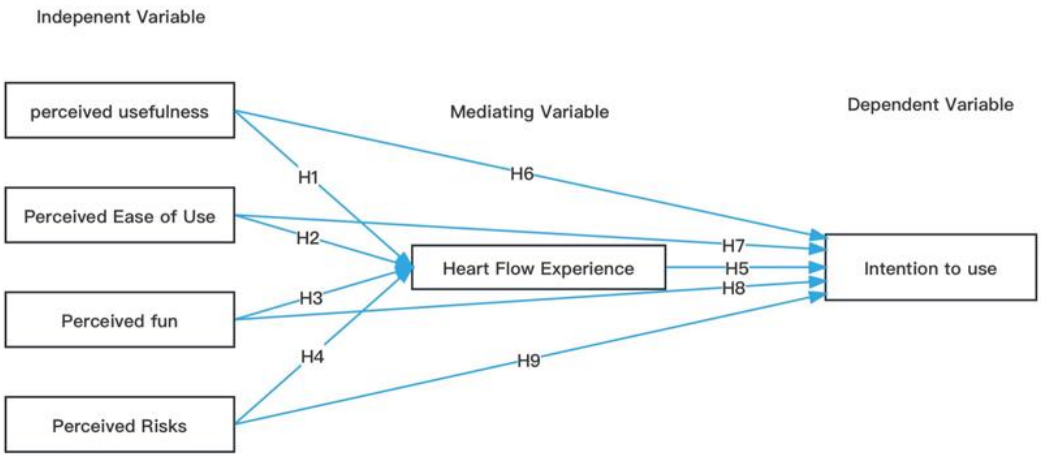
Research Questions is:

Q1: What are the factors affecting the continuous use of douyin AI painting technology?

Q2: How does the user flow experience of AI painting technology affect users' willingness to continuously use it?

Q3: How can users 'perceived usefulness, perceived interest, ease of use and perceived risk affect users' willingness to continue using it?

Q4:How much is the application of further teaching and learning of art and animation majors and the economic benefits of AI painting brought to technology.



To formulate a research hypothesis

H1: Perceived usefulness has a positive positive effect on the flow experience.

H2: Perceived ease of use has a positive positive effect on flow experience.

H3: Perceived fun has a positive impact on the flow experience.

H4: Perceived risk has a negative and negative effect on the heart flow experience.
H5: Flow experience has a significant positive impact on users' willingness to use it.
H6: The perceived usefulness has a positive impact on the willingness to use it.
H7: Positive influence of perceived ease of use on willingness to use.
H8: Positive influence of perceived interest on the willingness to use.
H9: Perceived risk has a negative impact on the willingness to use it.

Research Objectives

1. To explore the factors that affect the continuous use of douyin AI painting technology users
2. To investigate the impact of flow experience on users' willingness to continuous use
3. To study the effects of perceived usefulness, ease of use and interest and perceived risk on their willingness to continue to use users
4. To bring about some achievements in artificial intelligence painting. Such as the innovative creation of teaching students and the economic benefits brought by the experience of technology users bring to the company

Literature Review

Research on AI painting, With the rapid development of science and technology, AI painting has become a hot research topic in today's society. Many scholars believe that the artificial intelligence industry is an inevitable product of the development of digital technology. Today, AI painting has independently developed into an important branch of artificial intelligence art. Its creation process is based on artificial intelligence software's deep learning and optimization of text or pictures provided by users. This digital painting method has attracted the attention of scientists and artists since the 1960s. However, until the beginning of 2022, with the significant improvement in the technical level of many foreign AI painting companies, AI's painting capabilities have been revolutionaryly improved. , it can create exquisite paintings of various styles, themes and forms, even surpassing many professional painters with many years of painting experience. This greatly lowers the threshold for AI painting, and even people with relatively limited art knowledge can create stunning paintings in a short time. Because of this, AI painting triggered a nationwide craze in 2022 and became a landmark moment when the number of paintings around the world exploded. Therefore, people call it the first year of AIGC painting.

Research on Douyin technology users. Douyin′ s big data communication strategy has achieved remarkable success. On online platforms, a large amount of news needs to be disseminated every day, and different user groups pay different attention to the news. Using this data algorithm, news can be pushed to designated user groups accurately and quickly. However, this communication model also brings about a phenomenon, namely the seriousness of homogeneous content. This creates a contradictory situation, in which users can only receive information that they are more interested in, but know nothing about other areas. Therefore, while taking advantage of the advantages of big data, short video platforms should also avoid its potential disadvantages and prevent users from falling into a cycle composed of several tagged contents calculated by data. In order to solve this problem, Douyin needs to continuously optimize its algorithm to avoid users falling into this endless loop. In the process of development, short video platforms not only have entertainment functions, but also have strong social features. Users can freely share content on the platform to social software such as WeChat, Weibo, QQ, etc., thereby spreading

short videos to users′ networks. In addition, Douyin also has an address book function and a people you may know function, which connects the user's circle of friends on the Douyin platform, allowing users to make Douyin a part of their social life. Through a huge user base, short videos can forward their content to other platforms for promotion, forming a fast communication chain that spreads from one to ten or ten to a hundred, quickly increasing its own traffic and gaining attention. This helps expand the platform user base and spread the reputation of your platform. Currently, users can forward the video content posted on Douyin to various social media software unless the video blogger sets it so that it cannot be forwarded. This is the brilliance of Douyin. It does not mind that the content spread on the short video platform appears on other platforms. On the contrary, the short video platform wants to see this picture, which is a powerful way for it to promote itself. Of course, Douyin's distinctive watermark will appear on every video that users forward. Everyone will be aware of the video's origins, even if it becomes popular on other sites. It was through a steady ascent to prominence that Douyin became the popular platform that it is today. These are a few of the communication techniques now employed in the market for short videos. A platform's ability to effectively communicate its marketing is essential to its success. Developing a well-defined communication plan is essential.

Research on continuance intention, There are currently relatively few studies on the willingness to continue using AI painting in Douyin, and these studies are mainly concentrated in recent years. This shows that research on the continued use intention of the AI painting plug-in in Douyin will become a future trend. Continuance intention is a key concept in the field of information systems and is crucial to understanding users' technology adoption and continuation behavior. With the rapid development of information technology, understanding users' willingness to continue using these technologies has become an important issue. Continuance intention refers to a user's willingness to continue using a technology after its initial adoption. In a business environment, understanding users' continued use intentions helps companies predict market demand, improve product design, and increase user loyalty. Therefore, studying continuance intention has important practical implications in both academia and business.

Research review on relevant theoretical models and methods. The Theory of Reasoned Action (TRA) served as the model for the Technology Acceptance Model (TAM). In addition, factors such as perceived ease of use, perceived usefulness, perceived risk, perceived cost-effectiveness, perceived innovativeness and subjective norms are also considered as main factors of the TAM model. These factors together constitute the theoretical framework of the technology acceptance model, which helps researchers better understand and predict users' acceptance and use behavior of information technology.

Research on Heart flow experience. Flow is a psychological state that occurs during specific activities and is filled with a sense of involvement, concentration, and satisfaction. This concept was first proposed by Hungarian psychologist Mihaly Csikszentmihalyi in 1975 and attracted widespread research interest in the following decades. This article will review research on flow experience and explore its definition, characteristics, influencing factors, and its applications in different fields.

Research Methodology

This study adopts a mixed research method, combining qualitative and quantitative data to solve the research problem. Because, compared to a single quantitative data analysis, hybrid research methods better integrate real-world research. Although qualitative data can compensate for certain shortcomings, it is difficult to quantify. Due to the multi perspective, multi-level, and diversity of social phenomena, researchers need to integrate

various forms of data and evidence, and integrate multiple research perspectives in order to provide a more comprehensive explanation of the research phenomenon. Therefore, this study chooses to use a combination of quantitative and qualitative research methods to strengthen and complete quantitative or qualitative research findings, and to triangulate and mutually confirm the two research findings. Qualitative research samples. According to the research on theoretical sampling based on grounded theory, this study conducted a centralized survey on the universities in Taiyuan, Shanxi Province that set up art majors (including design art majors). There are a total of 34 undergraduate institutions (including private undergraduate institutions) in Shanxi Province. Among them, 11 undergraduate institutions offer art majors. For the convenience of interviews, this study selected undergraduate colleges located in Taiyuan City and began conducting research on art majors. The interviewers carried out the survey in a snowball manner through the introduction of acquaintances, focusing on the heads of the art schools and art departments of eight Taiyuan undergraduate colleges, such as the president, vice president, director, deputy director and other 20 department leaders.

In the qualitative research stage, semi-structured interviews were used. The design of the interview outline revolved around a core issue: users' willingness to continue using Douyin painting technology. In order to reduce the impact of subjective initiative on interviewees and ensure the scientific nature of the research, researchers try to ask and guide interviewees from a neutral and objective perspective as much as possible. Before the interview officially begins, the researcher first introduces themselves, explaining the purpose of the interview and the precautions to be taken. In order to establish trust and distance oneself from the interviewees, the researcher first enters through simple questions before the formal interview begins. Then, based on the questions in the interview outline, questions were asked to ensure that the interviewees can objectively and accurately understand the interview questions. During the interview, the researcher used a simple and understandable way to describe the questions. At the same time, adjustments were made at any time based on the actual situation of the interview site, and the words and actions of the interviewees were observed and recorded to facilitate the exploration of the deep meaning of the opinions expressed by the interviewees. The number of interview samples needs to be determined based on the principle of theoretical saturation, which requires that the two processes of interview and analysis are inseparable and mutually reinforcing in interview research. Analyze and extract the materials obtained from the interview until the relevant information begins to repeat and no new viewpoints or information are generated, that is, when the interview reaches theoretical saturation and the discussion ends.

Qualitative data is mainly collected through semi-structured interviews, which use two methods: individual interviews and centralized interviews. The interview time and location are agreed upon with the interviewee in advance, usually in a good interview environment, such as an office or conference room. The interview time is not less than 60 minutes, and a quiet interview environment and moderate interview time facilitate the smooth conduct of the interview and recording of the interview content. In order to obtain accurate, detailed, and complete interview materials as much as possible, the author recorded the interview content throughout the entire process, and promptly converted the recorded content after the interview, and arranged the converted text.

on the other hand, The qualitative analysis results of the interview data and the quantitative analysis results of the questionnaire data were introduced. In the qualitative study, 20 experts were selected from the school of Fine Arts and department in Taiyuan, Shanxi Province, and the interview data were coded. After the three-level coding, the saturation was tested and the research framework was established. In the quantitative

analysis, this study first screened the data, and finally obtained 400 valid questionnaires and participated in the study, using SEM to test the hypotheses proposed according to the research framework. Firstly, the homologous deviation test of the data; second, the sample characteristics of the respondents; third, the descriptive statistical analysis of the data and the demographic characteristics of the variables; fourth, the reliability and validity (convergent validity and differentiation validity) of the questionnaire; Fifth, the structural equation model was established, and the fit of the model was tested by AMOS. Sixth, the main effect, and the mediation effect. Finally, the hypothesis testing results are summarized.

Results

This article mainly analyzes qualitative and quantitative data. Qualitative analysis used manual coding to conduct three-level coding (open coding, axis coding, and selective coding) on interview data from 16 deans, deputy deans, department heads, deputy deans, etc. from universities in Taiyuan City, Shanxi Province. And use the remaining 4 interview materials for saturation testing, construct a theoretical model for this study, and propose research hypotheses based on the theoretical model.

The quantitative analysis section mainly conducted quality testing on the questionnaire data, including homologous bias, reliability, and validity testing. The specific situation is shown as follows:

Firstly, the homogeneity bias of the questionnaire was checked to ensure that there were no serious homogeneity biases in the questionnaire data. Secondly, preliminary statistical analysis was conducted on the sample characteristics (demographic characteristics) to provide assurance for subsequent research. Thirdly, descriptive statistics were conducted on the data, and it was found that the average of the six variables was above 4.0.Fourthly, a difference test was conducted on whether there were differences in demographic variables, and the results showed that there was no significant difference in use intention among age groups; Users have significant differences in the use time of Douyin painting technology, and there are significant differences in the use intention between users with short use time and users with long use time. Users who have used Douyin AI painting technology for a short time are more willing to use it. There is no significant difference in user use intention in terms of frequency. There are significant differences in use intention among majors, with art majors having a stronger use intention compared to other majors. There is no significant gender difference in the four dimensions of perceived value. There is a significant difference in perceived value among the three age groups of 18-19 years old, 20-21 years old and 22-23 years old. Specifically, people aged 20-21 have the strongest perceived ease of use. PU has significant differences in the use time of Douyin AI painting technology, while other dimensions have no significant differences. There is a significant difference in perceived usefulness between users who have been using for more than 2 years and 1 year and 1 day and 2 years, 6 months and 1 day and 1 year, and users who have been using for less than 6 months. Specifically, the shorter the usage time, the stronger the perceived usefulness. The four dimensions of perceived value have no significant difference in the frequency of Douyin AI painting technology. There are significant differences in perceived usefulness, perceived ease of use, and perceived risk among majors, while there is no significant difference in perceived interest among majors. There are significant differences in perceived usefulness, perceived ease of use, and perceived risk between art and sports majors. There were no significant differences in the Heart flow exerpience (pleasure, focus, and control) in terms of gender, age, duration of use, or profession. However, there is a significant difference in the

frequency of using pleasure. Users who use pleasure 5-7 times a week have a higher sense of pleasure than users who use Douyin AI painting technology 2-4 times a week and rarely use it. Fourthly, the correlation between variables was analyzed and it was found that there is a moderate correlation between each variable, which is consistent with theoretical assumptions. Fifthly, the reliability and validity of the questionnaire were tested, and it was found that the reliability of the questionnaire was good. CFA was conducted on six latent variables for validity, and it was found that the convergence and discriminant validity of the measurement model were good. Sixth, structural equation models are used to test the research hypotheses proposed in the conceptual framework, and the mediating effects are tested using Bootstrap sampling method. The research results indicate that out of the 13 research hypotheses proposed in this study, 11 were supported and 2 were rejected.

Discussion

The main results of this study focus on the in-depth comparison and interpretation of both quantitative and qualitative findings. We used data analysis and statistical methods to obtain quantitative research results with empirical support, including specific values and trends. Meanwhile, through in-depth interviews, observations and literature review, we obtained subjective and descriptive qualitative findings, which provided theoretical support for subsequent discussions. The research includes the relationship between perceived usefulness, perceived ease of use, perceived entertainment and flow experience; perceived usefulness, perceived ease of use, perceived entertainment and perceived risk directly affect willingness to use; flow experience directly affects willingness to use; perceived usefulness, perceived ease of use, perceived entertainment and perceived risk can also affect use willingness through flow experience.

Comparison of the quantitative and qualitative results. For the findings of the previous chapter, we found that the H3 and H10 assumptions proposed in the qualitative research conceptual model were not supported in the quantitative study analysis. These results imply that some assumptions in the conceptual model of qualitative research may not be entirely true or cannot be tested in quantitative studies. Therefore, we need to further explore whether these assumptions are reliable and in which circumstances can be applied and what they represent.

Discussion of the relevant results of the perceived value. The four dimensions of perceived value did not differ significantly in gender. In terms of age, there were significant differences in perceived value among users between 18-19, 20-21 and 22-23, with higher use rates among young people. There are significant differences in the perceived usefulness of Douyin AI painting techniques. No significant difference was found for the other dimensions. The four dimensions of perceived value do not differ significantly in the frequency of Douyin AI painting techniques. This means that there is no significant difference in the perceived value of AI painting technology, regardless of their frequency. Perceptual usefulness, perceived ease of use, and perceived risk all differ significantly professionally. However, there is no significant professional difference in perceived interest. In addition, perceived value has a positive impact on the flow experience, which is particularly evident among technology users. When technology users use AI painting, they can feel the actual value and psychological value brought. This perceived value can stimulate their positive emotions, and make them feel happy and satisfied in the process of use. This heart flow experience not only enhances users' willingness to use it, but also stimulates their enthusiasm and love for AI painting.

At the same time, the perceived value also has a positive impact on the willingness to use. Except that perceived interest in perceived value is not relevant for flow experience

mediation. This means that technology users are willing to use AI paintings not only because of its functionality and practicality, but also because of the value and satisfaction it can bring. This impact is particularly evident among technology users, because they usually pay more attention to the practicality and value of their products, to improve the quality of knowledge and the spirit of life, and to make direct judgments about the phenomenon.

To sum up, AI painting has received a positive response and affection by technology users in Douyin. When technology users use AI painting, they can feel the actual value and psychological value it brings. This perceived value can stimulate their positive emotions and flow experience, thus enhancing their willingness to use it. This also indicates the popularity and the height of the willingness to use AI paintings among technology users.

Relevant discussion of the willingness to use.AI painting is an innovative art application that uses artificial intelligence technology to create works of art. This application has been widely used in the field of art, and has gradually been welcomed by more users.

For user categories, art technology users are more inclined to use AI painting. These users often have a strong interest in new technologies and new applications, and are more open and receptive to this innovative art form.

In addition, the acceptance of AI painting is also relatively high. This is because the app can quickly generate attractive and artistic works, and can meet the personalized needs of users. At the same time, the application of AI painting is also relatively easy to use, so that more users can easily use it.

To sum up, AI painting is an innovative and practical art application, especially welcomed by art technology users. It is also relatively acceptable, thanks to its ability to quickly generate personalized works, meet user needs, and be easy to use.

Related discussion of heart flow experience. Flow experience as a mediating variable, studies show that other factors than perceived ease of use did not mediate willingness to use. Specifically, the heart flow experience refers to the pleasure, immersion and concentration that users feel when using the product or service, and this experience can enhance the user's willingness and satisfaction. Perceptual ease of use refers to the degree of difficulty for users to use a product or service, and its impact on the willingness to use is not achieved through the intermediary variable of heart flow experience. Instead, other factors such as perceived usefulness, attitudes, and subjective norms have influenced willingness to use through flow experience.

Specifically, perceived usefulness refers to the actual help and benefits of using a product or service, which can enhance their willingness to use it. In conclusion, flow experience as a mediating variable plays an important role when studying willingness to use. Other factors other than perceived ease of use had an impact on willingness to use. It shows that this AI painting is very convenient and fast on the Douyin platform, and users can directly use it to express their intentions. With simple operation, users can easily generate various styles of paintings, and can get satisfactory results in a short time. This convenience and ease of use makes AI painting one of the most popular tools on the Douyin platform.

In addition, another advantage of AI painting is that it can understand the user's intentions well, and it is able to quickly generate the required painting works according to the user's description. This intelligent feature makes AI painting be widely concerned and recognized on the Douyin platform.

In short, AI painting is a very practical plug-in on the Douyin platform, which is not only convenient and fast, but also can well understand the user's intention, and generate

the paintings that meet the requirements. These advantages make AI painting an integral part of the Douyin platform. Willing to use it is as popular with tech users as other Douyin plug-ons and special effects.

Conclusion

In the fourth chapter, there is a lot of space. First, this study determines the core category of "influencing factors of the willingness to use Douyin AI painting technology", which derived six main categories of perceived usefulness, perceived ease of use, perceived entertainment, perceived risk, flow experience and willingness to use. The clues around the core category will summarize the factors that affect the use intention of Douyin AI painting technology as: perceived usefulness, perceived ease of use, perceived entertainment and perceived risk have a direct impact on flow experience; perceived usefulness, perceived ease of use, perceived entertainment and perceived risk directly affect the willingness to use; flow experience directly affects the willingness to use; perceived usefulness, perceived ease of use, perceived entertainment and perceived risk can also affect the use intention through flow experience.

Then the analysis concluded that there is no significant difference in the age of the willingness to use AI painting technology, and there is no obvious difference in the willingness of users to use AI painting technology. Users have significant differences in the use time of the Douyin drawing technology. Users with shorter duration are more willing to use it than those with longer duration. This may mean that as the time of use increases, users are becoming more receptive to AI painting techniques. There is no significant difference in the frequency of user willingness to use. This means that there is no clear difference in their willingness to use users, regardless of their frequency of use. Significant differences significant differences in willingness to use. Compared with other majors, users of art majors are more willing to use AI painting technology. This may be related to the more sensitive and acceptance of novel painting techniques and tools.

References

Bhattacheijee, A. (2001). Understanding information systems continuance: an expectation-confirmation model. MIS quarterly, 25(3).

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), Testing structural equation model (pp. 136-162). Newbury Park, CA: Sage.

Bryman,A.(2008).Why do researchers integrate combine mesh blend mix merge fuse quantitative and qualitative researc. Advazices in mixed methods research., 87-100.

Byrne, B. M. (2012). Structural equation modeling with mplus: Basic concepts, applications, and programming. New york: Taylor & Francis/Routledge.

Davis, J. A., De, V. K., & Meindl, J. D. (1998). A stochastic wire-length distribution for gigascale integration (GSI). I. Derivation and validation. IEEE Custom Integrated Circuits Conference. IEEE.

Fornell C,Larcker D F. (1981).Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research, 18*(1), 39-50.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: algebra and statistics. Journal of Marketing Research (JMR), 18(1), 39-50.

Hou Delin. (2012).an empirical study on the behavior willingness of online video service users.103.

Huang Guan Xin. (2023). AI painting techniques and its creativity and artistry. Toy World, (03): 135-137.

Huang Liwen. (1998)The pleasure of Internet use and god fans —— game theory and network browsing behavior Gao Xiong: Sun Yat-sen University.

Huangfu Qinghong. (2014).Humanities and Social Sciences researchers, behavioral research on the continuous use of foreign language Digital Resources, 110.

J. Dlačić, M. Arslanagić, S. Kadić-Maglajlić, S. Marković, S. Raspor. (2013). Exploring perceived service quality, perceived value, and repurchase intention in higher education using structural equation modelling. *Total Quality Management & Business Excellence*, *25*(1-2): 141-157.

Jiang Sibo, Research on the influence of Customer Agreement on Social Value Co-creation in Virtual CSR, 2019

K.Little-Tetteh, H. Shchyhelska, Ph.D., Assoc. Prof. (2019). ARTIFICIAL INTELLIGENCE PAINTING: IS IT ART, REALLY?.

Koufaris M. (2002). Applying the technology acceptance model and flow theory to online consumer Behavior. *Information Systems Research*, *13*(2):205-223.

Lee C, Cyril Eze U, Oly Ndubisi N. (2011). Analyzing key determinants of online repurchase intentions. *Asia Pacific Journal of Marketing and Logistics*, *23*(2): 200-221.

Li D, Browne G, Wetherbe J. (2016). Why do internet users stick with a specific web site? A relationship perspective. *International Journal of Electronic Commerce*, *10*(4):105-141.

Li Kun. (2023). Where is the business model of AIGC?[N]. . Computer Newspaper, 03-06.

Li Longxiao. (2021). Research on sustainable Operation Strategy of takeout platform under the participation of multiple subjects, 83-85.

Li Xiaoke. (2021).willingness to use Internet medical platforms from the perspective of Big Five Personality,70.

Li Yazhou. (2016).continuous use of online education platform users... and influencing factors of willingness to pay for courses, 60.

Lin J, Wang B, Wang N, et al. (2014) Understanding the evolution of consumer trust in mobile commerce: a longitudinal study[J]. *Information Technology & Management, 15(1): 37-49.*

Liu Jie.(2019).audio knowledge based on TAM model... —— Take the Himalayan APP as an example, 10.

Liu Ruixue. (2017).empirical research on promoting the development of spatial reasoning skills in middle school students.

Liu Shuliang and Huang Shenze, (2022). Platform Control and Algorithm Myth: The Dilemma of Traffic Pool Platform Bloggers, Media, No.13,2.

Liu Shuliang. (2023). On the influence of AI painting on the cultural and creative field. Contemporary Animation, (02): 91-95.

Lu Haixia. (2016).a study on the impact of the perceived usefulness of online reviews on changes in purchase intention and purchase behavior, 59.

Lu Yi. (2015). Research on the influence of mobile online purchasing situational characteristics on consumers' purchasing intention . Quanzhou: Huaqiao University.

M. de Berg, A. Gunawan, M. Roeloffzen. (2017). Faster DB-scan and HDB-scan in low-dimensional Euclidean spaces. arXiv preprint arXiv:1702.08607.

M. Dursun, E. E. Karsak. (2010). A fuzzy MCDM approach for personnel selection[J]. Expert Systems with Applications, 37 (6): 4324-4330.

Mackinnon, D. P., Lockwood, C. M. &Williams, J. (2004). Confidence limits for the indirect effect: is tribution the product and resampling methods. Multivariate Behavioral Research. 39(1), 99-128.

Mohammed Amin Almaiah. (2022). Determinants Inflfluencing the Continuous Intention to Use Digital Technologies in Higher Education.

Novak T P, Hoffman D L, Duhachek A. (2003). The influence of goal directed and experiential activities on online flow experience. *Journal of Consumer Psychology*, *13*(1/2): 3-16.

Novak T P, Hoffman D L, Yung Y F. (2000). Measuring the customer experience in online environments: A structural modeling approach. Marketing Science. 19.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). New York, NY: McGraw-Hill, Inc.

Preacher, K.J., Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. Behavior Research Methods, Instruments, & Computers 36, 717–731. https://doi.org/10.3758/BF03206553

R. B. DiPietro, S. Gregory, A. Jackson. (2013). Going Green in Quick-Service Restaurants: Customer Perceptions and Intentions. *International Journal of Hospitality & Tourism Administration*, *14*(2): 139-156.

Ran Liwen, Liu Xiangping. (2013). Fluency experience theoretical model exploration. Quest, 112-114.

Reacher,K.&Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effectsinsimplemediationmodels. *BehaviorResearch Methods, Instruments, and Computers. 36*(4), 717-731.

Richard.Handling qualitative data. (2005). London: Sage, 117.

Roca J C, Chiu C M, Martínez F J. (2006). Understanding e-learning continuance intention: An extension of the technology acceptance model. *International Journal of human-computer studies*, *64*(8): 683-696.

Rudjer Boskovic Institute Zagreb Croatia. (2021). UNDERSTANDING AND CREATING ART WITH AI: REVIEW AND OUTLOOK.

S.R. Nikhashemi. (2021). Augmented reality in smart retailing: A (n) (A) Symmetric Approach to continuous intention to use retail brands' mobile AR apps.

Shen Junhan. (2023).Venture capital institutions beach layout AIGC .21st Century Business Herald, 02-13.

Sobel, M. E. (1982). A symptotic confidence intervals for indirect effects in structural equation models. Sociological Methodology.13, 290-312.

Sun Rui, Huo Wen. (2022). A preliminary study on the development path of the artificial intelligence technology introduced in Chinese cartoon oil painting. Fine Arts observation, (09): 72-73.

Sun Y, Liu L, Peng X, et al. (2014).Understanding Chinese users' continuance intention toward online social networks: An integrative theoretical model[J]. Electronic Markets 24(1): 57-66.

T. Dinev, P. Hart. (2006). An Extended Privacy Calculus Model for E-Commerce Transactions. *Information Systems Research*, *17*(1): 61-80.

Tae-Kyun Na. (2021). Moderating Effect of Gender on the Relationship between Technology Readiness Index and Consumers' Continuous Use Intention of Self-Service Restaurant Kiosks.

Turner, R. C., & Carlson, L. (2003). Indexes of item-objective congruence for multidimensional items. *International Journal of Testing*, *3*(2), 163-171.

Wang Zhuhua. (2023). Under the wave of artificial intelligence, the AI big model "promotes the waves". Qu Yizhen. Sci Daily, 04-17.

Wei Hua, Zhou Zongkui, Tian Yuan, et al. (2021).Online game addiction: the effects of immersion and its mechanism of action. Psychological Development and Education, 651-657.

Xian Lili. (2013). Based on the analysis of the degree of online qiao training as Fudan University, 59.

Xiao Xuan. (2016). Research on the Continuous Use Mechanism and Model of Social Network Services based on Social Impact Theory, 76.

Xie Guangling. (2016). empirical study of users of science communication websites, 114.

Yang Ao. A (2023).pplication of AI painting technology in the context of media convergence. News Outpost, (14): 9-11.

Yao Tao. (2006). Research on the Continuous Use of Online Games based on the extended Theory of Planning Behavior,130.

Yu Qinglong. (2023). Research on the creation characteristics of AI painting software —— Take the animation characters generated by the painting software Novel AI as an example. *Journal of Xinyang Normal University (Philosophy and Social Sciences edition)*. *43*(03): 127-132.

Zhang Weiheng. (2023) The Practice and Suggestions of AI Painting as a school-based project of maker education in vocational colleges. Chinese Journal of Multimedia and Network Teaching (China), (01): 21-24.

Zhang Y, Fang Y, Wei K K, et al. (2011). Repurchase intention in B2C e-commerce: A relationship quality perspective. *Information & Management*, *48*(6): 192-200.

Zhang Zezheng. (2023). The application and exploration of AI painting in digital painting. Beijing Institute of Printing Technology, 2023. DOI:10.26968/d.cnki.gbjyc.000100.

Zhao, X., Lynch, J.G. & Chen, Q. (2010). ReconsideringBaronandKenny: mythsandtruthsaboutmediationanalysis. *JournalofConsumerResearch.*