An Analysis of College Students' E-book Consumption Behavior: A sample of Students from 3 Universities of Guangxi, China[†]

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Abstract

E-books provide a more convenient, fast and cost-effective way of reading in the new era. This new way of reading has changed the reading ecology in the current society. The contents of e-books and reader devices have achieved more innovation and enrichment and have enriched the reading experience and perception. As one of the consumer groups of book reading, college students can better introduce e-book industry chain and supply chain policies if we observe their consumption motives, psychology, and behavior, which would help Chinese college students increase their interests in e-book reading, help college students master knowledge and increase skills. In this paper, 1,020 valid samples from 3 universities in Nanning, Guangxi, China are obtained by random sampling method, and the sample situation is statistically analyzed.Taking college students' e-book consumption as research object, this research intends to analyze the characteristics of college students' e-book consumption and explore the developing direction of college students' e-book consumption, so as to provide reference for the industry and to provide suggestions for the optimization of the industry chain and value chain.

First of all, at the micro level, studying the consumption behavior of e-books of college students will understand their motives, their consumption psychology, consumption intentions and consumption quotas for e-books, which can provide sufficient basis for relevant decision-making work in various aspects such as the production of e-book marketing strategies for college students.Secondly, at the level of colleges and universities, studying the e-book consumption behavior of college students will help colleges and universities to correctly and comprehensively understand the reading needs of college students, and it will be convenient for colleges and universities to combine the e-book reading characteristics of college students and make good use of library to provide unimpeded e-book reading channels for college students.Thirdly, at the national level, if the country wants to lay a foundation of knowledge for future builders, it must have good industry policies and macro methods to guide the reading behavior of college students.

Keywords: E-books, E-book consumption, E-book marketing strategy, E-book industry chain, Industry policy

Introduction

Overall objective

Consumer behavior research focuses on the rational and firm decision on how to allocate the resources (time, money, and energy) they have to consumption-related things, including following factors: What to buy? Why to buy? When and where to buy? And how frequent to buy and use? How to evaluate the products after purchase and how the evaluation affects subsequent purchases, and how to treat these products etc.

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Through investigation and research, college students' consumption characteristics and desire of e-books can be grasped and the main contradictions in college students' e-book consumption can be solved as well, realizing the high-quality development of college students' e-book consumption. On the one hand, it is necessary to solve the negative effects brought by e-books reading of college students such as addiction, etc. On the other hand, not only the supervision and control of e-books should be paid attention to, but also the optimization of e-book industrial chain should be strengthened. Only in this way, college students can enjoy high-quality e-book resources and the e-books consumption confederation can be established, that's how the future development of e-book consumption can be seized.

Specific aims
1) Overall recognition of the sub-group characteristics, consumption motivation, consumption decision and other information of college students in the e-book consumer market.

In terms of market segmentation, according to the market segmentation theory, basic cognitive of university students' e-books consumer market segmentation situation, from age, sex, area, consumption level, disposable income, class, and personality (interests), understand all kinds of the consumption behavior of college students and the characteristics of different market segments. In the aspect of cognition of consumption motivation, understand the demand and motivation reflected behind consumption behavior; Analyze the cognition and perception of e-book consumption of college students, the formation and change of e-book consumption attitude, grasp the cognition, emotion and intention components of e-book consumption, and better grasp the decision-making framework system of consumers; Study the consumption of e-books of different college students under the influence of different family background and cultural environment. Finally, according to the investigation, fully grasp the decision-making process of e-book consumption, and understand the effective influence on marketing managers' decision-making.

2) Complete, perfect, and unify e-book consumption regulatory policies and control standards

It is urgently for e-book industry chain to reconstruct the functional organizational structure system of e-book consumption supervision, to apply new supervisory technology and self-regulated industry organization system, so as to meet the requirements of the rapid development of the e-book consumption industry in the new era. First of all, it is necessary to clarify who will assume the regulatory responsibility, establish a 3-dimensional and all-round functional organizational structure system, redefine the regulatory responsibilities, regulatory boundaries and management scope of each regulatory department, and form a unified regulatory framework and policies. Each regulatory body performs their duties within a unified framework, coordinate with each other and establish a 3-dimensional regulatory organizational structure system with government regulatory agencies as the leading department, industry chain stakeholders as the leadership and introduction of college student consumer groups to participate in. In addition, the unified regulatory framework and policies for e-books should keep pace with the times and adjust the strategy in accordance with the development of situation, industrial needs and consumption demands of college students. Secondly, take advantage of new regulatory technologies to address the problem of "how to implement" regulatory implementation. Regulatory organizations should actively explore regulatory needs and regulatory technical solutions in the new era on the basis of their requirements to improve regulatory efficiency and quality. Finally, to improve the "regulatory efficiency", the stakeholders in the industry chain should strengthen the implementation of the "self-regulatory" organizational system, upgrade the overall planning, integrate their respective e-book copyright protection forces, establish copyright protection industry associations and other legal organizations, formulate the operating regulations of the copyright protection industry associations, release the supervision results of the functional organization structure timely, joint reveal the information of various infringement platforms. The implementation of the collective rights protection model is conducive to reducing the cost of e-book copyright protection, improving the effectiveness of self-regulatory organizations and promoting the healthy and stable development of the e-book consumer industry.

3) Promote optimization and improvement of the e-book consumer publishing industry chain

At present, the 5 most critical participants in the e-book industry chain, including copyright owners, e-book producers, issuers, sellers, and consumers, form the e-book value chain system. The distribution and sales channels of e-books are most critical because it is the core of connecting e-book consumers and forming the profit of the e-book industry chain ultimately.

The industry chain must embrace the marketing centered concept. Only by creating e-books around the needs of consumers can the e-book market be further expanded. First of all, the consumption motivation and content needs of e-book consumers must be grasped. It is the foundation for continuing to meet the requirements of e-book consumers, improving the perception of e-book reading experience, guiding e-book consumers to abandon the pirated books and promoting the consumers turn to purchase and read high-quality e-book. Secondly, the potential value of college students as an emerging consumer group must be developed continuously. Various e-book platforms can set down precise marketing strategies to analyze the reading behavior of users according to the consumption needs of college students in different situations, forming new value of user flows. Furthermore, through the analysis of college students' consumption behavior of e-books, college libraries can do more with the conclusions drawn from the analysis to reconstruct the current operation of e-book pricing, introducing, borrowing and sharing in universities. This will lower the threshold of e-book consumption for college students to develop their good habits of paying for knowledge, profession and self-literacy.

Methodology

Research overview
Research ideas
In the first place, the researcher conducted in-depth research on consumer behavior theory, accumulated basic theoretical knowledge of consumer behavior and learned many consumer behavior analysis cases in academia provided the good theoretical basis and experience investigation for this research. After reading a large amount of literature, the researcher combined the characteristics of e-book consumption behavior of college students from Guangxi University, Guangxi University for Nationalities and Guangxi University of Finance and Economics, 3 universities in the southwestern border of China, with the research object and direction of this paper to formulate the questionnaire for on-site investigation. Combining with various data collected by the questionnaire, the author utilizes the analysis tool SPSS software to further analyze and organize the data so as to understand the current situation of the consumption behavior of college students in Guangxi University, Guangxi University for Nationalities and Guangxi University of Finance and Economics, finally come to the conclusion of college students' consumption motivation, psychology and behaviors, etc., and puts forward strategies and means to promote e-book reading from the perspectives of college students, industry chain, universities and countries.

Research methods
Literature research methods
Given the research on the situations and measures of college students' e-book consumption behavior, the author has read a large number of consumer behavior research results and sorted out various documents. Through reading, integrating, analyzing and summarizing relevant research content, the theoretical overview, current situation, and countermeasures of consumer behavior in college student e-books can be understood, lying a theoretical foundation for subsequently writing of consumer behavior.

Questionnaire survey method
Random sampling is a kind of sampling survey conducted in full accordance with the principle of equal opportunity, which is called "equal probability". Self-made questionnaires took Guangxi University, Guangxi University for Nationalities and Guangxi University of Finance and Economics as samples. Random sample surveys were used to survey college students in these 3 universities and basic data were collected in the form of questionnaires. After sorting all the questionnaire data, the author formed all valid

samples of the final questionnaire, performing statistical results and data analysis on all the sample data, and summarizing the status of the consumption behavior of college students' e-books for the subsequent development of college students to provide reference for the consumption strategies of e-books.

Research motivation and research budget

Research motivation

Grasp the consumption behavior of e-books of college students through sample collection. In terms of the national reading survey report, digital reading has promoted the expansion of the e-book consumption industry rapidly. College students are the main body of e-book consumption and the purchase of e-books by college students has huge consumption development prospects. The researcher's joint investigation team directly distributed questionnaires in the 3 universities to investigate the e-book consumption behaviors of their college students, combining with the college students'e-book consumption situation and in-depth analysis of their e-book consumption characteristics and the factors which would influence their e-book consumption. In turn, suggestions are put forward to promote the consumption of e-books for college students, promoting the formation of a virtuous circle of industrial chains and value chain systems.

Research budget

The sample consumption is estimated to be 2 yuan/piece. On the basis of the 95 % validity of the sample, it is estimated that about 1,000 samples need to be collected, and so about 2,000 yuan will be needed.

The design and preliminary collection of the questionnaire

The target population of this study is Chinese university undergraduates who have e-book reading behaviors. The data survey is carried out by the "street interception access" (i.e. questionnaire survey method) in the arbitrary samples. This questionnaire contains 6 parts: Personal information, consumption motivation for e-book, e-book consumer psychology, e-book consumer behavior, e-book market situation and e-book copyright. This questionnaire has 24 question items, in which the personal information item includes 4 questions such as gender, age, grade, etc., and the other 5 types of indicators and question items are: 6 questions about e-book consumption motivation; 3 questions about e-book consumption psychology; 5 questions about e-book consumption behavior; 2 questions about the e-book market situation; 3 questions about the e-book copyright.

In this research, 5 students from Guangxi University, Guangxi University of Nationalities and Guangxi University of Finance and Economics were invited to participate in the pre-survey and analysis of this questionnaire in late May 2021. Through appropriate pre-surveys, part of the contents about those items were effectively revised. In the meantime, the options of some question items were also modified appropriately and then finally formed into a field survey after analyzing the results of the investigation. This questionnaire includes both single-choice questions and multiple-choice questions. After adjustment and confirmation, the questionnaire of this study was determined in early June.

In sampling, this study adopted arbitrary sampling methods. The questionnaire was distributed in the field and the researcher was responsible for data collection and analysis. In the survey, the relative balance of the distribution of variables in gender, age and grade of the questionnaires was comprehensively weighed and considered. Until early August 2021, a total of 1,495 questionnaires have been collected. After selection and confirmation, some invalid questionnaires have been eliminated and a number of 1,020 of valid questionnaires have been retained. There were 481 questionnaires for boys and 539 for girls according to the gender. Considering the age, 223 people aged 17 - 18 accounting for 21.9 %, 227 ones aged 19 - 20 accounting for 22.3 %, 330 ones aged 21 - 22, accounting for 32.4 % and 240 ones aged 23 or older accounting for 23.4 % in this survey. Finally, given the grades of college students, freshmen, sophomores, juniors and seniors accounted for 24.4, 24.3, 31.6 and 19.7 %, respectively.

Based on the validity of the questionnaire, the Cronbach situation of the 5 types of questions is: The Cronbach alpha coefficient of e-book consumption motivation is 0.774; the Cronbach alpha coefficient of

e-book consumer psychology is 0.903; the Cronbach alpha coefficient of e-book consumer behavior is 0.628; the Cronbach alpha coefficient of the e-book market situation is 0.866; the Cronbach alpha coefficient of e-book copyright situation of the e-book is 0.691. The Cronbach alpha coefficient of each sub-item is above 0.6, which has already met the requirements of usability. The Cronbach alpha coefficient of the whole evaluation scale containing 50 indicators is as high as 0.800. It is obvious that research reliability of the collected questions and the results is relatively good.

Population

Students from Guangxi University, Guangxi University for Nationalities and Guangxi University of Finance and Economics were invited to participate in this research. Sample size: More than 1,000 Samples were collected in the 3 mentioned universities and each university has collected 300 samples or so. Finally, 1,020 effective samples were collected.

Introduction of guangxi university

Guangxi University is one of the comprehensive universities in Guangxi. With the strong support of the province's finances, it has gradually become a comprehensive university with a relatively complete range of disciplines, which has basically gathered the relatively talents in the province. Over the years, the school has strengthened exchanges with various great universities and joined the regional alliance of higher universities. It has a good academic atmosphere, relatively high quality of college students, more open-minded and inclusive thoughts, which is relatively appropriate to investigate. The students of this school as the research object can reflect the real situation of e-book reading by different types of college students in multi-disciplinary and multi-specialties.

Introduction of guangxi university for nationalities

Guangxi University for Nationalities is a university with ethnic minority characteristics in Guangxi. The campus environment is ranked high in the province, attracting outstanding students from various ethnic groups in the province and overseas students from Southeast Asia. The school's disciplines focus on the humanities with a number of minor language majors. Moreover, a number of science and engineering studies are building up, so the comprehensive educational ability is gradually improving. This university has supplied many talents to the Southeast Asia region, which possesses the characteristics of cultural integration and the output feature. The quality of students of this school is relatively high so that they can complete the investigation well.

Introduction of guangxi university of finance and economics

Guangxi University of Finance and Economics is an important regional finance and economics university in Guangxi. The school always represents the educational ability of finance and economics in the region. It focuses on cultivating the integrity of college students and the quality of employment, on the basis of providing financial professionals for neighboring provinces. The school's competitiveness in running has steadily increased. Besides that, the structure of disciplines and majors has been continuously optimized and upgraded. The students of this university have a calm and down-to-earth characteristic with a high degree of cooperation with the investigation.

Introduction of samples

In this questionnaire survey, the author adopts random sampling method to determine the samples. Then the investigators respectively select students as the survey samples in the 3 universities in accordance with the principle of randomness to carry out the survey. Since the sampling is carried out in universities, each individual in the survey is the same or highly similar as a whole. In the overall survey object, the homogeneity of each individual is obvious, therefore the arbitrary sampling method can ensure better results.

Sample size and selection of sample

Sample size: More than 1,000 Samples were collected in the 3 mentioned universities and each university has collected 300 samples or so. Finally, 1,020 effective samples were collected. Among them, there are 300 samples from Guangxi University, 350 samples from Guangxi University of Finance and economics and 370 samples from Guangxi University for nationalities. Conduct data cleaning on the questionnaire to eliminate incomplete sample information. The team selects samples in a random way, does not follow the determined methods, and ensures that all samples in the sample population have equal opportunities to be selected. Finally, 1,020 valid samples were collected.

Sources of data

With the conduction of on-site investigation and summary of the information about those samples, this research adopts a similar method to the common method of "street blocking method" in random sampling **-** "campus blocking method". The specific approach is: Enquire some pedestrians in public areas of campuses as the surveyed persons for this research, requesting the surveyed persons to ask about their views on the questionnaire and asked the surveyed persons to fill in the questionnaire.

Collection of data

Manually collated the data and selected available samples. After collecting all survey samples, those did not belong to the college student group were eliminated and then the data could be preliminarily processed.

Data analysis

This paper uses descriptive statistics, regression, correlation analysis, reliability analysis, multiple response analysis and other statistical analysis methods. Conduct an overall analysis of the effective samples, which concentrated on the following aspects:

1) To learn a breakdown of the e-book consumer market for college students. According to the market segmentation theory, a basically clear understanding of the current segmentation of e-book consumption by college students can be seen. And to collect detailed statistics from the perspectives of age, gender, location, consumption level, disposable income, class, personality (hobbies), etc. to grasp the consumption behavior and characteristics of college students in various market segments.

2) To master the demand and motivation for e-book consumption of college students. Based on the cognition of consumption motivation, this research recorded the needs and motivations reflected by the consumption behavior. To analyze college students' cognition and perception of e-book consumption, the formation and change of their attitudes toward e-book consumption and grasp the cognitive, emotional, and emotional components of e-book consumption, which can better seize their decision-making structure system.

3) To record the decision-making framework system for college students' consumption of e-books. E-book consumption behavior is not an individual behavior, but a socialized behavior, which is affected by various social factors. This part aims to learn about the e-book consumption of college students in different situations so as to grasp the decision-making process of e-book consumption based on the survey.

4) To analyze the impact of pirated e-books on college students' e-book consumption behavior. From the perspective of consumption costs and economic conditions, this research analyzes why college students intend to read free e-books and even pirated e-books.

Results and discussion

Conclusion of the investigation
Analysis of college students' e-book consumption motivation

Table 1 Length of reading e-book

	Frequency	**Percentage**
Within 1 h	495	48.5
1 - 4 h	430	42.2
4 - 6 h	70	6.9
More than 6 h	25	2.5
total	1,020	100.0

Statistics show that 48.5 % of college students use e-books for less than 1 h a day, which is in line with the current trend of "fragmented" reading. From the above regression analysis, "the length of time to read e-books" is the main positive factor affecting addiction. In the era of fragmented reading, most of the acquisition is fragments of knowledge. These fragments of knowledge cannot effectively form a relatively good knowledge structure, and cannot effectively help college students to form and improve their own knowledge and ability. The main purpose of college students reading e-books is to use e-books as an effective supplement to their daily learning. Reading e-books can help college students obtain a long-term positive benefit through continuous and effective learning. Since the short-term benefits of continuous reading are not obvious, the digital reading performed by college students is basically "shallow reading".

Table 2 Addiction to e-books

	Frequency	**Percentage**
Not addictive	715	70.1
Addictive	305	29.9
Total	1,020	100.0

From the statistical results, 70 % of college students said that they would not be addicted to e-books, but 30 % of college students' questionnaires indicated that they would be addicted. From the above regression analysis, "e-book content (leisure reading), e-book content (comic), e-book content (online novel), e-book reading time, e-book file format HTML" are the main positively correlated factors. If a college student has a greater influence on these factors, then the probability of his or her addiction to e-books will be high. From the results, junior students have the largest proportion of addicted to e-books. Among the motivations of reading e-books, college students who choose "recreation and entertainment" are more likely to become addicted to e-books, accounting for more than 50 %. The negative impact of entertainment on the e-book industry and on college students' reading e-books has become even greater. College students who browse casual reading materials, online novels, and comics are more likely to become addicted. Among them, online novels are more prominent. If they choose online novels as e-book reading content, 83.6 % of college students are likely to be addicted to e-books.

Analysis of college students' e-book consumption psychology

The 3 indicators of "easy to carry", "easy to obtain" and "strong sharing interaction" have the highest degree of recognition. From the perspective of user experience perception, these are the biggest perception points of the digitization of paper books. "Easy to carry" allows users to avoid the cumbersomeness and burden of carrying paper books; "easy access" reflects users' expectations of convenience and expectation of obtaining e-books easily, which means that the development of e-books must be even greater. Pay attention to the channel construction to reduce the difficulty in obtaining e-book; "sharing and interactive" reflects the interaction in the process of reading e-books, which helps users to immerse themselves in the reading environment and improve the perception of e-book users.

The 3 indicators of "practicality", "conformity" and "comparability" have the highest degree of recognition. "Practicality" once again reflects the user's pursuit of direct and simple experience and perception in the process of satisfying the "entertainment" motivation. College students hope that e-book reading can provide a kind of practical short-term satisfaction, rather than relying on the depth of textbooks. The satisfaction of reading; "conformity" reflects that when college students read e-books, the principle of choosing e-books is to follow the trend, and it also reflects that the design, advertising and sales of e-books must use the psychological characteristics of herd and make good use of viruses. The means of dissemination promotes college students to choose more e-books to meet their personal needs; "comparison" reflects the psychological satisfaction of college students by comparing the reading conditions of those around them, and the comparability reflects College students hope that with the help of e-books, they can consolidate their personal image, which is also an important measure for college students to optimize and enrich their personal image.

Factors influencing the propensity to consume e-books

From the statistical results, 83.1 % of college students currently price e-books within 5 yuan, which accounts for the absolute majority. In fact, this price is generally lower than the current e-book service prices provided by mainstream websites such as Jingdong and Dangdang, which means that college students believe that the current price of e-books on Jingdong and Dangdang is still high, so in the previous questionnaire, college students are more willing to use other payment methods to obtain non-genuine e-book services.

Table 3 The price of ordinary e-books

	Frequency	Percentage
Less than 5 yuan	848	83.1
5 - 10 yuan	135	13.2
10 - 20 yuan	29	2.8
20 yuan or more	8	.8
Total	1,020	100.0

College students' awareness of e-book copyright management

From the statistical results, at present, college students generally still want to choose the "free sharing version", which accounts for 82.5 %. College students are generally aware of free use of e-books, and there are more free dependencies. For the majority of college students, under the same convenient conditions, college students must first find e-books with the same quality and the same content on the Internet, rather than choosing a way to purchase paid e-books at a reasonable price.

The current situation of e-book piracy has greatly harmed the rights and interests of e-book copyright holders. Although e-book copyright owners can carry out related rights protection actions within the framework of the law, many e-book copyright owners are unable to effectively carry out rights protection actions due to various pressures, because in these e-book copyright infringement incidents, most of the

subjects involved in the case are the "overlords" of Internet companies. These "overlords" use their advantages in channels and power to prevent the defenders from effectively guaranteeing their rights and interests. In addition, on the Internet, many undocumented pirated e-book sharing websites generally use points exchange or pay to purchase e-books. Website operators attempt to increase website traffic by pirating high-quality e-books for their own benefit, which actually allows the majority of college student consumer groups to maliciously upload their own pirated e-books, and through these channels, the spread of infringing works on sharing websites has been realized. Under the condition of obtaining the same consumption effect, college students are more inclined to "free lunch" and are more inclined to download e-books through pirated websites.

Discussion

Insufficient willingness to consume e-books among college students

Judging from the statistics of the above questionnaire, the lack of willingness to consume e-books among college students is a more prominent problem. Studying the reasons for the insufficient willingness of students to consume e-books is crucial to the long-term development and structural transformation of the e-book industry. It can be observed that there are mainly 4 types of factors that limit the behavior of college students to purchase e-books: First, college students' psychological needs and desires for e-books are the direct reasons for college students' purchase and consumption of e-books. The second is the disposable income level of college students and the price of e-books. The third is the characteristics of the e-book itself, that is, the conditions required for purchase, reading, and sharing, which can affect the purchase behavior of e-books by college students. The 4 is the impact of the social environment on college students, especially the social and psychological impact. Copyright issues have always been an important factor affecting the normal consumption of e-books by college students.

Risks of fragmented reading for college students

The characteristics and hazards of fragmented information mainly include the following aspects. One is that fragmented reading affects college students' construction of their logical system of knowledge. Second, fragmented reading is easy to distract college students from studying. Third, the scattered browsing process takes up time, but it gives the college students the illusion that he is continuing to study.

Risk of e-book addiction among college students

This article believes that it is necessary to comprehensively observe and master how college students become addicted to e-books and how to avoid e-book addiction. In addition, many other studies can also show that if college students can do a good job of personal control during college, they can make full use of their time to take care of their studies, and can coordinate the quality of their studies, this kind of college students can also get better control of e-book addiction. In other words, the e-book addiction of college students has a positive correlation with academic power.

Piracy problem affects the overall development of e-book industry

The most important issue in the development of the e-book industry chain is the e-book piracy. Pirated e-books have seriously damaged the commercial interests of content creators and content providers, making it impossible for various participants to generate revenue through effective sales and supporting the healthy development of the entire industry chain.

The subjects of e-book industry chain are lack of enthusiasm to participate in the construction of value chain

At present, there are still the following problems in the development of the digital virtual value chain. First of all, the work progress of the publisher or the copyright owner is too slow. Modern publishers must not only produce and manage paper books, but also strengthen the digital processing of best-selling books, so as to achieve good value-added sales of books. However, from the current point of view, traditional publishers lack the motivation for transformation, have low awareness of digitization,

and singly deal with digitization. They cannot provide diversified reading content to the market well, and cannot effectively provide audio, Books, e-books, etc. Secondly, there are obvious problems with book wholesalers' perception and transformation support of emerging industrial chain forms. In the traditional distribution industry chain, book wholesalers are the intersection of various information in the traditional industry chain. This kind of information gives the wholesalers great convenience and is also the source of their profits. However, with the gradual development of the industrial chain of new formats, wholesalers are increasingly unable to adapt to the development needs of the industrial chain. The status of wholesalers has been challenged and the space for existence has been further compressed. Third, the evolution of physical bookstores is slow. Affected by many factors, China's physical bookstores did not quickly transform into an online and offline interface, but quickly disappeared.

Lack of mutual trust mechanism in the upstream and downstream of the industrial chain

"disintermediation" has caused great difficulties and influenced on the integration of the industrial chain. Digitization is actually a process of disintermediation. In the process of digitization, the original industrial chain participants have to transform, and have to be completely abandoned by the industrial chain. If some participants do not grasp the development trend of the industrial chain, it is easy to lose the opportunity to participate in the industrial chain again. "Disintermediation" has flattened the industrial chain, and this flattening also urgently requires the participants of the industrial chain to abandon their original vision and change the traditional and backward perspective of interests, but this process is difficult and long. The existence of "disintermediation" has greatly affected the rational division of labor in the e-book publishing process and the development speed of the e-book industry.

A big gap between e-book pricing system and consumer market expectation

The digital distribution of e-books actually means a flat sales system. In this system, the sales channel is the party that holds the sales data and the party that makes the most profit, but the profits of the sales channel also squeeze out the interests of content creators. Content providers are unable to obtain relevant benefits from the sales of e-books, so the content providers gradually consider "disintermediation" and safeguard their rights through self-publishing and other methods. If each participant in the e-book industry chain lacks sufficient cooperation and coordination, then this industry chain is a zero-sum game system with zero collaboration and zero division of labor, and all parties cannot protect their rights and interests well. To solve this problem, on the 1 hand, the top-level design of the industrial chain needs to be optimized, and on the other hand, participants in the industrial chain are required to balance the interests of the upstream and downstream, and realize the integration and rapid development of the industrial chain.

Difficulties exist in e-book management of university libraries

University libraries are slack in assuming their obligations and fail to formulate corresponding systems and standards to protect the copyright of original works. University libraries lack sufficient management capabilities to coordinate the implementation of the original copyright issues, which also reflects the major system deficiencies in the proper authorization and reasonable protection of copyrights for e-books. Appropriate authorization and reasonable protection are the inevitable requirements for the reasonable development of e-books, but cannot be solved well, leading to the further deterioration of the consumer market environment of e-books. In order to facilitate the e-book experience of college students, academic libraries do not invest much in the security and copyright protection of e-books. Many college libraries adopt a loose access environment. College students can log in to their personal accounts, browse and download related e-book resources. For downloaded documents, academic libraries do not have relevant copyright control and tracking methods. In addition, college students can use simple technical means to process the content of the downloaded document. These conditions have caused the piracy of e-books to spread further.

Conclusions

From the previous survey, college students have generally accepted e-books as a new way of reading, and at the same time, they can understand the positive meaning of e-books well. However, the current pricing, industry management and guidance systems of e-books have caused great troubles for college students' e-book consumption behavior. To completely reverse this situation, it is necessary to strengthen legal guidance at the national level, initiate a national procurement plan, implement industrial policies, and combine the "carbon neutral" trend of the times to carry out the support and adjustment of relevant policies and regulations at the national level; it also requires the industry chain itself strengthen the optimization of its own functions, create an e-book consumption platform in the new era, and promote the popularity and promotion of e-book reading; for families, it is necessary to strengthen reading guidance, provide college students with a reasonable consumption budget, and promote college students to adjust the strategy of consuming e-books based on their future vision, so as to help the students form a good consumer psychology and promotes the growth of learning skills; for college students, it is necessary for college students to consume e-books actively, rationally and legally, to protect their reading rights from a higher level, to prevent addiction to e-book reading, and to seek read in a more reasonable way, to make a rational and correct choice for jointly promoting the development of the e-book industry.

College students should be correctly guided to adjust the consumer psychology of e-books

Cultivate the consumption habits of college students and establish a correct concept of e-book consumption.To help college students form a positive view of e-book consumption, it is necessary to comprehensively use a variety means to reconstruct and establish a consumption view.Families should guide college students to form a better view of e-book consumption.Colleges and universities should strengthen education and guidance to improve college students' awareness of consuming genuine e-books.

Guide college students to purchase and use e-books in the correct way

Identify the e-book reading problems of college students and carry out active psychological counseling. Families should observe and identify the reading behavior of college students in a targeted manner, and identify and confirm the reasonable conditions of college students' e-book reading behavior.Improve the e-book reading environment for college students and implement behavior guidance.Reflect on the independence cultivation of college students and implement reasonable interactive teaching.

Colleges need to provide a more convenient borrowing environment

University libraries should start a demand-driven e-book procurement plan. Facing up to the solutions of college students' e-book addiction.University libraries should organize and implement the responsibilities of guidance and management, and promote college students to better carry out e-book reading.University libraries should apply block chain technology to realize the protection and management of e-book copyright.Implement data intelligent application solutions for the e-book industry chain.

The upstream and downstream of the e-book industry should establish a benign system for industrial development

To establish an industry self-coordinating rights protection organization for the e-book digital publishing industry.Integrate and establish a unified, centralized and interconnected copyright resource platform and trading platform across the country.The industry chain should formulate industry norms for e-book operation and management.The industry chain must adapt to the changes of book publishing mode conversion.The industry alliance for the digital publishing of e-books must do a good job in anchoring consumers' values. The industry alliance should promote the online and offline integration of e-book sales channels.

The national level needs to strengthen the e-book development strategy and optimize the consumption environment

To promote the national strategy of the digital industry of e-book publishing.The state should establish a copyright management agency for digital publishing.Continue to improve the system, business and legal environment for e-book publishing. Promote R&D and innovation of copyright protection technologies for e-books at the national level..The state shall establish a unified coordination mechanism for e-book infringement enforcement.Combining with the long-term plan of "carbon neutrality", establish an electronic system of college textbooks.

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