

The idea of supply chain postponement in crowdfunding publishing

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Abstract. The problem of inventory backlog in publications is one of the pain points in the industry today. In addition, the poor sales of publications often plagues the majority of practitioners. The emerging publishing model of crowdfunding publishing fundamentally changes the traditional publishing process and can effectively solve the problems of inventory backlog and poor sales. This is actually an application of the concept of postponement: the natural social characteristics of crowdfunding platforms can achieve the dual effects of fundraising and brainstorming, which contains the idea of design postponement (the content design activities of publications are delayed). The participation of readers in content design is conducive to responding to reader needs and expanding publication sales; the pre-sale feature of crowdfunding publishing moves the consumption link forward, while the production activity of printing and copying publications is delayed until the demand is confirmed. The implementation of production postponement effectively avoids inventory backlog caused by decision-making based solely on experience. There is currently no research literature analyzing crowdfunding publishing from the perspective of postponement strategy. This article specifically analyzes the postponement mechanism in crowdfunding publishing, which is beneficial for publication project sponsors to fully utilize the concept of postponement in the crowdfunding process to solve the inventory and sales problems in the publishing industry.

Keywords: Crowdfunding; crowdfunding publishing; publishing model; post-ponement.

1 Introduction

Crowdfunding publishing is the application of Internet crowdfunding financing mode in the publishing field. It refers to the behavior that project sponsors launch publishing projects to the public through crowdfunding platforms to obtain funds for publishing. The traditional publishing model, due to the fragmentation of production and demand links in the publishing industry chain, makes it difficult for publishing institutions to accurately determine the quantity of publications needed, resulting in a large amount of inventory backlog problems. In the crowdfunding publishing model, customers have

already confirmed the publication before it is produced, truly achieving on-demand publishing and effectively solving inventory risk issues. According to the ideas in the supply chain, crowdfunding publishing is actually the implementation of two postponement strategies - design postponement and production postponement. Why do you say that? Firstly, crowdfunding platforms have unique advantages in social interaction and market proximity. They empower the public with the right to participate in book content and creativity, allowing them to comment on the content and creativity. Publishing proiects often target specific public groups during the creative stage (before the design content is fully formed), setting topics to attract their attention and participation, and contributing wisdom to the creation of books. This is actually a design postponement. The traditional publishing process involves pre-designing book content and then printing and distributing it to customers. However, the content design activities here are delayed, and customers (readers) participate in the design, Because the content of books comes from the creativity of customers, it fits their preferences and can expand book sales. For example, in 2013, Zhihu launched a crowdfunding publishing project called "What do we talk about on Zhihu when starting a business". Based on the number of likes from readers, the most popular entrepreneurial Q&A was included as the publishing content, thereby expanding the sales of the book and making it the top seller on Amazon's pre-sale list. The second scenario is that when the initiator of a publishing project releases the project to the public on a crowdfunding platform, the content that needs to be published is often finalized, but the number of publications is unknown. Once the funds raised reach the target amount required by the platform, it means that crowdfunding is successful, customer orders are confirmed, and the publishing project starts, which is a production postponement, The production activity of book printing and copying is delayed until the customer order is confirmed, and delayed production can effectively avoid the risk of book inventory. For example, after the completion of the book "Social Dividend", Xu Zhibin released a project through crowdfunding platforms for pre-sale, determining the publication volume (demand) of 3300 copies, achieving the goal of on-demand publishing.

Crowdfunding publishing fundamentally changes the traditional publishing model from a "one-way participation" state to a "multi-dimensional interaction" state. This new publishing model not only enables the public to provide a certain share of publishing funds, but also actively participate in the production and circulation process of publications, combining the creativity and consumption power of the public to achieve the dual effects of financing and intelligence. Crowdfunding publishing has attracted more and more scholars' research interests in recent years. However, there is no research literature analyzing crowdfunding publishing from the perspective of postponement strategy. According to CNKI, using "crowdfunding publishing" plus "postponement" for topic retrieval, the number of retrieved documents is zero. According to the idea of supply chain postponement, the implementation of postponement can effectively solve the inventory risk problem that exists widely in the publishing industry. The implementation of postponement design in "intelligence" can improve the innovation of publications and expand their sales volume. This article will specifically analyze the postponement mechanism in crowdfunding publishing, in order to help publishers fully utilize

postponement thinking in the crowdfunding process and solve inventory and sales problems in the publishing industry.

2 Overview of postponement strategy

Postponement is an important supply chain strategy that refers to postponing supply chain activities such as product design, production, and distribution as much as possible until customer demand is confirmed(Dong et al., 2019)[1]. Its essence is to carry out activities after receiving customer orders, in order to improve enterprise production flexibility, reduce inventory costs, and minimize market risks. To implement the postponement strategy, it is generally believed that the key is to confirm the customer order separation point. According to research literature, the separation point (CODP) is the turning point in the supply chain activity stage where product differentiation turns, and it is also the turning point that is most affected by consumer demand. Products before the separation point are modularized and generic, with high versatility and little influence from customer orders; products after the separation point are flexible and personalized, with different effects on product quantity, specifications, etc. in terms of customer orders(Hu, 2018)^[2]. Popularly, applying the postponement strategy is to find the separation point in the production process of a product and move it as far downstream as possible in the production process(Christopher et al., 2007)[3]. Postponement strategies are widely used in industries with high levels of modularization such as the automotive and computer industries. For example, cars can be divided into modules such as body, bogie, wheel, brake system, etc. Each module can be divided into many types. and the production of these modules can be pre-produced in a large-scale generalized way. The assembly activities of cars are postponed until customer orders arrive. Through this kind of assembly postponement (a form of production postponement). low-cost mass production can be used to meet diverse consumer demands. Therefore, postponement strategies have the effect of reducing market risks and improving customer response.

The uncertainty of consumer demand is mainly manifested in the uncertainty of product form, quantity, time, and place. Therefore, supply chain postponements can be roughly divided into form postponements, quantity postponements, time postponements, and place postponements. Among them, form postponements and quantity postponements can be referred to as production postponements, while time postponements and place postponements can be referred to as logistics postponements(Pagh and Cooper,1998)^[4]. With the development of technology, the objects of postponement have been expanded and extended, and new types of postponement such as payment postponement and design postponement have emerged. In terms of future valuable research directions for postponement, Yang *et al.*(2004)^[5]believe that as a relatively mature research field, current research on postponement is still relatively weak in some aspects, such as combining postponement practices with specific industries. Applying a mature theory to a new industry is an innovation in theoretical application. This article will make an attempt in this regard, analyzing the idea of postponement in crowdfunding publishing, and

providing constructive ideas for the publishing industry to apply the idea of postponement to solve inventory and sales problems.

3 Design postponement: raising funds and ideas for crowdfunding publishing projects

Design postponement, also known as pure postponement, refers to the postponement of all activities in the value chain, including product design activities, until the arrival of orders. For the field of crowdfunding publishing, design postponement means that the content of the publication is not designed and created by the author in advance as in the traditional publishing process, but rather the content is not vet formed and is delayed until the customer (reader) demand is determined. Often, it is the reader who determines the creative and content of the publication. In traditional publishing, readers have little opportunity to participate in the production process of publications, and can only purchase and read publications after they are completed. However, for a crowdfunding publishing project, readers can participate in the content creation process of the publication and contribute their own creativity and wisdom to the formation of content. The book crowdfunding publishing project "Millisecond Understanding Men" invites readers to deeply participate in the publication process. First, the author of the book solicits their love stories from readers through a crowdfunding platform as material for writing the book. Then readers are invited to select cases from the collected material to determine the content of the book. Among all readers, there will be deep planners who can not only decide which material cases to retain, but also publish their own views and ideas about love in the book. In order to thank the deep planners for their efforts and support, this book will place their avatars on the inside pages and publish their recommendations for this book. In addition to the creation and selection of book content, readers can also follow up on the publication progress of the book and contribute suggestions for cover design and promotional copy content. In the crowdfunding publishing case of "Millisecond Understanding Men", not only the content design of the book but also its technical design (cover binding design) have been delayed compared to traditional publishing, both determined based on reader demand. This is a typical case of design postponement. This case completely changes the traditional model of author's isolated creation of content, boldly introducing reader participation. Not only does it raise funds for book publishing, but also raises content for book publishing. Due to the popularity of the book's content among readers, it has been very successful after publication. The implementation of design postponement thinking in this crowdfunding publishing case perfectly solves the inventory and sales problems that are inherent in traditional book publishing processes.

In crowdfunding publishing, the author has already found future readers (customers) before writing, and has engaged in interactive communication with readers. Based on the suggestions and inspirations received from readers, the corresponding creative process is carried out. This reader-oriented approach, which integrates fundraising, production, and consumption, is more scientific in terms of topic selection and creative planning. The content design activities of the publication are

delayed until the customer comes to implement it, which makes the publication more suitable for customer preferences and ensures that the publication is more popular among readers, expanding the sales volume of the publication.

4 Production postponement: avoiding the risk of a large backlog of publications inventory

What is more widely used in crowdfunding publishing is actually the idea of production postponement. Production postponement refers to delaying production activities until customer orders arrive. The production activities in the publishing industry are the reproduction of publications, including the printing of books or the production of audiovisual products. Currently, many crowdfunding publishing projects in China belong to books that have been finalized or are about to be launched. They are pre-sold and promoted through the crowdfunding model. Therefore, when the initiator publishes a publishing project through the crowdfunding platform, the content of the publication is often determined, but the sales volume is still unknown. When crowdfunding succeeds, it means that customer orders have been placed and the sales volume of the publication has been determined. The production activity of printing and reproducing publications is delayed until customer orders are confirmed. This is a form of production postponement, which can effectively avoid the problem of high inventory risk caused by traditional publications that are printed and distributed blindly based on subjective experience.

In the Internet era, the reading demand of readers is obviously personalized, and the uncertainty of the market makes it difficult to grasp the customer demand. Traditional publishing involves processes such as topic selection, editing, printing, and distribution. Although there are stages such as topic argumentation and market research before publication printing and distribution, due to the one-way and fragmented nature of the processes, decision-making is blind, customer sales are often difficult to accurately determine, and publishing backlog often becomes a common problem. Publishers bear great business risks. Inventory issue is one of the pain points in the publishing and distribution field today. Taking JD.com as an example, it has a warehouse area of 130000 square meters, more than 1.1 million book categories in stock, and a total inventory of over 70 million assets. Even with such a large inventory, JD.com still has a total shortage of 600000 categories and 800000 zero selling categories every year(Zhu, 2020)^[6]. The emergence of crowdfunding publishing has overturned the traditional business model of "first production and then sales" in the publishing industry, formed a precise supply and demand chain, and achieved on-demand publishing. The supply of publication output is completely determined by market demand, thus avoiding a large backlog of inventory and effectively reducing the operational risks of traditional publishers. This is because crowdfunding publishing has a certain pre-sale nature. It presales not the physical entity of the publication, but the creativity and soul of the publication. When many readers like this creativity and soul, they will invest in the crowdfunding publishing project and promote the success of crowdfunding. Therefore, the production activities of the publishing entity are delayed until the customer order is confirmed, This on-demand publishing method with delayed production effectively avoids the risk of a large backlog of publication inventory. For example, on April 14, 2016, basketball superstar Kobe Bryant officially announced his retirement, which was a hot news topic at the time. Can celebrity themed books about Kobe be sought after by fans? Some publishers feel that they can seize the hot topics and accelerate the release of a batch of books around Kobe Bryant; Some publishers also believe that this issue can be verified by the market through crowdfunding publishing. Heilongjiang Education Publishing House adopted the latter approach and released the crowdfunding publishing project "Bi · Case - Written for Kobe Bryant" through a crowdfunding platform. The project ultimately received zero support and the crowdfunding failed, indicating that the market did not recognize the content of the book. As a result, the book was not published, avoiding inventory backlog caused solely by subjective decision-making(Zhang, 2019)^[7].

5 Analysis of the postponement application of the crowdfunding publishing project "What do we talk about on Zhihu when starting a business?"

5.1 Project profile

On December 18, 2013, Zhihu took the first step towards crowdfunding publishing. It collaborated with CITIC Publishing House to announce the crowdfunding publishing project "What Are We Chatting on Zhihu When We Start a Business?" with a plan to recruit 1000 people. Each person can contribute 99 yuan to become the "co publisher" of the project, and the return is a collection of books with the name of the investor printed on the cover. After the project was announced, it immediately aroused a large number of netizens' strong interest. In just 10 minutes, the recruitment of 1000 people was already full, and the scene was so hot that even Zhihu's Chief Operating Officer Huang Jixin couldn't help others grab a spot. At that time, many netizens who had received the collection of books proudly shared their orders everywhere, and one Zhifan revealed the true meaning of the matter: "Zhihu sells books, which are clearly a sense of honor and belonging." In fact, in this era, the sales of entrepreneurial guidance books were not very good. However, when this book was pre-sale on the Amazon e-commerce platform in February 2014, it achieved a good ranking at the top of the charts. This is because the content of this book is almost all from the essence of entrepreneurship Q&A on Zhihu website, so the quality and practicality of the book are beyond doubt. In 2013, Zhou Yuan, the founder of Zhihu, began to have the idea of publishing an entrepreneurial guidebook. Based on his rich experience in entrepreneurship, he preliminarily determined the outline and structure of this book. Next, the editorial board members will collect relevant content from the Zhihu website based on the outline. In fact, high-quality Q&A on entrepreneurship has been widely available on the Zhihu website before, mainly due to the website's unique features. After several adjustments, the topics related

to entrepreneurship went from just over 500 collected at the beginning to 103 carefully selected based on likes from Zhifan.

The value of this book lies in the fact that it embodies the efforts of 5 million fans, providing detailed answers to 103 entrepreneurial topics, all of which come from fans with rich entrepreneurial experience in the field. The questions and answers cover almost the entire process of entrepreneurship, including how to choose an entrepreneurial direction and how to choose investors, partners, etc. It also provides enough details to be aware of in entrepreneurship, as well as many reliable answers that cannot be found elsewhere. All of these are very valuable for someone who really wants to start a business. The co-publisher of this book, CITIC Press, is also quite satisfied with this crowdfunding publishing project. Compared to traditional publishing, the crowdfunding process involving user participation in content creation and design saves the need for topic selection and manuscript negotiation, and CITIC Press only needs to handle the traditional publishing processes of editing, printing, and distribution in the later stage.

5.2 Analysis of postponement application in the case

Traditional publishing is characterized by its closed and one-way nature, with readers at the end of the book production process and unable to participate in the creation and design of book content. In crowdfunding publishing, readers can interact with authors and participate in the design of book content: readers can express their opinions and views by participating in topic discussions and interactions on crowdfunding platforms; book topics and content can be selected through readers' likes. In this case, the determination of book content is based on the latter method, selecting the most popular entrepreneurial Q&A from Zhihu website and compiling them into a book. The project initiator initially used an algorithm to condense the three-year entrepreneurial Q&A on Zhihu website into more than 500 questions by assigning weights, and then selected 103 hottest entrepreneurial topics through the likes of Zhihu users. Most of the content of the book comes from readers, and the initiator only plays a role of organization and coordination.

From the perspective of supply chain postponement, the idea of design postponement is applied in this case. The initiator (creator) delays the creative design activities of the book content, rather than pre-designing and producing the physical book and selling it to readers (users) as in traditional publishing. Moreover, the design of the book content is actually done jointly by the creator and the reader. The reader completes the design activity by liking the book content, and determines the user demand by becoming a "co-publisher" of the book through funding. According to supply chain thinking, the entire publishing industry chain process can be divided into design, production, and distribution links. Design activities include topic selection and content creation, while production activities include printing and copying. The distribution link refers to the distribution and retail of publications. The corresponding types of postponement are design postponement, production postponement, and distribution postponement. Design postponement refers to fully customizing according to user requirements. In general, this type of postponement can bring very high user satisfaction because the product is designed and produced according to user wishes, which fits user preferences. In this

case, due to the fact that entrepreneurial Q&A is first condensed by the Zhihu team and then selected through user likes, it embodies the collective wisdom of 5 million Zhihu users. Therefore, the book content is very popular among readers. Firstly, the book content covers the entire process of entrepreneurship from idea generation to A round financing, which is very comprehensive. Secondly, the answers to entrepreneurial questions are of high quality, otherwise they would not be selected. Thirdly, the book contains many valuable lessons and details that should be noted, which are not available in other books. This book can become the number one on Amazon's pre-sale list with an impressive initial print run of 50,000 copies (only a tiny fraction of which was achieved through crowdfunding). This is inseparable from readers' participation in designing the book content, which contains the idea of design postponement that may not be known to the initiator.

6 Conclusions

As a content industry, the personalization and diversification of readers' reading needs in the Internet era have led to increased uncertainty in the publication market, making it increasingly difficult for publishers to plan topics and make publishing decisions. Inappropriate decisions have led to serious unsalable publications, and inventory has become one of the pain points of today's publishing industry. In addition, poor sales of publications often troubles a large number of practitioners. The emerging publishing model of crowdfunding fundamentally changes the traditional publishing process and can solve the problems of inventory backlog and poor sales. This is actually the application of postponement thinking: the natural social characteristics of crowdfunding platforms can achieve a dual fundraising effect of fundraising and intelligence, containing the idea of design postponement (the content design activities of publications are delayed). Reader participation in content design is conducive to responding to reader needs and expanding publication sales; The pre-sale feature of crowdfunding publications moves the consumption process forward, and the production activity of printing and copying publications is delayed until demand is determined. The implementation of production postponement effectively avoids inventory backlog caused by decisionmaking based solely on experience. In recent years, there has been an increasing amount of research on crowdfunding publishing. However, there is no literature analyzing crowdfunding publishing from the perspective of postponement strategies. This article has done some exploratory work in this regard, and future research directions can start with comparative research to compare the characteristics and similarities and differences of postponement strategies in traditional application fields - manufacturing and publishing, in order to draw on the successful experience of postponement strategy application for crowdfunding in the field of publishing.

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