

Current Use and Strategies for University Press Higher Education Textbooks in the Digital Publishing Era (Postprint)

Authors: Pan Haiying

Date: 2023-10-08T00:00:00+00:00

Abstract

Purpose: Based on the concept and characteristics of digital publishing, this article analyzes the future development trends of university presses. In conjunction with the current status of textbook utilization in university presses, it is recognized that against the backdrop of the digital era, digital publishing and convergence development have become deeply integrated into the publishing industry. Publishers, taking content and resources as the foundation, realize the digitization of higher education textbooks through resource integration.

Methods: The literature analysis method is employed to review literature and identify effective approaches for the digital publishing of current higher education textbooks. The case analysis method is utilized to comprehend the key application points of digital publishing platforms.

Results: By summarizing the current status of textbook usage, the research concludes that the quantity of products needs to be increased and publishing concepts require updating.

Conclusion: It is recommended to appropriately increase digital publishing products, strengthen the optimized design of higher education textbook content, thoroughly explore digital resources within textbooks, enhance innovation and industrial restructuring of higher education textbooks, and address issues in textbook construction for university presses by establishing digital platforms.

Full Text

Preamble

ChinaXiv Cooperative Journal: Current Status and Countermeasures for Higher Education Textbook Use by University Presses in the Dig-

ital Publishing Era

(Beijing Sport University Press Co., Ltd., Beijing 100084)

Abstract

Objective: Based on the concept and characteristics of digital publishing, this article analyzes future development trends of university presses. Combined with the current status of textbook use in university presses, it is evident that under the digital era background, digital publishing and integrated development have become deeply embedded in the publishing industry. Publishers, taking content and resources as their foundation, achieve digital construction of higher education textbooks through resource integration.

Methods: Using literature analysis methodology, this study examines relevant literature to identify effective pathways for digital publishing of current higher education textbooks. Using case analysis methodology, it explores key application points of digital publishing platforms.

Results: Summarizing the current status of textbook use, the research reveals that product quantity needs to be increased and publishing concepts need to be updated.

Conclusion: The number of digital publishing products should be appropriately increased, optimization design of higher education textbook content should be strengthened, digital resources within textbooks should be deeply explored, innovation in higher education textbooks and industrial structure adjustment should be enhanced, and digital platform establishment should be used to resolve textbook construction challenges in university presses.

Keywords: digital publishing; university press; higher education; digital construction; textbook customization

CLC Number: G237.9

Document Code: A

Article ID: 1671-0134(2023)02-138-04

DOI: 10.19483/j.cnki.11-4653/n.2023.02.028

Citation Format: Pan Haiying. Current Status and Countermeasures for Higher Education Textbook Use by University Presses in the Digital Publishing Context [J]. China Media Technology, 2023(02).

With the development of domestic higher education, university presses have gradually expanded their social influence, and the brand competitiveness of higher education textbooks has continuously improved. University presses have now become the main force in higher education textbook publishing. Presses must provide high-quality textbooks for talent cultivation, teaching, and research in higher education. The development of digital technology has driven changes in print books. After embedding QR code links, textbook content can be disseminated on a large scale as digital resources. Publishers should seize the

opportunities presented by digital publishing, strengthen their own transformation and upgrading, and promote the digital construction of higher education textbooks.

Under the digital development paradigm, traditional print media publishing forms are gradually declining, while network platform publishing exhibits multimedia convergence. Digital publishing overall demonstrates characteristics of “virtualization,” “networked services,” and “system integration,” transforming previous linear structures into nonlinear ones. This breaks the textbook printing format based on print media carriers, providing students with intangible publishing supported by digital technology and achieving an efficient transformation from tangible carriers to intangible dissemination in university press publishing. This truly realizes the efficient integration of digital technology and knowledge. [2]

1. Concept and Characteristics of Digital Publishing

Digital publishing specifically refers to the application of digital and network communication technologies to process publishing methods, achieving digitization in product form, distribution channels, and textbook content. Digital publishing requires network technology as its foundation and relies on three-dimensional communication forms to complete the dissemination of higher education textbook resources. It primarily presents two meanings: (1) The final published product remains a printed material, but the production process exhibits networking and automation trends, with publishers achieving digital publishing of print materials through the application of digital equipment. (2) Based on digital production, the final published product is disseminated in digital forms such as network transmission or optical discs. [1]

2. Diversified Development Trends of University Presses in the Digital Publishing Context

In the digital publishing environment, university presses exhibit the following development trends when publishing higher education textbooks: (1) **Richer product offerings.** Digital publishing initially maintained an opposing stance to traditional publishing, but as times changed, traditional print publishing began to embrace digital publishing, and the two moved toward integration. While maintaining the original form of print books, university presses also provide students with digital forms such as e-books, making textbook content more diversified. This not only enriches the content of higher education textbooks but also caters to the spiritual needs of contemporary college students, broadening the development channels for publishers. Audio textbooks, using voice as a carrier, also give students more options in selecting higher education textbooks. (2) **Diversified sales channels.** In the digital era, sales channels for university presses have also diversified. The internet accelerates information dissemination, with online bookstores, Douban communities, and WeChat

official accounts beginning to release textbook information and applying various marketing methods to improve textbook promotion effectiveness. (3) **Shift in publisher positioning.** Publishers have long served as bridges between knowledge authors and readers, positioned as content output providers delivering book resources to readers. In the digital era, the concept of “reader” has become blurred, gradually replaced by the concept of “user.” Publishers have now become providers of “knowledge” and “services.” While outputting higher education textbook content, they must also optimize textbook content design according to market changes and attend to marketing and promotion to maintain economic benefits. [3]

3.2 Publishing Concepts in Need of Renewal

In the context of digital development, digital publishing emphasizes the application of digital technology. Integrating digital technology with higher education textbook publishing helps improve publishing efficiency and quality and completes the rapid transformation and upgrading of publishers. However, at present, publishers only use digital technology simply, combining publishing elements with digital technology from the perspective of content or model. Textbook publishing is not market-demand oriented, and the exploration of textbook resources is inadequate, resulting in digital products that lack creativity.

3.3 Impact of Learning Styles on Digital Textbook Publishing

Changes in living habits and lifestyles profoundly influence technological development. Similarly, digital textbooks will change students’ learning styles, manifesting in both psychological and physiological aspects and requiring students to have time to adapt to digital changes. Prolonged digital learning affects students’ individual capabilities. Reading digital textbooks requires corresponding readers, and long-term online learning leads to distracted attention, preventing students from effectively concentrating. Teachers also cannot fully grasp students’ learning progress. Therefore, the application of digital textbooks requires an adaptation period to enable students to develop a correct understanding of digital textbooks.

3.4 Technical Development Challenges in Digital Publishing

In the digital publishing industry chain, digital publishing technology and service providers are important promoters of digital publishing, while sellers and reader manufacturers are downstream in the industry chain, maintaining close contact with readers. However, in the digital publishing context, many publishers lack modern management concepts, harbor prejudices against digital publishing, have narrow operational perspectives, insufficient awareness of digital applications, and incorrect understandings of digital textbooks. Meanwhile, many domestic publishers do not understand digital publishing well and fail to

comprehend its forward-looking nature. Constrained by technology, publishers often adopt a wait-and-see attitude, with few developing digital products independently in the first place, resulting in an incomplete industry chain structure.

4. Effective Countermeasures for Higher Education Textbook Use by University Presses in the Digital Publishing Context

Regularized mechanisms for the digital development of university presses can provide long-term momentum for higher education textbook publishing and are key to the digital transformation of publishers. University presses should summarize digital publishing experience and further implement regularized mechanisms. Relevant recommendations include the following aspects:

4.1 Implementing Regularized Mechanisms for Digital Transformation of Higher Education Textbooks

Digital higher education textbooks integrate text, images, audio, video, and other elements, making teaching content more open and textbook information more engaging, which can effectively stimulate student interest. However, digital textbooks are constrained by storage methods and distribution channels, and the profit model for digital textbooks is not clear enough, leading to insufficient enthusiasm for investment and construction by publishers. Some publishers have not formed relatively independent product systems and fixed business models, indicating that the number of digital publishing products needs to be further increased and the development space for digital publishing needs to be broadened.

Innovate products, improve the usage rate of digital higher education textbooks, and achieve optimal allocation of textbook resources. Publishers should develop different types of products based on higher education content resources to meet the actual learning needs of college students. Therefore, publishers should promote innovation and transformation of digital products around core resources to provide students with digital textbooks. For example, embedding links in print higher education textbooks and then generating digital resource QR codes allows students to scan the codes to view digital textbooks. This product is similar to traditional publishing products but also strengthens the digital perception of textbooks to better gain student recognition.

Create knowledge service platforms. In the digital publishing context, university presses should create knowledge service platforms based on market demand through resource integration, properly classify platform services, exert synergistic effects, extend and broaden service content for digital publishing products, and make the use and construction services of digital higher education textbooks more precise.

Ensure standardization of textbook content. Different publishers have different

emphases and concerns regarding higher education textbook content, making it impossible for them to conduct macro-management of digital textbook content. In response, publishing industry standards covering network education resources and metadata should be formulated to meet digital publishing development needs. Unified management should be implemented from aspects such as textbook content format, copyright, and quality standards to improve digital textbook usage rates, enable mutual connection of various links in the digital publishing industry chain, promote sustainable development of textbook digitalization, and further enhance the popularity of digital textbooks in higher education.

Clarify digital publishing types. For example, implement online publishing of textbooks, which includes two modes: e-book publishing and database publishing. The e-book publishing model usually relies on information technology suppliers, portal websites, and publishers. Publishers adopt independent publishing or cooperative publishing methods for e-books. Independent publishing means publishers release e-books independently; cooperative publishing means publishers provide content while technology suppliers provide copyright and sales channels, and both parties cooperate to provide readers with online reading and download services for e-books. The database publishing model integrates massive information scattered in various corners and then publishes the integrated information content on network platforms to facilitate online reading for readers, breaking time and space limitations on book reading. In addition to online publishing models, there are new media publishing methods that use mobile phones or tablet terminal devices as media to provide offline readers with online reading and download services, facilitating direct public access. [4]

4.2 Transforming Publishing Concepts and Deeply Exploring Digital Resources

4.2.1 Meeting Customized Development Needs and Providing Quality Digital Textbooks for Teachers and Students Based on customized development needs, provide quality digital services for students. According to the actual situation of digital publishing, university presses should achieve leapfrog development, transforming product-based publishing customization into simultaneous development of print and e-books. Focusing on the same resources and content, they should complete multi-channel, multi-type product development for both print and electronic textbooks. University presses can accomplish digital construction of textbooks by embedding QR codes in textbooks and then complete personalized customization through “higher education textbook + QR code digital services” to deepen digital products and provide higher quality services for the transformation of learning methods for students.

In offline classrooms, teachers and students prefer print textbooks, but in digital learning scenarios, student learning is affected by time and space constraints. To meet personalized learning requirements, e-textbooks become the preferred choice, and student demand for electronic textbooks is gradually increasing.

Compared with print textbooks, e-textbooks with the same content can provide students with more diversified services, integrating audio and video content and including search functions to improve information retrieval efficiency. For example, Beijing Language and Culture University Press converted print textbooks into e-textbooks and released them to the market at equivalent pricing, allowing users to choose their required textbooks according to their needs. To better align with digital development trends, universities have begun to establish new majors such as Intelligent Science and Technology and Digital Publishing, and higher education textbooks for these majors will provide important development directions for press textbook construction. [8]

4.2.2 Deeply Exploring Resources to Promote Product Diversification Launching different types of products around higher education textbook resources may cause competitive conflicts in the book market, thereby affecting product value. Multi-form digital products generally revolve around the same content and resources to meet individual needs and better suit different groups. In the digital publishing environment, university presses should simultaneously develop print and e-book resources to move book products from previous singularity to diversification. For example, developing integrated textbooks based on scenarios uses digital technology to interconnect text information, audio-video information, virtual reality, and 3D animation content, breaking previous time and space limitations on textbook use and promoting deep integration among textbooks, classrooms, and resources. [7]

4.3 Strengthening Textbook Innovation and Industrial Structure Adjustment to Build a Digital Publishing System

When compiling higher education textbooks, publishers should conduct research on teaching, innovate textbook resources according to teaching reform plans, and thus compile exemplary higher education textbooks that contribute to curriculum construction. Promote efficient sharing of teaching resources, start with textbook innovation, create supporting electronic courseware, strengthen digital construction of network resource databases, develop online courses, and enhance the integrity of teaching resources. University presses need to innovate content forms, broaden development space in the publishing industry, innovate reading methods, and accelerate digital development of higher education textbook publishing.

4.3.1 Textbook Innovation and Industrial Adjustment The following recommendations are provided for reference: (1) University presses can learn from other publishers in society, grasp new trends in higher education textbook demand, rationally plan textbook information based on quality textbooks released by university presses nationwide, and strengthen cooperation among publishers. (2) Publishers can provide customized services for teachers, such as offering full-process support from the topic selection stage to final textbook publication. (3) Promote value-added services for higher education textbooks to

improve cost-effectiveness. Publishers can provide supporting classroom PPT digital resources such as QR codes or optical discs alongside textbook publication to facilitate teacher preparation, or broaden textbook knowledge points using audio and video formats. Additionally, they can provide supporting MOOC resources for students to offer extracurricular learning opportunities. [6] (3) Clarify key points of digital publishing control. Based on reader demand, improve textbook usage rates, ensure digital textbook content is compatible with e-readers and various terminals, guarantee universal electronic document formats, and provide convenient payment channels for readers. Provide personalized textbook publishing methods for readers, such as selling textbooks by chapter to reduce purchase costs, allowing readers to buy chapters according to actual content needs.

Adjust the industrial structure, follow market development laws, optimize resource allocation, continuously upgrade textbook content, and solve problems in publisher digital textbook use. Publishing reform involves cultivating new market entities according to the publication market, scientifically establishing logistics systems, properly planning network construction, providing content guidance for publishing activities, and managing both spiritual and material production activities, such as adjusting industrial structure, improving publisher productivity, and promoting orderly development of digital higher education textbook publishing by university presses. [9]

4.3.2 Constructing Digital Publishing Business Models First, **product sales**. Digital textbooks transform traditional reading models, enriching textbook content. Traditional publisher content becomes one source for digital publishing, with complementary advantages and integrated resources, making publisher marketing models more diversified. Providing paid services, marketing strategies are adjusted according to digital products, and paid reading of digital content can guarantee content quality and improve reader satisfaction. Second, **advertising operations**. Focusing on advertising to generate profits, publishers cooperate with advertisers where readers read textbooks for free while advertisers pay the bill—this is a product combining traditional publishing and network publishing models. Finally, **channel distribution**. This can provide platforms for digital publishing, making digital publications more dynamic. [10]

4.4 Strengthening Digital Platform Construction for University Presses

The planning and construction of digital platforms for university presses is a requirement for the connotative development of higher education and a key to implementing digital development strategies in the publishing industry. Digital platform construction should address the following points.

4.4.1 Strengthening Digital Infrastructure Construction Digital infrastructure for university presses includes not only hardware facilities but also plat-

forms such as digital resource centers and ERP systems. [11] Digital resource centers contain both book information centers and resource centers. The former covers all textbook data information, while the uniformly stores various resources to complete multi-channel, multi-terminal distribution of textbook resources. ERP system construction typically covers business process management including editorial, printing, and distribution, as well as archive management and fixed resource management. The construction of digital infrastructure for publishers facilitates resource integration, strengthens effective integration of technology and business, and improves publisher production levels. [12] Building digital textbook databases and releasing higher education textbook content to online sales is a common method of textbook digital marketing. Based on multimedia development, making online supporting materials a supplement to textbook digitalization integrates teaching resources across platforms, strengthens teaching content updates, and ensures textbook quality.

4.4.2 Developing Mass Reading Digital Platforms Based on Full-Copyright Operations The publishing industry has always been about content, which essentially means copyright resources. In the digital context, university presses should further explore the potential value of IP resources, develop higher education textbook content in multiple ways, implement full-copyright operations, and use IP resources accumulated during educational services to build digital platforms for “full-copyright operations” that serve students in reading and autonomous learning. Resource docking with third-party distribution channels completes synchronized publishing of e-books, audio-video courses, and print books. For example, Tsinghua University Press has established its own digital distribution channels “Wenquan Bookstore” and “Wenquan Classroom,” relying on the “Xiaoe-Tong” platform to provide students with tens of thousands of authorized e-books, video and audio courses, and other digital services. [13]

4.4.3 Empowering Digital Platform Construction for Traditional Publications Nowadays, with the growing popularity of smart devices, student learning methods and reading habits have changed. Publishers can use print textbooks as carriers to integrate audio-video, VR/AR, and image resources, effectively associating them with print books to increase textbook added value and enhance competitive advantages for higher education textbook publishing and use. Higher education textbooks are core products for university presses. Establishing digital platforms to support higher education textbook publishing should be based on usage scenarios for higher education textbooks under digital and information conditions. In the digital publishing context, changes in teaching methods require university higher education textbooks to apply multiple media. University presses can independently develop book platforms to create book publishing forms based on “book + resources” and “book + courses.” In 2021, Tsinghua University Press independently developed more than 5,000 new-form book varieties, with 620 books adopting anti-copying and anti-piracy

technologies. [14]

In summary, against the backdrop of the digital publishing era, the transformation and upgrading of university presses and digital textbook publishing have become major future development trends, requiring presses to grasp market development trends, leverage their accumulated advantages in higher education textbook resources, strengthen cooperation between presses and universities, adjust development strategies, and enhance digitalization of higher education textbooks. [1]

References

- [1] Wang Lei. Textbook Construction of University Presses in the Digital Publishing Context [J]. *Communication and Copyright*, 2022(8): 19-21.
- [2] Zhang Weiming. The Path of High-Quality Characteristic Development for University Presses in the New Era—Taking Zhengzhou University Press as an Example [J]. *China Media Technology*, 2021(8): 126-128.
- [3] He Xiaoming. Textbook Construction of University Presses in the Digital Publishing Era [J]. *Journal of China Multimedia and Network Teaching (Early Decade)*, 2019(4): 225-226.
- [4] Chen Chanjuan, Zhang Xuhui, Yan Yan. Exploration and Practice of Digital Publishing for Experimental and Practical Textbooks [J]. *China University Teaching*, 2019(1): 93-96.
- [5] Liu Yajie. Research on Digital Textbook Publishing by University Presses [J]. *Communication and Copyright*, 2018(6): 50-51+53.
- [6] Du Hongyan. Trends and Prospects of Educational Publishing in the Digital Era [J]. *China Newspaper Industry*, 2022(14): 64-65.
- [7] Zheng Xiaohui. Application of Digital Proofreading Technology in Digital Publishing [J]. *China Media Technology*, 2022(5): 126-128.
- [8] Miao Hongcai, Zhou Dianfu, Yan Min. Reflections and Practices on Digital Transformation of Publishing [J]. *Publishing Wide Angle*, 2022(5): 61-64.
- [9] Cui Manman. Research and Analysis on University Textbook Publishing in the Mobile Internet Era [J]. *Interview, Writing, and Editing*, 2022(1): 121-122.
- [10] Liu Shengyu, Mei Sheng. Exploration on Digital Transformation of Traditional Publishing Units in the New Media Era [J]. *News Dissemination*, 2022(1): 66-67.
- [11] Miao Fei. On the Deep Integration and Development of Traditional Publishing and Digital Publishing [J]. *Media Forum*, 2021(24): 99-101.
- [12] Dong Aonan. Research on the Digital Upgrade Path of Traditional Book Publishing Industry Under the Background of “Big Data, Intelligence, Mobility, and Cloud” [J]. *China Media Technology*, 2021(12): 88-90.

[13] Wang Qian, Lu Chunyan. Editorial and Publishing Transformation Ideas in the Digital Age [J]. Interview, Writing, and Editing, 2021(12): 136-137.

[14] Chao Nan. Digital Status and Development Trends of Book Publishing Industry Under Media Convergence Background [J]. News Dissemination, 2021(23): 82-83.

Author Introduction: Pan Haiying (1988-), female, from Changling, Jilin, intermediate publishing professional, research direction in sports humanities and sociology, editing and publishing.

(Editor in Charge: Zhang Xiaojing)

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv –Machine translation. Verify with original.