Revenue Models of Academic Enterprises – An Empirical Study in Vietnam

Chu Ba Quyet¹, Nguyen Binh Minh² and Le Thi Hoai³

Abstract

Academic publishing is the publishing field associated with scientific works, scientific articles, or scientific documents. Under the impact of the Internet, digital transformation, and open access, academic publishing is also affected. Academic publishers around the world have changed their revenue models to grow but this creates controversial views. In Vietnam, academic publishing is developing in response to internal needs and international integration. Academic publishers and scientific journals in Vietnam are also influenced by digital transformation and open access. Besides the opportunities, the challenges facing the academic publishing sector in Vietnam are research quality and revenue model. Based on the content research method, this writing presented some basic theories about academic publishing, academic publishing revenue models, and some discussions about academic publishing in Vietnam.

Keywords: Academic Publishing, Revenue Model, Vietnamese Science

INTRODUCTION

Academic publishing plays an important role for scientific researchers, universities, and research institutes today. While there are many successful academic publishers in the world such as Elsevier, SAGE, Springer Nature..., etc, with revenues of tens of billions of US dollars with high-profit margins (Xuan Quynh, 2022), there is still a large number of academic publishers and scientific journals which have limited revenues as well as financial difficulties in operating and publishing their research results (Siler, 2017). The impact of open-access publishing also affects the revenue sources of many publishers (Taber, 2013). In that context, publishers have changed their operating models to generate revenue, but this also caused complicated controversies (Zul M, 2023). In Vietnam, the number of publishers involved in academic publishing has increased rapidly to meet the needs of scientists, researchers, and universities. However, most academic publishers in Vietnam are state-funded. The funding limitations and the impact of open publishing make it difficult for academic publishers to meet publishing needs. Some studies seek solutions to improve the quality of Vietnamese scientific journals and academic publications such as (Tran Van Nhung et al., 2019), or the ministerial-level research project hosted by Vietnam Science and Technology Magazine Maintaining "Researching the current situation and proposing solutions, mechanisms and policies to improve the quality of Vietnamese scientific journals towards international standards in the context of international integration in science and technology (S&T)" currently conducted by (Nguyen Thi Hai Hang & Vu Van Hung, 2022). However, these two studies primarily focus on solutions to improve the quality of Vietnamese scientific journals. This article approaches and researches the popular revenue models used by academic publishing around the world, explores the current status of revenue models of academic publishers in Vietnam, and then offers suggestions. exchange ideas for entities involved in academic publishing in Vietnam.

THEORETICAL BASIS AND RESEARCH METHODOLOGY

Related Concepts

Academic publishing, academic publishers, and revenue models Academic publishing is the publication of scholarly work in peer-reviewed scholarly journals or books. Academic works or scholarly documents are scientific works in the form of research articles, review documents, case studies published in scientific journals, scientific conference proceedings, and monographs. An important aspect of academic publishing is that it

¹ Thuongmai University. E-mail: quyetsb@tmu.edu.vn
² Thuongmai University. E-mail: minhngb@tmu.edu.vn
³ Thuongmai University. E-mail: hoaile@tmu.edu.vn
involves sharing new research results and ideas with other researchers and scholars worldwide. The peer-review process, rigorous methodology, and in-depth analysis of scholarly publishing distinguish it from other forms of publishing. The primary users of scientific publications are fellow researchers and experts rather than the general public.

Scientific publications are published in scientific journals, scientific proceedings, monographs, and other scholarly books. Scientific journals are specialized journals that publish original research articles presenting new findings, data, or experimental theories and are considered the core expression of academic publishing. Scientific journals are also considered tools and means in training, scientific research, technology transfer, and important information portals of a higher education institution (Tran Van Nhung et al., 2019). Scientific conference proceedings are collections of papers presented at academic conferences in one or several disciplines. Scientific conference proceedings often include contributions from researchers at the conference. They are a record of work presented to fellow researchers. In many fields, they are published as supplements to academic journals; In some places, they are considered the main popular routes. Monographs are in-depth books from in-depth and relatively comprehensive research results on a field or a single topic, often written to summarize the research results of a scientific research topic at a national level.

Academic publishers often operate as academic publishing companies. These companies carry out activities related to the processing of research publications and academic knowledge. Their main goal is to advance knowledge in their respective scientific fields and connect like-minded individuals. Academic publishers publish work according to specific industry standards. Cara Jordan (2023) divides academic publishers into three categories: university presses, for-profit presses, and small presses. University presses are academic publishers affiliated with a specific academic institution. These publishers are often non-profit and are important forces in the scholarly publishing sector, producing high-quality scholarly works in a variety of fields, including the humanities, social sciences, and natural sciences (Jam, 2016). These publishers have a strong commitment to academic freedom and intellectual rigor, prioritizing the dissemination of research over profits. For-profit publishers are companies that operate with the primary goal of making a profit. They include large multinational companies such as Elsevier, Springer Nature, Routledge, Taylor & Francis, and Wiley, as well as smaller publishers. For-profit publishers often publish works in a variety of fields, and they have extensive marketing and distribution networks that allow them to reach a large audience. Third are small publishers, often defined by their independence, most of which operate on tight budgets and publish only a few books a year.

The role of the academic publisher is demonstrated by providing scholarly services, making research results more discoverable, reputable and accessible. The functions of academic publishers are expressed through the following tasks: i) Managing peer review: Academic publishers perform the function of monitoring the peer review process through searching and selecting/inviting qualified scientists to participate in evaluating and peer-reviewing research results to ensure rigor and fairness. This testing process is crucial to maintain academic standards and credibility; ii) Dissemination of research results: After the research is accepted for publication, the publisher will undertake the task of effectively disseminating the research results to the target audience through editorial activities, copying, typesetting, branding, printing, and publishing; iii) Archiving and preservation: Publishers also play an important role in the long-term storage and preservation of academic papers. Maintaining digital archives and repositories ensures ongoing access to historical scholarly works. This allows knowledge to accumulate over time. In addition to the three main services mentioned above, many academic publishers also offer value-added services to support researchers, such as citation tools, plagiarism checking, multimedia options, data storage, and author networking platforms, facilitating the research process. By fulfilling these important roles, academic publishers provide the essential infrastructure that enables the creation, validation, dissemination, and preservation of scholarly knowledge worldwide.

The revenue model is a critical component of a business model. A business model is the way a company organizes its activities and operations to generate profit. According to (Osterwalder & Pigneur, 2011), the revenue model is the ninth component of a business model that answers the question of how the business model operates financially. How does the business receive cash flows from customers or partners? The diagram of the components of a business model called also Business Model Canvas (BMC) is illustrated in Figure 1.
Depending on the field of a business selling goods, retailing, or providing services, businesses have different revenue models. Currently, researchers (Jan Mendling et al., 2005), (Turban et al., 2018) have compiled seven revenue models for most business models: product sales revenue, advertising fees, affiliate fees, transaction fees and membership registration fees, licensing fees; and other revenue models. Table 1 explains the revenue models and illustrates them with examples.

### Table 1. Revenue models

<table>
<thead>
<tr>
<th>Model name</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale of products, goods</td>
<td>The business model sells products such as clothes, electronics, books ...</td>
<td>The business model of Amazon.com sells books online, and the business model of thegioididong.com sells phones, computers ...</td>
</tr>
<tr>
<td>Advertising fees</td>
<td>The model of collecting advertising fees for renting advertising space on websites, advertising keywords ...</td>
<td>Vnexpress.net renting advertising space and collecting fees, Google AdWords, or Youtube, Facebook, high-traffic information pages.</td>
</tr>
<tr>
<td>Affiliate fees</td>
<td>Company A's revenue is obtained when introducing products and transactions of company B to customers.</td>
<td>Amazon Affilinet is a good example of affiliate fee revenue. For each potential customer that leads to your website, you need to pay a percentage of commission to Amazon Affiliate.</td>
</tr>
<tr>
<td>Transaction fees</td>
<td>The company's revenue is calculated on the number of trading clients</td>
<td>The revenue of traditional service providers, such as car parking, phone call services, freight forwarding, and passenger by transport companies.</td>
</tr>
<tr>
<td>Membership fees</td>
<td>A fee is collected when a user registers as a member to use the provider's services</td>
<td>For example, fees for opening bank accounts, registration fees for opening booths on electronic trading platforms, fees for opening Netflix accounts, YouTube Premium ...</td>
</tr>
<tr>
<td>Licensing fees</td>
<td>A fee a service provider collects from a user for granting permission or licensing to use a service, which can be an annual fee or for a single-use</td>
<td>For example, software vendors may license users to use the software annually, or on a one-time basis;</td>
</tr>
<tr>
<td>Other revenue models</td>
<td>The model allows people to play games for a fee or to watch a sports competition in real time for a fee</td>
<td>For example, businesses provide walking services and apps to make money to encourage working people to spend time walking, exercising,</td>
</tr>
</tbody>
</table>

Source: Authors

For example, Figure 2 illustrates 7 types of revenue of 135 publishers surveyed in 2019 according to six levels: level 1 is no revenue, and level 6 is quite a lot of revenue. Large and very large revenue accounts for direct-sold ads, programmatic ads, and subscription fees.
Figure 2. Revenues model for publishers
Sources: Digiday, Sep 2019

Research Methodology
The authors use the desk document research method for the paper. Studies on academic publishing, business models, and revenue models of academic publishers are synthesized to clarify the current situation of revenue models in academic publishing in the world. Additionally, the current situation of revenue models in academic publishers in Vietnam is also summarized for research objectives.

REALIZING THE CURRENT REVENUE MODEL OF ACADEMIC PUBLISHING IN THE WORLD

Overview Of the Academic Publishing Status In The World

The development of the Internet and digital publishing has had a strong impact on the publishing industry, including academic publishing, around the world. Scholarly publishing is undergoing major changes as it makes the transition from print to electronic format. Since the early 1990s, licensing of electronic resources, especially journals, has been very popular. An important trend, especially for scientific journals, is open access via the Internet. In open-access publishing, a scholarly document is made freely available online by the publisher to everyone at the time of publication. The Internet has even facilitated open access self-archiving, in which the authors themselves make a copy of their published articles freely available all over the Internet. The scholarly publishing industry generates approximately $19 billion annually globally. However, about 50% of that revenue is distributed only among 5 large companies: Elsevier, John Wiley & Sons, Taylor & Francis, Springer Nature and SAGE. The statistical report on the publishing situation from 2018 to 2022 shows that the number of published academic articles has increased every year, and in the years 2018 to 2022 increased by 22.78%, in 2022 alone there will be about over 5,14 million academic documents (Dimitrije Curcic, 2023) published (see table 2)

<table>
<thead>
<tr>
<th>Year</th>
<th>Articles published (in millions)</th>
<th>Growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>4,18</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>4,43</td>
<td>0,95</td>
</tr>
<tr>
<td>2020</td>
<td>4,68</td>
<td>0,50</td>
</tr>
<tr>
<td>2021</td>
<td>5,03</td>
<td>0,62</td>
</tr>
<tr>
<td>2022</td>
<td>5,14</td>
<td>0,06</td>
</tr>
</tbody>
</table>
In addition to the increase in the number of academic documents, the number of academic journals published each year also increases. According to (Dimitrije Curcic, 2023), the number of academic journals published each year has increased by 28.7% in the 10 years 2011-2020, of which journals published in English have grown at an average rate of 3.22% per year, non-English journals grow at a slower rate, about 2.33% per year. Open-access publishing is growing rapidly. Over 56% of academic documents published in 2020 were open access. The number of open access scientific articles has increased by 58% in the 10 years from 2011-2020, 35.98% of articles have fully open access as of 2020, up from 10.44% in 2011. With more than 1.43 million scholarly articles published through open access between 2017 and 2020, the United States is the world's leading country in producing open access articles. Also according to statistics from (Dimitrije Curcic, 2023), only five academic publishing companies, Elsevier, John Wiley & Sons, Taylor & Francis, Springer Nature, and SAGE, accounted for more than 50% of academic publishing revenue, in 2022 about 9.5 billion USD. The academic publishing industry is one of the industries with the largest profit margins, sometimes up to 40%. Under the impact of the Internet and open access, major changes have been created in academic publishing, both positive and negative. According to (Siler, 2017), under open access, academic materials are made freely available online without fees or subscription fees. This increases reach but challenges the subscription-based revenue stream that publishers typically rely on.

The development of electronic publishing also has a strong impact on the business models of publishers, significantly impacting the financial models of academic publishing (Zul M, 2023). As content moves online, publishers must adapt their business strategies. New tools on the Internet also impact revenue streams, for example, text and data mining tools can mine insights from academic papers without users needing to pay a subscription fee to get a scientific article. This provides value to users but can impact publishers' earnings. The growth of preprint servers has also affected the finances of academic publishing. Researchers are increasingly posting pre-printed versions of their articles online for free. This allows access to pre-publication research and formal review, which can reduce the need for a final published version. Illegal sharing, or free distribution, of copyrighted articles, also poses a revenue threat. Additionally, high-profit margins from academic publishing also attract more predatory journals, who recognize the opportunity after looking at how lucrative academic publishers make money. Predatory journals are fraudulent publications that exploit the open access model for profit, charging authors publishing fees without providing appropriate editorial services such as peer review and archiving (Zul M, 2023). In recent years, the number of predatory magazines has shown a worrying upward trend. Predatory journals often use deceptive practices, such as false impact factors and misleading names, to appear legitimate. The threat of predatory journals lies in their ability to undermine the reputation of scholarly publishing. They allow the publication of substandard or even fraudulent research, leading to the dissemination of inaccurate information. This could mislead researchers, harm scientific progress, and erode public trust in academic research.

Revenue Models for and Controversial Issues Surrounding Academic Publishing Revenue Models

According to (Zul M, 2023), academic publishers make money by relying on several major revenue sources from academic content. Publishers' primary sources of income include subscription fees, paywalls, and author processing fees associated with open-access publishing.

Subscription fees: Many academic publishers generate a significant portion of their revenue from selling subscriptions to academic journals and databases. Libraries, universities, and other institutions pay annual subscriptions to gain access to bundled journal packages or online databases from publishers. These subscription fees can range from a few hundred to millions of dollars per year, depending on the size of the organization and the content being licensed.

Paywalls: Paywalls on articles are another way for academic publishers to monetize content. Non-subscribing readers must pay a one-time fee, typically $30-50, to access an individual paywalled article. While not as lucrative as long-term subscriptions, pay-per-view fees provide additional income, especially from readers who do not have access to the organization’s magazines.
Open access fees: In open access publishing, publishers make money by charging authors a processing fee, also known as an article processing fee (APC). This number ranges from hundreds to thousands of dollars per accepted article. The work is then made freely available online for anyone to read. Although a newer model, APC now accounts for a sizable portion of revenue for many academic publishers.

This multifaceted financial structure allows academic publishers to profit from scholarly work through subscriptions, paywalls, and APCs. However, these practices have also sparked debates about the ethics and sustainability of the current system. Critics argue that the for-profit academic publishing model reaps excessive, super-profitable financial rewards (about 40%) while limiting access to important research. Their view is that the majority of research projects are publicly funded, and the research results are sold to visitors in the form of access fees, limiting access to information that can be useful benefits for society. Arguments against charging access fees also cite the reason that for-profit academic publishers charge too high access fees while services (such as typesetting, article editing, distribution, etc.) are provided to readers at a very low cost (Willy A Renandya, 2016). The issue of peer review management by publishers is also controversial since scholars undertake evaluation or peer review voluntarily. In contrast, the view that subscription fees and paywalls are justified is because publishers provide many services to researchers, and it is expensive to invest in new technologies for management and archiving. Store academic documents for researchers. In general, the revenue model for academic publishers, especially the excessively high-profit margins, needs to continue to be discussed between academic publishers and researchers, with requirements for financial transparency and authorship.

IMPLEMENTATION OF THE ACADEMIC PUBLISHING REVENUE MODEL IN VIETNAM AND RECOMMENDATIONS

Academic publishing activities in Vietnam take place in foreign journals, domestic scientific journals, proceedings of national and international scientific conferences, and monographs. As for scientific journals, Vietnam has about 600 scientific journals scattered in ministries, branches, professional associations, universities, colleges, and research institutes. The 2022 survey results of (Nguyen Thi Hai Hang & Vu Van Hung, 2022) with 300 scientific journals (about 50% of Vietnamese scientific journals) show that: multidisciplinary journals account for 22.7%, specialized industry account for 77.3%; journals published in English account for 49%; 56% of magazines admit foreign authors, only 5-10%; 89.5% have an editorial board; 37.2% check for duplicates (plagiarism); 75.4% of journals have peer reviews; nearly 30% are not proofread for journals published in foreign languages; 74.3% of journals have websites, of which 82.3% of websites are built on OJS open source software; 47.8% have online review software... According to (Tran Van Nhung et al., 2019), in 2017, 387/600 scientific journals were included by the State Council for Professor Titles in the list of scoring journals converted scientific works but only 13 journals were in the Scopus and WoS categories. According to Adubiz (2023), Vietnam has 14 journals in the Scopus and WoS categories. According to survey results by (Nguyen Thi Hai Hang & Vu Van Hung, 2022), and (Tran Van Nhung et al., 2019), Vietnamese academic publishing has certain advantages, difficulties, opportunities, and challenges. Besides the successful results, Vietnamese scientific journals also reveal shortcomings that need to continue to be resolved in the coming years to improve scientific quality to meet the requirements of international integration.

According to Nhi Anh (2023), Vietnamese scientific journals currently have not identified a model that is consistent with market rules, thereby causing difficulties in revenue. There is also complete dependence on budget capital and the challenges in scholarly quality assurance. The new difficulty is the influence of the Internet and information technology, including open access. According to research by (Nguyen Thi Hai Hang & Vu Van Hung, 2022), and (Tran Van Nhung et al., 2019), (Nhi Anh, 2023), academic publishers need to have various solutions like improving quality in line with scientific standards that have been recognized regionally and internationally, improving the quality of the editorial team, and increasing technology and science application and digitalization. According to Associate Professor, Dr. Pham Ngoc Linh, Vice President of the Vietnam Union of Science and Technology Associations, press economics, financial autonomy is a very hot issue - a requirement and a development trend - but also difficult for press enterprises, including the journal and magazines of the Vietnam Union of Associations. To be financially independent, it is necessary to carry
out activities to develop the press economy. This is an adaptive action required for survival and development (Nhi Anh, 2023). Thus, in addition to solutions to improve the quality of scientific journals, innovating the revenue model of journals is very crucial.

According to this paper's authors, leaders of academic publishers and scientific journals need to identify the kind of non-profit or for-profit publishers. This is based on the magazine's purpose and political mission, alongside their other professional missions. Publishers and scientific journals need to orient their type. In the case of for-profit-oriented academic publishers, it is necessary to improve scientific quality according to regional and international standards (Tran Van Nhung et al., 2019), with a specific roadmap and timeline; using one or a combination of the three revenue models of subscription fees, paywalls, and open access fees.

Moreover, academic publishers should be innovated in the direction of electronic publishing to take advantage and utilize the benefits and advantages of electronic publishing. In addition, in the process of converting revenue models, academic publishers and scientific journals need to continue to receive support from state agencies and governing bodies. Academic publishers and scientific journals need to invest financial and human resources, learn from successful journals, and associate with reputable domestic and foreign scientific publishers.

CONCLUSION

This article presents important concepts about academic publishing, the revenue models of academic publishers, and scientific journals. Academic publishers play a vital role in disseminating scholarly research and rely on multiple sources of revenue to sustain their operations. This has created controversial issues surrounding the revenue models of academic publishing.

Under the impact of the Internet and digital applications in publishing, open access requirements, especially international scientific integration of Vietnam, Vietnamese scientific journals and publications face challenges and opportunities for new change. How to choose a suitable revenue model, in addition to comprehensive innovation, and improving the quality of academic products and the qualifications of the publisher's team, will be issues that need to continue to be discussed and researched in the future for publishers to integrate and development.

REFERENCES

Cara Jordan (2023), The three main types of academic publishers, accessed April 11, 2024 https://flatpage.com/the-three-main-types-of-academic-publishers/
Dimitrije Curcic (2023), Number of Academic Papers Published Per Year, accessed April 11, 2024 at https://wordsrated.com/academic-publishing-statistics/
Jan Mendling, Gustaf Neumann, Andreas Pinterits, Bernd Simon Revenue Models for E-Learning at Universities, Wirtschaftsinformatik 2005 (pp.827-846), DOI:10.1007/3-7908-1624-8_43
Keith S Taber (2013), Challenges to academic publishing from the demand for instant open access to research, Chinese Social Sciences Today, pp 1-6.
Revenue Models of Academic Enterprises – An Empirical Study in Vietnam


