

Naver Webtoon's Strategic Path : Balancing IP Expansion and AI Integration

Injung Park¹, Kangmin Kim², Yejun Park³, Taeseong Jo⁴, Dongsup Yun⁵, Joohee Han^{6*}

Abstract

Webtoon industry plays an important role in the expansion of intellectual property (IP) under intensifying OTT(Over the Top) media service competition. As many dramas based on webtoons are creating success stories, the popularity of webtoons, which has proven marketability and is easy to film, is growing. This study investigated to derive strategic implications for the Korean webtoon service platform by analyzing the environment and strategies of Naver Webtoon. In particular, Naver Webtoon has to consider writer protection as a top priority when introducing the latest technology and establish clear guidelines and regulations regarding the use of Artificial Intelligence (AI) technology. In addition, a strategy of utilizing webtoon IP in a variety of ways must be maintained, and a cautious approach that takes into account artist protection and consumer response is needed when introducing AI technology.

Keyword : webtoon industry, intellectual property, Naver Webtoon, strategy, AI technology

1. Introduction

A webtoon is a type of digital comic that originated in South Korea and is typically published online in a vertical scroll format. Unlike traditional comic strips or Japanese manga, webtoons are designed to be read on digital devices such as smartphones and tablets, which makes the vertical layout particularly user-friendly [1]. Korea's comics and webtoon industry market size grew by 23% year-on-year to KRW 2.624 trillion in 2022, and thanks to the overseas expansion of our webtoon platform, overseas exports also reached USD 107.64 million (about 31.3% increase over the previous year). It is growing at a

1 Department of Business Administration, Gachon University, Gyeonggi-do, Korea [Undergraduate Student]
e-mail: plj4751655@naver.com

2 Department of Business Administration, Gachon University, Gyeonggi-do, Korea [Undergraduate Student]
e-mail: rlaqjathf@naver.com

3 Department of Business Administration, Gachon University, Gyeonggi-do, Korea [Undergraduate Student]
e-mail: dvid412@naver.com

4 Department of Business Administration, Gachon University, Gyeonggi-do, Korea [Undergraduate Student]
e-mail: jts4414@gmail.com

5 Department of Business Administration, Gachon University, Gyeonggi-do, Korea [Undergraduate Student]
e-mail: alex4082@naver.com

6 Department of Business Administration, Gachon University, Gyeonggi-do, Korea [Assistant Professor]
e-mail: jhhan0729@gachon.ac.kr (Corresponding author)

Received(April 11, 2024), Review Result(1st: April 29, 2024, 2nd: May 15, 2024), Accepted(June 7, 2024), Published(June 30, 2024)



© 2024 The Authors. Published by NCISS.
This is an open access article licensed under the Creative Commons Attribution-NonCommercial 4.0 International License.
To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/4.0/>.

breakneck pace, surpassing \$100 million for the first time. This is a figure that exceeds the average growth rate of the content industry, and it is expected that the comics and webtoon industry will expand into various content products and become a next-generation core industry that will drive the growth of our content industry in the coming years [2].

Naver Webtoon is a platform that was launched independently as a subsidiary of Naver in May 2017, and provides three services: Webtoon, Challenge Comics, and Best Challenge Comics. Webtoon is a service where officially licensed artists regularly publish their works on designated days, and Challenge Comics is a space where anyone can register and share their webtoons. Best Challenge Comics selects and provides popular works among challenge comics. Naver Webtoon provides artists with the opportunity to increase their work and awareness through this service [3]. In this way, Naver Webtoon's success is due to factors such as the service structure for writers and users, organizational culture, and spirit of challenge. CEO Kim Jun-gu emphasizes that organizational culture and a spirit of challenge are the keys to success, and is making efforts to pioneer the webtoon industry and create new genres in response to changing times.

Naver Webtoon is a crucial player in the Korean webtoon industry because it has set industry standards and trends, significantly influencing how webtoons are produced, distributed, and consumed. In addition, the platform is at the forefront of integrating new technologies, such as AI, to enhance content production and distribution. Therefore, Naver Webtoon's strategic innovation, economic contributions, global reach, and support for creators make it a cornerstone of the Korean webtoon industry. In this regard, this paper conducts an environmental analysis of Naver Webtoon and makes strategic suggestions on the direction in which Naver Webtoon should move along with implementation strategies.

2. Environmental Analysis of Naver Webtoon

2.1 External Analysis

The webtoon industry continues to grow from 2019-2022 with an industrial scale growth of 65.3% in 2019-2020, 48.4% in 2020-2021, and 16.8% in 2021-2022. However, it is estimated that the excessive supply of content such as NobleComics intensified competition, which led to a stagnation in growth without causing rapid growth. As a result of adding up the share of sales of the top three companies (CR3), 73.57% came out. Since it is an oligopoly market from 75%, the webtoon platform market is a competitive market, but it is close to oligopoly. Companies that distribute webtoons can be largely classified into portal sites, webtoons specialized platforms, open markets, SNS, video platforms, and

online bookstore platforms. In 2023, the Korea Cartoon and Video Promotion Agency used statistics to show that the number of webtoon platforms in Korea was 34 [4].

In the webtoon industry, the use of AI has recently emerged as a prominent technology trend. According to a 2023 Webtoon Business Survey, 41.2% of the businesses surveyed said they were willing to introduce AI [5]. The introduction of these technologies is expected to lead to cost reduction by AI performing tasks such as data collection and coloring in the production process, which will increase supply and intensify competition. After all, the webtoon platform market has a low threat to competitors due to the small number of businesses, market concentration close to oligopoly, and differentiated products. By thoughtfully integrating AI, Naver Webtoon can enhance their efficiency including automated coloring, storyboard suggestions, and translation services, and offer a more engaging and personalized experience for both creators and readers, while also addressing potential challenges and ethical considerations. However, the ease of production of works and the reduction of barriers to entry due to the introduction of AI technology can act as a factor in intensifying competition in the future. The webtoon industry is subject to government regulations such as the Publication Management Act, the Copyright Act, and the Content Rating Classification Regulations. However, these government regulations are characterized by not forming barriers to entry. Since the webtoon industry sells copyrighted creations, the differentiation of products is legally protected. Webtoon production can achieve economies of scale. Webtoon production progressed from traditional single-person artist-centered work to the division of team-type production processes, increasing work efficiency, enabling more production of works, and reducing costs. Through the analysis of new entrants, there are no government regulations on new entrants, but the barriers to entry are low considering differentiated products and decreasing cost per unit.

The bargaining power of suppliers is weakening. Providers of webtoon platforms include agencies and studios, which are called CP companies. CP is in charge of planning and producing webtoons and supplies works to the platform. The number of webtoon platforms is decreasing and the number of production companies is increasing, so supplier bargaining power is somewhat low. The possibility of forward vertical integration exists but is insufficient. Although it is a CP company like Kidari Studio and Mr. Blue, it also operates its own webtoon platform, and other companies also manage writers and hold copyrights in content, so it sometimes competes as a platform. However, according to a survey of the webtoon business field operated by CP, it can be seen that only 4.5% of the webtoon platform business accounts for [6]. Also, supply factors are differentiated. This is because many of the works that generate demand from buyers are supplied from studios. Popular works such as Lookism, Director Kim,

and Omniscient Viewpoint, which accounted for a high proportion of works enjoyed by users in the 2023 webtoon user survey, are representative works supplied by suppliers such as Park Tae-joon cartoon company, DNC Media, and Red Ice Studios. Through supplier threat analysis, it can be seen that the supplier threat is low, the supplier threat is relatively large, and forward integration is possible, but it is rarely possible. In addition, although the supply factor is differentiated, it can be judged that it is a part that can be overcome.

In terms of buyers threat, through the mobile phone app MAU of Android OS and iOS users in the first half of 2023, Naver Webtoon recorded 8.2 million, Kakao Page recorded 4.77 million, Naver Series recorded 2.57 million, Daum Webtoon 1.74 million, Resin Comics recorded 120,000, TopToon 110,000 and Mr. Blue 40,000 [7]. This suggests that the size of individuals who consume webtoons is small. In 2022, Naver Webtoon raised the price of cookies (the particular money that can be used for buying episodes) by 20%, which led to high price sensitivity. When setting the number of monthly users as demand, the price sensitivity was 0.374 that indicates that a 1% increase in price would reduce demand by 0.374%. And most users of webtoon platforms are individuals, and they rarely compete. In order to create a webtoon platform, webtoons can be distributed through one-person media such as Instagram and Facebook, but competition with large-scale platforms has difficult limitations. As a result of the buyer's threat analysis, the increase and decrease factors of the buyer's threat are equally compatible, so it is not clear, but the threat is generally low. In addition, the factors of increasing buyer threat can be analyzed as the low number of buyers, high price sensitivity, and decreasing factors as the small size of buyers and the difficulty of rear integration.

As substitutes threat, the switching cost of Naver Webtoon is not high. Assuming that the standard deviation of rental prices per session of major webtoon platforms such as Resin Comics, Bomboon, Naver, Kakao, and Daum is switching cost, it can be seen that it is 161.631 won. It can be judged that the threat of substitute goods is high because the switching cost is low or there is no alternative platform to meet the user's demand.

2.2 Internal Analysis

Naver Webtoon introduced three PPS (Page Profit Share) models: pay-per-page content sales, advertising model, and derivatives exposure, generating 548.9 billion won in sales, 68.6 billion won in profit and loss, and 64.3 billion won in operating profit in December 2022. Paid content sales are provided in the form of best collection and externals, advertising models are PPL, and derivatives exposure is provided in the form of purchasing work-based publications or character products. When it

comes to PPS, which has improved the situation of financial resources, and VRIO (Value, Rarity, Imitability, Organization) framework analysis, the PPS program, a model for diversifying creators' profits, has exceeded 2 trillion won a year for the first time in 10 years. Naver Webtoon plans to reorganize its PPS program and secure up to 2,000 works that exceed 100 million won in annual transactions by 2028, and through this, the value of the resource can be confirmed both now and in the future. The success of the PPS model increased annual revenue to KRW 2.255 trillion, an 87-fold increase from KRW 23.2 billion when it was introduced in 2013. As the number of star writers increased due to the PPS model, the number of works with annual transactions of more than 1 billion won on the platform increased, and it became popular overseas. As a result, it is judged that scarcity can be maintained in a way that is differentiated from competitors. Naver Webtoon's PPS is a business model introduced with a 12-year plan from 2013, and even they have just reached the fourth stage after three years of investment, three years of growth, and three years of business model introduction. This requires a long period of time and financial investment if other competitors try to imitate. Naver Webtoon is forming a Corporate Team and Contents & Service Team to utilize PPS. The Corporate team is in charge of finance, and the Contents & Service team is in charge of IP business and advertising business.

As physical resource, Naver Webtoon is supporting writers to focus on their creative activities by running the 'largest contest on the ground,' 'challenge comic' and 'webtoonwith,' a creative ecosystem support program to discover new IPs. In addition, IP is expanding to various contents such as dramas, movies, and animations. Naver Webtoon is building a virtuous cycle ecosystem in which sales of original webtoons and web novels increase while expanding its verified IP to various services and products. As a result, creators are getting an opportunity to increase not only the revenue of the IP secondary work license, but also the revenue of the original work itself. The artists' creations secured through the challenge comics and the largest competition on the ground soon led to competitiveness in Naver Webtoon content, and it is judged that they have their own scarcity to be able to hold such an influential competition. Each piece of Naver Webtoon has its own IP value, and it is unlikely to be leaked to the outside world due to its exclusive serialization. Although direct reproduction is impossible, it is difficult to say that there is no complete risk of imitation because there may be competing works with similar genres or contents. Naver Webtoon develops and operates content through its Contents & Service team by performing tasks such as IP sourcing, partnerships, creative support, and platform operation. In addition, it is moving away from the form of outsourcing IP by producing second content media through subsidiaries Studio Orico and Studio N.

To analyze human resource, Naver Webtoon is divided into Tech, Design, Contents & Service, and

Corporate teams, focusing on communication between writers and readers. Content creators include exclusive webtoon writers and employees of content production subsidiaries, who produce webtoons and related content and need an understanding of customer preferences. The purpose of the analysis is to focus on user understanding and communication skills of these human resources. The response to the 'Writer's Home' service, which was introduced as a communication channel between writers and readers who serialize their works on its platform, is hot. It is judged to be valuable in that it secures loyal customers and connects them to profits by creating such a communication channel. Through the writer's home service, writers provide a space to actively communicate with readers, and recently, a comment function has been introduced to enable more intimate communication between writers and readers. Expose the artist's favorite comments on the top or respond to the comments through reactions. Due to these characteristics, Naver Webtoon's 'Writer's Home' service is considered to have scarcity. Kakao Webtoon introduced T-Story's 'Cheering' for communication between writers and readers, but this is a system in which readers provide unilateral financial support to the author, and there is a limitation that there is no two-way communication [8]. Naver Webtoon is establishing a system that allows two-way communication through the service, and it is judged that it is difficult to directly duplicate it. However, in the case of replacement through SNS, there are cartoons that started with a communication system already in place, but it is believed that replacement and direct reproduction will take time. Naver Webtoon is organizing its communication system well by creating Wwriter's Home and Challenge Comics to form and maintain the relationship between readers and writers. In addition, four teams of in-house departments are distributed according to each role, and various systems for content production and artist discovery are established.

The organizational resources are largely composed of Naver Webtoon, Line Manga, Naver Web Novel, Naver Series, and Watpad domestic and foreign content businesses, and there are in-house departments (Tech, Design, etc.), which are subsidiaries of content production. In the end, these various organizational systems are directly related to content production capabilities. Naver Webtoon occupies an unrivaled position in the webtoon industry and has a line network for global expansion. This is considered valuable in that it serves as a stepping stone to global growth, not just domestic growth. It can be said that there is rare in that only Naver Webtoon consists of domestic and foreign content businesses and that it has a content production subsidiary linked to it. Naver Webtoon is one of the few one-source multi-use companies in Korea. It is possible to produce not only web novels and webtoons, but also dramas and movies based on them, thanks to the system of subsidiaries such as Studio N and Studio Orico. As can be seen in the organizing stage of human resources, Naver

Webtoon's organizational resources are well organized to use the resources of the organization efficiently, as there are four in-house departments suitable for the role, Studio N, and a powerful subsidiary that can produce movies and dramas called Studio Orico.

3. Naver Webtoon Strategy

Naver Webtoon domestic strategy can be divided into strategic alliance and marketing strategy using metaverse. For strategic alliance, Guksundang, a traditional liquor company, launched the wine Yumi's Gargotte in collaboration with the webtoon Yumi's Cells. The wine sells 40,000 bottles within a month of its release as shown in [Fig. 1], and it has targeted its main customer base by harmoniously combining the characters favored by the MZ generation [9]. Webtoon Foot Apple Moisturizing Academy at the end of the century' held After School Lessons in collaboration with Lotte World Adventure.



[Fig. 1] Yumi's Gargotte

As shown in [Fig. 2], webtoon contents were provided in various forms such as exhibitions, experiences, MD sales, and performances so that visitors could experience the emotions and stories of webtoons [10]. For marketing, Reda Games has released a metaverse room escape game called "Others are Hell: Innocent" based on the webtoon Others are Hell. The game follows the story of Yoon Jong-woo, the main character, to experience a scary experience in Gosiwon, and provides fun to readers and new users [11]. On the ZEPETO platform, users can meet webtoon characters and enjoy survival games by presenting Giggeobul World, which can be seen as a plan to expand various webtoon IPs to the ZEPETO map in the future [12].



[Fig. 2] Metaverse Room Escape game (Left), ZEPETO's survival game (Right)

Naver Webtoon also implements global strategies. Naver Webtoon has entered overseas markets and provides services as Line Webtoon, and has been successful in entering the Japanese market through Line Manga. Overseas IPs are also being discovered through CANVAS, an overseas challenging cartoon system, and Naver Webtoon is growing with more than 1,600 serial works and more than 22 million overseas users. Also, for IP utilization strategy, the original webtoon drama is highly popular not only in Korea but also abroad, and various works have been produced through collaboration with Naver Webtoons and large video platforms in China. In addition, works are produced using overseas IP, and the win-win effect of increasing interest in webtoons again is considered as related IP application fields are diversified.

4. Conclusion

K-culture contents such as music, movies, and drama industries have been successful around the world [13]. This study focused on the webtoon industry under intensifying OTT competition [14]. Also, this study investigated to analyze the external and internal environment and current strategies of Naver Webtoon.

To strengthen its market position and address current and future challenges, Naver Webtoon should focus on several strategic initiatives. First, Naver Webtoon is currently implementing a strategy to utilize the IP rights of webtoons in various fields including dramas, movies, games, and goods production. In order to take advantage of the global K-Webtoon craze, which is gaining huge popularity around the world, Naver Webtoon's IP must be used in various ways.

Second, as in many cultural industries, Naver Webtoon is using the latest technologies such as metaverse and AI with high interest [15][16]. Enhancing creator support through AI-powered creative tools and regular workshops can empower artists, while leveraging localized content production and

advanced translation systems can bolster global expansion [17]. Operational efficiency can be achieved through automated content moderation and predictive analytics for content success. However, caution is required. The protection of writers should be considered as a top priority, and clear guidelines and regulations regarding the use of AI technology should be prepared. Thus, strengthening IP management with AI-driven piracy detection and plagiarism checks will protect intellectual property. Exploring new content formats like metaverse integration and AI-enhanced narratives, along with continuous R&D and user-centric initiatives, will ensure Naver Webtoon's sustained growth and innovation in the industry.

While this study focused on Naver Webtoon's strategies and the integration of AI in the webtoon industry, it lacks empirical data on user and creator responses to AI, insufficiently explores the regulatory impacts of AI usage, and does not fully address its long-term sustainability. Thus, future studies can be done to focus on collecting quantitative and qualitative data on AI's impact to understand market and consumer behavior and evaluating innovation to enhance the webtoon experience and market reach.

References

- [1] J. Lee, Y. Kim, J. Kang, "Preparation for Digital Transformation: A Case and Empirical Findings of South Korean Multinational Corporations", *Journal of Global Business and Trade*, vol. 19, No. 1, February 2023, pp. 57-74, doi: 10.20294/jgbt.2023.19.1.57.
- [2] Ministry of Culture, Sports and Tourism, "Making Korea's platform into the 'Netflix of comics and webtoons'", mcst.go.kr, https://www.mcst.go.kr/kor/s_notice/press/pressView.jsp?pSeq=20805, (accessed May 15, 2024).
- [3] C. Choi, J. Kim, "Strategy of Naver Webtoon : News article analysis by period", *Information Society & Media*, vol. 23, no. 3, December 2022, pp. 1-26, doi: 10.52558/ISM.2022.12.23.3.1.
- [4] S. Eun, "Innovative Integration of Brain-Computer Interface and Virtual Reality Technologies for Cognitive Rehabilitation", *Journal of Digital Media & Culture Technology*, vol. 3, no. 1, April 2023, pp. 1-7, doi: 10.29056/jdmct.2023.06.01.
- [5] Korea Creative Content Agency, "2023 Webtoon Business Survey", kocca.kr, <https://www.kocca.kr/kocca/bbs/view/B0000147/2004817.do?searchCnd=&searchWrd=&cateTp1=&cateTp2=&useYn=&menuNo=204153&categorys=0&subcate=0&cateCode=&type=&instNo=0&questionTp=&ufSetting=&recovery=&option1=&option2=&year=&morePage=&qtp=&domainId=&sortCode=&pageIndex=1#>, (accessed May 3, 2024).
- [6] Korea Creative Content Agency, "2023 Survey of Cartoon and Webtoon Users", kocca.kr, <https://www.kocca.kr/kocca/bbs/view/B0000147/2004324.do?menuNo=204153#>, (accessed May 15, 2024).
- [7] W. Lee, "Nekao, Webtoon, Web novel 'Sweep'...3rd party's app market share is less than 1/10th of Naver", g-enews.com, https://news.g-enews.com/breaking/sokview.php?ud=20230620100604214c5fa75ef86_1, (accessed March 15, 2024).

- [8] Y. Kwak, "Strengthen communication with Naver, Kakao, creators, and readers who work on content", goodkyung.com, <http://www.goodkyung.com/news/articleView.html?idxno=222635>, (accessed May 15, 2024).
- [9] N. Choi, "Guksoondang, webtoon collaboration wine, 'Yumi's Gargotte' is sold out...Let's go to the 2nd episode in January next year", fetv.co.kr, <https://www.fetv.co.kr/news/article.html?no=104541>, (accessed May 8, 2024).
- [10] S. Ahn, "Naver Webtoon Collaborates With Lotte World at the End of the Century's Green Apple Moisturizing Academy... IP offline stage expansion", bloter.net, <https://www.bloter.net/news/articleView.html?idxno=612933>, (accessed May 3, 2024).
- [11] K. Cho, "Reda Games 'Others Are Hell' Room Escape, Lotte World Metaverse Diorama heated up", donga.com, <https://game.donga.com/109445/>, (accessed May 15, 2024).
- [12] S. Jeong, "Naver Webtoon Implements Webtoon's 'Device Monster' on Metaverse Platform ZEPETO", insightkorea.co.kr, <https://www.insightkorea.co.kr/news/articleView.html?idxno=97480>, (accessed May 15, 2024).
- [13] J. Han, D. Y. Kim, S. J. Jo, "An Exploratory Study on Global Strategy of K-Contents Music and Media Industries", *Journal of Digital Art Engineering & Multimedia*, vol. 10, no. 1, March 2023, pp. 117-126, doi: 10.29056/jdaem.2023.03.11.
- [14] J. Han, "Strategic Suggestions for Video Content Firms: Focusing on YouTube and Netflix of the South Korean Market", *Journal of Digital Media & Culture Technology*, vol. 3, no. 2, December 2023, pp. 127-141, doi: 10.29056/jdmct.2023.12.06.
- [15] Y. J. Hwang, J. Han, "A Case Study on Zepeto and Roblox Business Model", *Journal of Digital Art Engineering & Multimedia*, vol. 9, no. 2, June 2022, pp. 123-136, doi: 10.29056/jdaem.2022.06.02.
- [16] S. Choi, Y. Kim, "From Image-Based to Immersive: Exploring Virtual Museums that enhance Accessibility and Forms of Museum", *Journal of Digital Media & Culture Technology*, vol. 3, no. 2, August 2023, pp. 93-102, doi: 10.29056/jdmct.2023.12.03.
- [17] C. Y. Hwang, S. W. Kang, S. B. Choi, "Coaching leadership and creative performance: A serial mediation model of psychological empowerment and constructive voice behavior", *Frontiers in Psychology*, March 2023, vol. 14, doi: 10.3389/fpsyg.2023.1077594.