

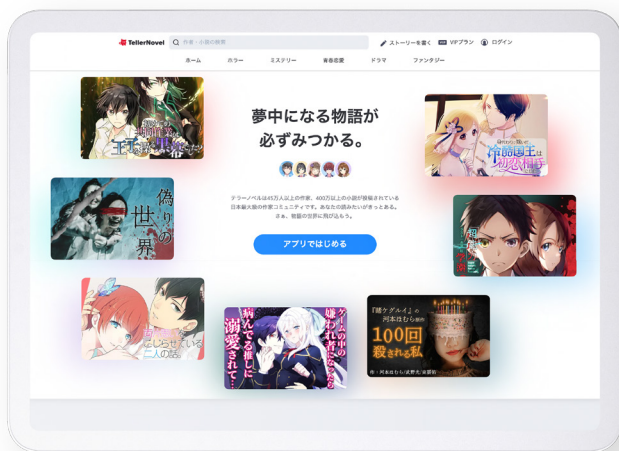


## Case Study

# Leveraging BytePlus Technology for Enhanced Efficiency and Business Growth

## Executive Summary

Teller Novel, a rapidly growing user-generated content (UGC) platform focused on light novels, sought to improve user engagement, content consumption, and revenue generation. By partnering with BytePlus and utilizing their advanced AI/ML technology, Teller Novel significantly increased their click-through rate (CTR), daily active users (DAU), and overall business performance.



## Company Overview

Teller Novel, originating from Japan, is a user-generated content (UGC) platform specializing in light novels, catering to a diverse and growing audience of authors and readers. Boasting a monthly active user base of 1 million and a diverse content library of over 6 million articles, Teller Novel is an energetic and flourishing virtual hub for literary enthusiasts. Users on the platform can be both authors, contributing original content, and readers, consuming and engaging with the vast array of novels.

The platform encompasses a diverse array of genres, catering to the unique preferences of its users, thereby cultivating a vibrant and captivating environment for the members of its community. To ensure steady revenue generation, Teller Novel offers a premium subscription model, granting users access to exclusive content, alongside embedding advertisements within the content for additional income.

More importantly, Teller Novel stands at the precipice of an extraordinary opportunity — the creation of innovative and captivating characters that could rival the cultural impact of Pokémon. Such intellectual property (IP) holds the potential to significantly boost the platform's value during this pivotal phase of growth. The stakes are high, as the successful development of these new, revenue-generating characters hinges on fostering a deeply connected community of readers and authors.



To seize this opportunity, Teller Novel must deploy a sophisticated recommendation engine that effortlessly unites passionate readers and talented authors, nurturing a collaborative environment where creativity flourishes. By tapping into the collective imagination and resourcefulness of its user base, Teller Novel can drive the development of groundbreaking content that captures the hearts and minds of audiences worldwide, propelling the platform to even greater heights.

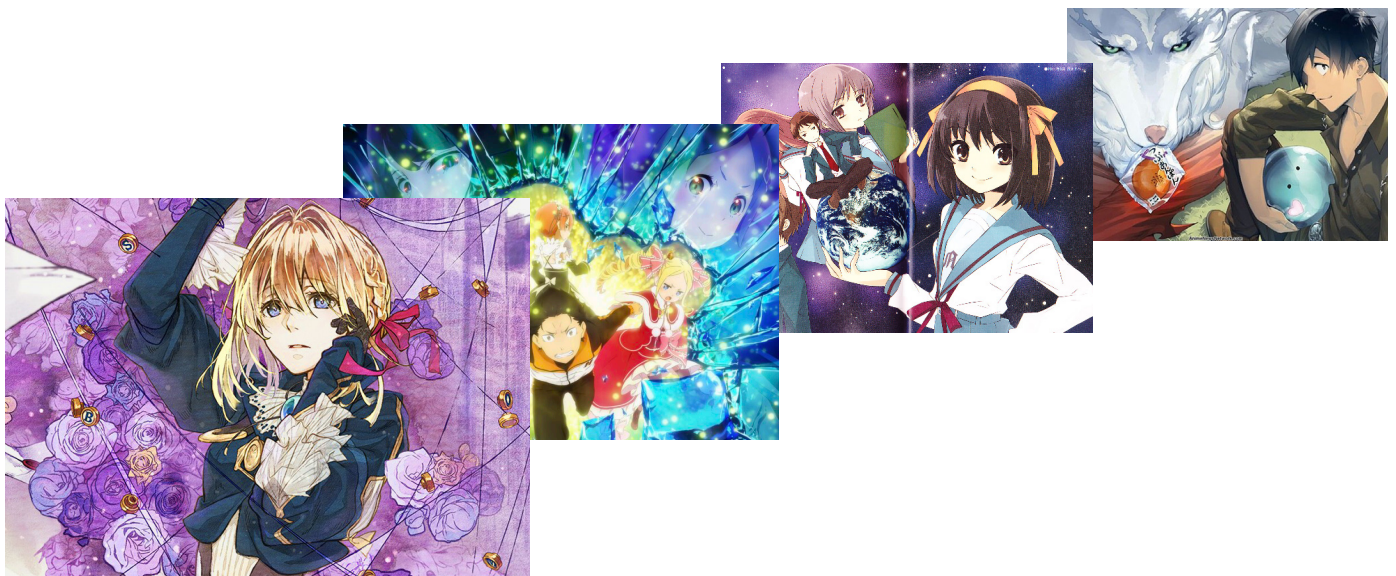
## Light Novels Unveiled: Breezy Reads for the Modern Literary Explorer

A light novel is a style of Japanese literature that is typically aimed at young adults and features short, easy-to-read volumes. These novels are characterized by their compact length, often containing around 50,000 words, and are usually serialized with multiple volumes in a series. Light novels often include illustrations, which are usually drawn in manga or anime style, to enhance the reader's experience and provide visual context.

The storytelling in light novels typically focuses on dialogue and fast-paced plots, making them easily digestible and engaging for the target audience. While light novels cover a wide range of genres, such as romance, fantasy, science fiction, and mystery, they often contain elements of pop culture and are sometimes adapted into manga, anime, or live-action adaptations, further increasing their popularity.

### Notable successful animations/TV shows adapted from light novels:

1. Violet Evergarden
2. Re:Zero
3. The Melancholy of Haruhi Suzumiya
4. Campfire Cooking in Another World with My Absurd Skill



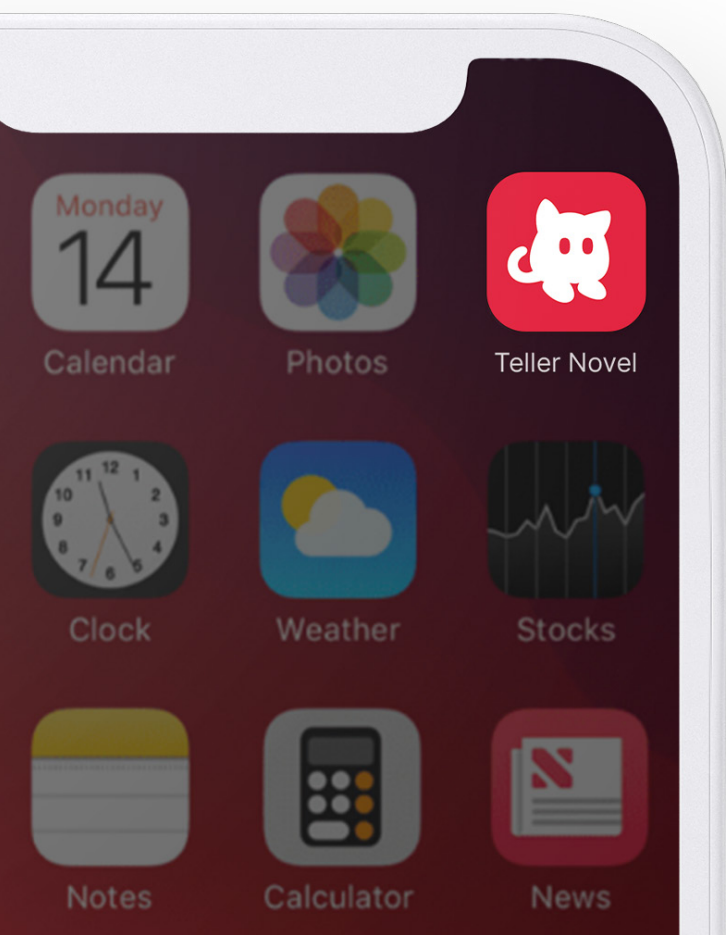
# Navigating the Challenges of Teller Novel's Expanding Business

Teller Novel faced limitations in their existing recommendation system using Google Cloud Platform's (GCP) AI technology. Their CTR had plateaued, and they needed a more scalable and adaptable solution to continuously improve engagement. Additionally, the cost of continuous tuning and optimization on GCP and AWS was prohibitive.

Imagine the excitement and promise that comes with operating a flourishing content platform like Teller Novel. With each day, the library of light novels grows, and the community of passionate authors and readers expands. However, this remarkable growth brings with it a set of pressing challenges that must be addressed.

Facing the responsibility of managing a rapidly expanding content library and user base, the platform's success hinges on delivering personalized and optimized experiences to its users. Without an effective solution, Teller Novel risks losing the very essence that makes it so captivating — declining user engagement, reduced content consumption, and a slump in revenue from premium subscriptions and advertisements.

But the aspirations of Teller Novel extend beyond maintaining the status quo. The platform envisions a future where users are not only readers but also empowered authors contributing valuable intellectual property (IP) to the ecosystem. This vision aims to elevate Teller Novel's growth and market value, but it requires implementing a sophisticated recommendation engine capable of connecting interested readers with potential authors, fostering a truly collaborative and creative environment.



# Why BytePlus

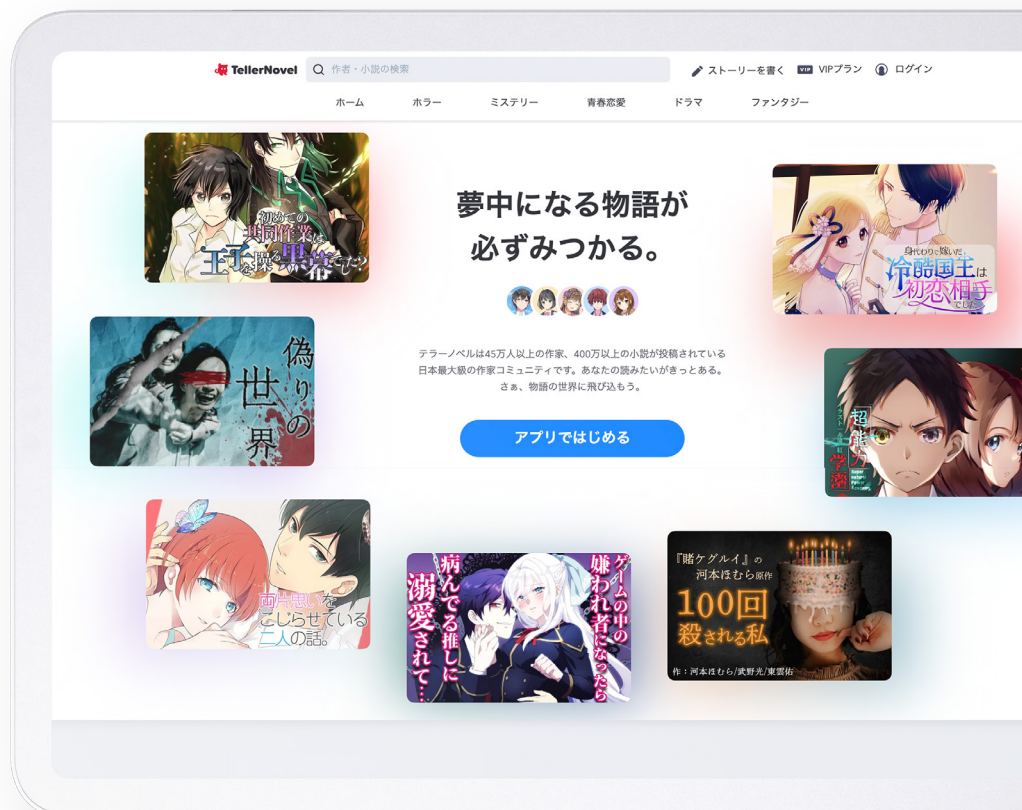
Teller Novel's CEO, an avid fan of TikTok, recognized the potential of ByteDance's AI and deep machine learning technology for improving UGC content recommendations. BytePlus provided a flexible, customizable solution, allowing Teller Novel to surpass the limitations of GCP and AWS.

Before partnering with BytePlus, Teller Novel faced several challenges with its earlier system that was unable to meet Teller Novel's unique and evolving requirements, leaving gaps in user experience and hindering the platform's growth.

One major limitation of Teller Novel's system was the inability to recommend content based on the user's followers. This meant that users were missing out on the opportunity to discover content that their social circle enjoyed. Recognizing the importance of social connection, BytePlus implemented a solution that incorporated recommendations from the user's followers, fostering a sense of community and enhancing the overall platform experience.

Another area where the previous system fell short was in reacting to users' recent behaviors. As a result, the recommendations failed to keep up with users' changing interests and preferences. BytePlus addressed this issue by developing a dynamic system that quickly adapted to users' recent behaviors, ensuring that the content served remained relevant and engaging.

Lastly, Teller Novel required complex customizations, such as promoting new items, prioritizing certain categories, and improving the experience for new users. BytePlus rose to the challenge, offering highly tailored solutions that catered to these specific needs.



# Solution Implementation

By leveraging BytePlus' advanced recommendation engine, Teller Novel improved content targeting and personalization for their users, resulting in increased engagement, premium subscriptions, and advertisement exposure. This was achieved through a seamless API integration and continuous support from BytePlus' engineering team.

## Results

# Transforming User Experience with Groundbreaking Personalization Solutions

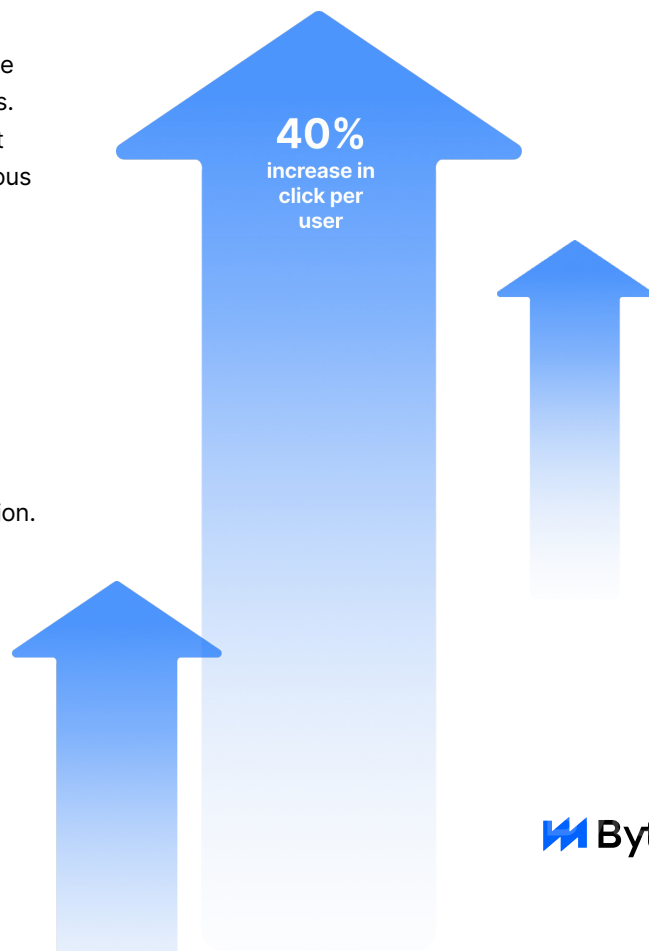
Teller Novel experienced a notable **40% increase in click per user**, along with improvements in DAU, demonstrating the effectiveness of BytePlus' solution during the A/B tests

BytePlus' collaboration with Teller Novel led to significant improvements in user engagement by implementing a customized personalization strategy. Although deep learning was already the backbone of their personalization efforts, the BytePlus team recognized the potential for further enhancements.

We've introduced several targeted adjustments to refine Teller Novel's personalization algorithms. One such tweak was to place a stronger emphasis on the user's most read tags. By analyzing the user's reading preferences and prioritizing content related to their favorite topics, BytePlus was able to create a more tailored experience for each user.

Additionally, the Recommendation team incorporated the concept of click polarity into the personalization process. This technique helped to identify and serve content that resonated with users' preferences, based on their previous interactions with similar content.

These strategic refinements, combined with the power of deep learning, resulted in a significant increase in user engagement metrics, such as click per user and daily active users. Ultimately, the collaboration between BytePlus and Teller Novel demonstrated the value of fine-tuning personalization algorithms to better cater to individual user interests and drive greater user satisfaction.





# Competitive Advantage

In the fast-paced and competitive world of digital content platforms, achieving desired results often requires tailored expertise to address unique challenges. When Teller Novel relied on Google Cloud Platform (GCP), they faced limitations due to the absence of dedicated experts who could help them optimize performance for their specific scenarios. This lack of personalized support acted as a barrier to their growth and hindered their ability to adapt and evolve.

BytePlus has established itself as a leader in the field of personalized content recommendation, thanks to its unique approach and commitment to client success. While many competitors focus solely on core metrics like click-through rates (CTR), BytePlus understands the importance of taking a more comprehensive approach to address the diverse needs of user-generated content (UGC) platforms. One of the key competitive advantages of BytePlus is our ability to customize their systems to optimize a wide range of metrics, such as coverage and diversity. By understanding the value of these metrics for UGC platforms, BytePlus ensures that the recommended content not only engages users but also exposes them to a broader array of topics and creators.

We developed tailored solutions that cater to Teller Novel's specific requirements. For instance, implementing custom features that limit recommendations to only original content, excluding fan-fiction, in certain situations upon the Teller Novel's request. This level of flexibility allows us to provide highly targeted solutions that truly address the unique needs of each platform.

**These experts could identify granular details of Teller Novel's performance, enabling them to adapt and implement changes swiftly and effectively:**

1. The intricate connections between various performance metrics and how they relate to individual components or features within the system. This understanding helps in determining the effectiveness and impact of each element on the overall performance.
2. Examining the presence of any biases within the system and assessing whether these align with the platform's inclinations. If discrepancies are found, it's crucial to identify the root causes and address them to ensure the system's recommendations align with the platform's objectives.

This personalized support empowered Teller Novel to overcome the obstacles that had previously hindered their progress, paving the way for continued growth and success.

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## Customer Testimonial

Teller Novel's CEO and COO have expressed satisfaction with BytePlus' solution and have enthusiastically recommended the product to other potential clients, including C-suite executives within their network. This endorsement highlights the transformative impact of BytePlus' technology on Teller Novel's business growth.