

From BNPL pioneer to the leading provider of BtoC BNPL services in Japan

Lumen proactively responds to the evolving requirements of Net Protections' business growth



Net Protections, Inc.

Industry

Fintech

“Lumen is a foreign company, but they serve us with a Japanese heart. They are extremely flexible in terms of customization. I feel free to ask them anything, and they will deliver me the right answer and solution. I view them as an extremely reliable vendor, that has continued to serve us well as we have grown.”

— Shiroh Suzuki,
Director and CTO,
Net Protections, Inc.



Net Protections

Challenges

- Ensuring a 24x7x365 highly available secure payment infrastructure
- Difficulty hiring and training engineers with strong infrastructure skills
- Requirement to focus upon application development

Solutions

- Lumen Managed Private Cloud
- Lumen Advanced Managed Services
- Lumen AWS Cloud Connect
- Lumen Internet Services

Benefits

- Improved ability to rapidly respond to complex needs and sudden changes in IT or business requirements
- Significantly reduced the internal IT burden of day-to-day operations and maintenance

The customer

A pioneering credit tech company that leverages technology to create new forms of trust

Net Protections, Inc. (Net Protections) is a pioneer of BNPL payment services in Japan and a leading company in the domestic BNPL payment services market for BtoC transactions. Net Protections provides postpaid payment services that make every business transaction safe, secure, and smooth through credit operations based on advanced technology and extensive experience.

Net Protections was founded in 2000, and listed on the First Section of the Tokyo Stock Exchange in 2021¹. Some of the services they provide includes:

- BtoC online retailing payment system “NP Atobarai”
- “NP Kakebarai”, a settlement service for BtoB
- “atone”, a membership-based settlement service for BtoC
- “AFTEE”, a settlement service for Taiwan

As of FY2020, Net Protections’ BNPL services had an annual transaction volume of over 430 billion yen (116% year-on-year) and supported 15.8 million unique users annually (109% year-on-year).²



The challenge

Average of 200,000 critical transactions per day

Net Protections provides the BNPL (buy now, pay later) payment service called “NP Atobarai”, that predominantly caters to e-commerce businesses. Online retailers that use this service are guaranteed against the risk of uncollected payments, and the entire process from billing to reminders to payment is outsourced to Net Protections, allowing customers to pay later. The number of users of this service is rapidly increasing. Users benefit from the ease of making purchases, plus they feel secure in the knowledge that they can pay at convenience stores, banks, and post offices nationwide, or online via PC or mobile payment after receiving the purchased product.

When Net Protections began offering their first BNPL service, it was a small-scale offering. At the time, it was not practical to operate a data center on their own, and so they decided to outsource their infrastructure. They selected Lumen as their managed service provider, outsourcing their data center and managed infrastructure and application requirements to save on labor and operational costs, as well as to meet their uptime requirements.

Over 2 decades, Net Protections business has continued to expand. As of March 2021, about 76,000 merchants have adopted this service. The number of transactions has reached approximately 66 million per year and the total transaction amount is over 430 billion yen per annum, and growing. To service their ecosystem of partners and customers, Net Protections requires a mission critical infrastructure, that is operational 24 hours a day x 365 days a year.

Footnote(s)/Disclaimer(s)

1. Listed by Net Protections Holdings, Inc.
2. <https://corp.netprotections.com/news/press/2021/0630>

The solution

Responding to migration and international standards

Operating on Lumen's cloud-based platform is the core infrastructure of Net Protections' postpaid settlement service. Net Protections also leverages public cloud for some of their service components, but the "must not fail" portion primarily resides on Lumen's managed private cloud. Net Protections strongly believe that a private cloud composed of Lumen's customer-occupied infrastructure can best meet the specific requirements of their business.

The two companies have been operating this critical system together for more than 20 years. As Net Protections' requirements have evolved, Lumen has assisted them with many facets of their growth challenges. One of the most memorable instances was when Net Protections needed to first comply with the Payment Card Industry Data Security Standard (PCI DSS) – which is the international security standard for the credit card industry. At the time, Net Protection's had to conduct an extensive review and reconfiguration of their environment to adhere to the strict requirements of the newly introduced standard. It was a daunting challenge, but the two companies worked closely together to ensure Net Protections were able to meet all of the necessary requirements for policies, processes, networks, software, and security management. Furthermore, since their successful first PCI DSS audit, Net Protections – with Lumen's assistance, has been able to complete each annual audit without any major problems.

As another example, Net Protections has also experienced several large scale migrations, due to the accelerated growth of their business. These were complex projects, particularly because Net Protections' services needed to be "Always On" 24 hours a day, 365 days a year. Lumen provided expert support on critical components – such as their transaction databases, to ensure a seamless migration. Advice included how to perform stable tasks during parallel operations, and handling of differential data during system switchover.



We were able to grow our services and customer base because we were able to concentrate on our business by entrusting our IT infrastructure to Lumen. In the future, we are likely to take on challenges in unknown areas. At that time, we will continue to accumulate experience and know-how together with Lumen, and grow together as we have in the past."



Net Protections

– Shiroh Suzuki,
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The benefits and the future plan

Working together for next-generation infrastructure

Supported by Lumen's Advanced Managed Services, Net Protections' private cloud is a mission critical platform that is designed to be up and running 24 hours a day, 365 days a year. In the early days of the company, there were incidents where the system had to be restarted, but after selecting Lumen as their strategic managed service provider partner, various measures were taken to ensure the continuation of services. Design elements, such as architecting the system with multiple layers of redundancy, were introduced into their environment.

Since they can leave the operational side to Lumen, Net Protections can let their IT resources focus upon application development. The challenge of hiring and training engineers with strong infrastructure skills has also been eliminated.

In the future, the challenge will be to migrate to next-generation infrastructure that incorporates the latest technology. In addition to database expansion and decentralization, Net Protections will begin to explore using container services, enhanced support for Business Continuity Planning (BCP), and proactively improving their security posture to protect against the evolving cyberthreat landscape.