

Nexon Korea Corporation Increases Operational Efficiency, Improves Customer Experience



Executive summary

Established in 1994, Nexon Korea Corporation (Nexon) is one of the world's largest gaming companies and the online and mobile game leader in Korea. It released the world's first online MMORPG, *The Kingdom of the Winds*, in 1996 and introduced the industry's first "Free to Play" business model. Nexon now offers 150 game titles in 150 countries. In order to make informed decisions about content management and game balance, Nexon required full visibility into user behavior across its numerous virtual gaming worlds. Since deploying Splunk Enterprise, Nexon has seen benefits including:

- Enhanced operations reliability
- Optimized user experience
- Real-time business insights

Why Splunk

To address business-critical requirements, Nexon was collecting data from multiple sources. Unfortunately, this manual data collection process was extremely complex and labor-intensive. Whenever a game director asked for data, the infrastructure team had to search the servers one by one. Details were then passed to the IT team for parsing and analysis, and the results were organized in an Excel spreadsheet. Since it took a few days to complete this process, getting real-time insights from the data was impossible. Worse yet, Nexon had to wait for direct feedback or complaints from customers before any user issues could be addressed. Nexon needed a flexible solution that could provide it with intuitive and actionable intelligence by analyzing its game logs and visualizing statistical data in real time.

After evaluating several vendors, Nexon selected the Splunk platform for its ease of use and capability in analyzing disparate data sources simultaneously. With Splunk software, Nexon can now have a single-pane-of-glass view into data collected from multiple sources. By correlating different data metrics within the Splunk platform, Nexon gets real-time insights into its overall online gaming operations. It can now make the right decisions to enhance game balance, secure its

Industry

- Media and entertainment (online and mobile gaming)

Splunk Use Cases

- Business analytics

Challenges

- Needed to make informed decisions about content management and game balance
- Lacked full visibility into user behavior across numerous virtual gaming worlds
- Wanted to proactively address abusive behavior and malicious user activities
- Seeking insights into game popularity
- Cumbersome manual processes to determine the source of user problems

Business Impact

- Strengthened customer support through real-time data analysis
- Increased value for marketing derived from real-time insights of user behaviors
- Enhanced operations reliability due to faster abuse detection—from days to minutes
- Improved human resources planning and utilization due to several folds increase of manpower efficiency in infrastructure maintenance
- Boosted business efficiency and optimized user experience due to accelerated incident response

Data Sources

- Game play logs
- Windows applications, including game server logs, network logs and system logs
- User profiles and user client logs
- Server access logs
- Database logs
- Memory data

Splunk Products

- Splunk Enterprise

operations and optimize user experience. Additionally, the Splunk solution is widely used for Nexon's new games such as *Sudden Attack 2*.

Real-time issue mitigation results in improved customer service

Prior to the Splunk deployment, it could sometimes take several days for Nexon to resolve a customer issue. The Splunk platform has enabled real-time troubleshooting, reducing mean-time-to-resolution (MTTR) for issues to minutes, instead of days. The Splunk platform also generates alerts triggered by a predefined threshold, which enables Nexon to proactively address customer issues even before they are filed to the customer service team.

Additionally, Splunk software has helped Nexon address security issues much faster. Instead of having to rely on users' complaints, Nexon can proactively detect suspicious behavior by setting thresholds and alerts for specific actions simply by using the "custom algorithms" in the Splunk platform. This has resulted in more reliable operations, increased customer satisfaction and an overall boost to Nexon's brand image as a company that provides a superlative level of customer service.

Increased marketing effectiveness generates new revenue opportunities

By capturing past and present usage patterns, trends and peak gaming periods, the Splunk platform has enabled Nexon to gain real-time insights into gamer behavior. Using this invaluable data, Nexon's marketing team has been able to more successfully roll out special offers, new game content, promotional campaigns and other marketing initiatives. For instance, Nexon is planning to activate its "Item Recommendation System," which will automatically recommend the best in-game items to users based on known preferences and dynamically modify the game

"Splunk's real-time business analytics help us gather and analyze play logs and applications logs from the ever-evolving gaming world. We can track past and current incidents in real time—what's more, violations and abuses can be detected and addressed in minutes instead of days, which raises the bar on the overall user experience."

Chunghoon Ryu
 Department Manager,
 Game Infrastructure Department,
 Nexon Korea Corporation

to offer gamers a uniquely customized experience. Since the Splunk UI and dashboard allow non-IT users such as game directors, service operators and marketers to access the relevant data, these teams can be more efficient in analyzing trends and planning expanded campaigns.

Increased operational efficiencies with tenfold saving of maintenance manpower

Infrastructure maintenance plays an integral part within Nexon's business model. With game content changing monthly or even weekly, Nexon has to keep up with the content production cycle and maintain its service level agreements (SLAs) for customer service and statistical tools. Previously the maintenance window required additional development resources. Now, Splunk software has completely eliminated the need for development maintenance with its unique unstructured data processing. This has resulted in a tenfold reduction of time spent on game maintenance. The infrastructure team can also spot abnormal gaming activities and tackle root problems in real time. As a result of the increase in efficiency, Nexon's staff can now focus on innovation and business development.

Download Splunk for free or get started with the **free cloud trial**. Whether cloud, on-premises, or for large or small teams, Splunk has a deployment model that will fit your needs.



Learn more: www.splunk.com/asksales

www.splunk.com