



Business Presentation

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TABLE of CONTENTS

■ About us	3p
■ Service Quality Assurance	7p
■ Platform Quality Assurance	17p
■ Performance Test	25p
■ Localization & LQA	32p
■ System Integration	39p
■ Appendix	44p

: KEY MEMBER, Our Ability, Timeline

Service quality

The most reliable path to business success,
The core value of NGLE

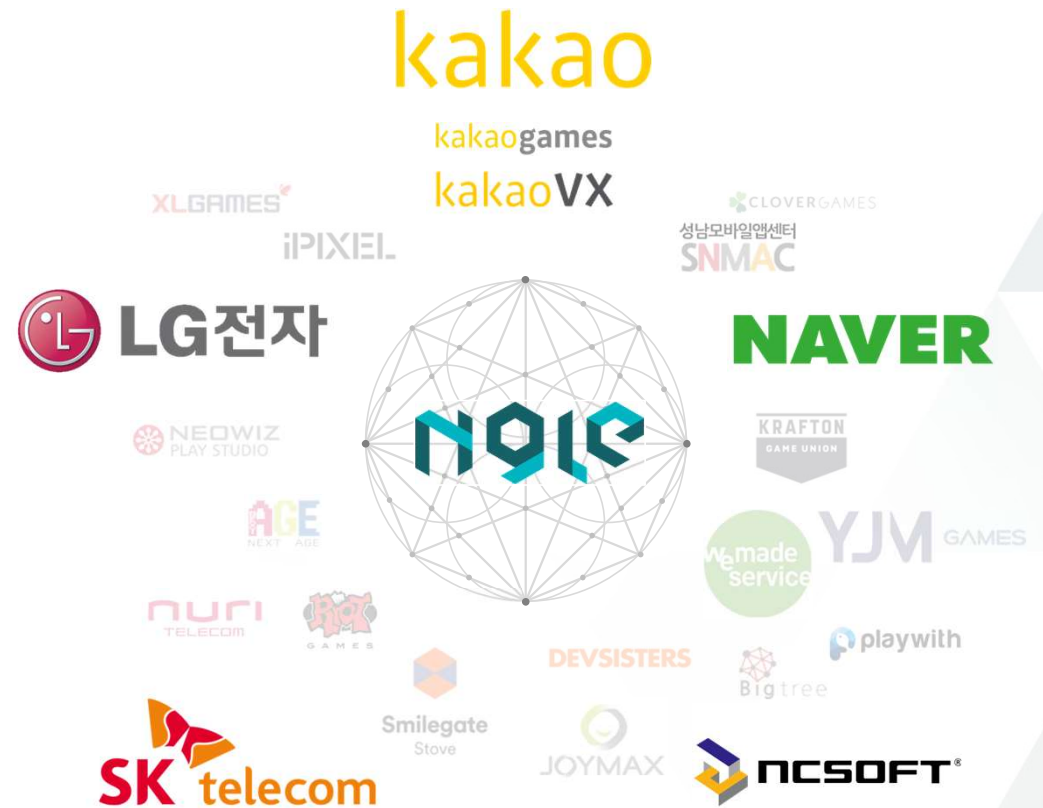
Comprised of professionals from leading IT companies such as NHN, Samsung Electronics, Smilegate, and NCSOFT, NGLE delivers the highest quality through extensive project experience and advanced technical expertise.



As a specialized service affiliate of Kakao, we possess extensive expertise in quality assurance (QA), service development, and operations across a wide range of IT platforms and service domains.

With experience in QA testing for over 300 services and IT platforms, NGL also provides web and app platform service development (SI), as well as service operations and customer support (CS).

From launch preparation to live operations, we ensure stable and reliable service delivery throughout the entire service lifecycle.



Our key service offerings by business domain

From PC, Mobile, VR, Platform Apps, to Smart TV, we delivers the most effective testing solutions for quality improvement and performance validation, tailored to each client's business characteristics and service environment.

We also provide systematic support for service development and launch, ensuring stability and quality throughout the process.

Service QA

• Mobile Market Review Guidelines

- Guidance for app submission to mobile marketplaces
- Guidance for marketplace featuring eligibility
- Analysis of rejection cases and response strategies

• Service QA

- Functional QA
- Compatibility QA
- Balancing QA
- Performance QA
- Security QA
- Billing QA
- Live environment maintenance QA

Platform QA

• Platform & Blockchain QA

- Functional and compatibility testing
- Wallet and Dapp functionality testing
- API functionality testing
- SDK integration testing
- Review and validation of platform integration guidelines
- Platform back-end performance testing
- Test automation
- Admin tool testing

• Server Performance QA

- Server performance testing
- Transaction validation testing
- Test automation

Development

• Web · APP Service Development

- Web and app service, Platform and content development
- Development of web and app service operation tools (Back-office systems)
- Web and app service consulting and proposals
- Technical R&D support

• Game Content Service Development

- Global game service development
- Development of game service operation tools (back-office systems)

Localization

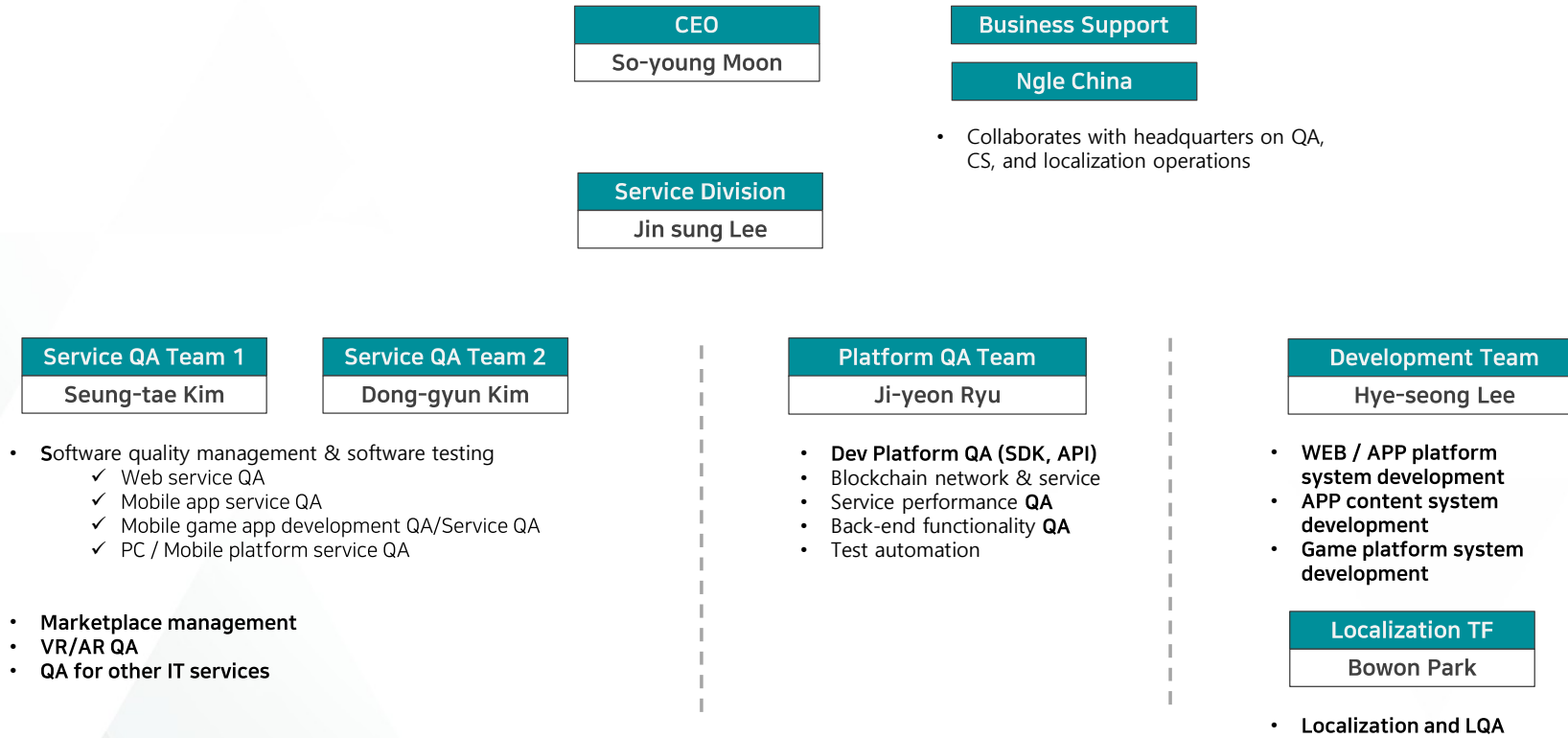
• Game Localization

- Established standardized localization workflows
- 16+ target languages support
- Direct translation from Korean text
- MTPE services

• LQA

- Linguistic / Visual / Rewriting
- Support for a wide range of LQA product and formats

Organization Structure





Service QA

- We conduct comprehensive quality and performance validation
- across all necessary areas, tailored to our clients' needs
- based on the type of IT service.
- From market preparation through updates and post-launch operations, we provide QA support by responding swiftly
- to issues and performing thorough root cause analysis.

A large, semi-transparent graphic of the word "Quality" in a serif font, overlaid on a circular arrow icon. The background of the entire slide is a teal-tinted image of a hand holding a smartphone displaying a game interface.

Quality

01 Role Overview



What We Do

- Guidance for mobile app store submission and registration
- App store featuring strategy support
- Review rejection analysis and resolution
- Functional, Performance, Compatibility, Security, and Billing QA
- Live service QA and ongoing maintenance
- Multilingual translation and linguistic Review
- End-to-End global localization QA

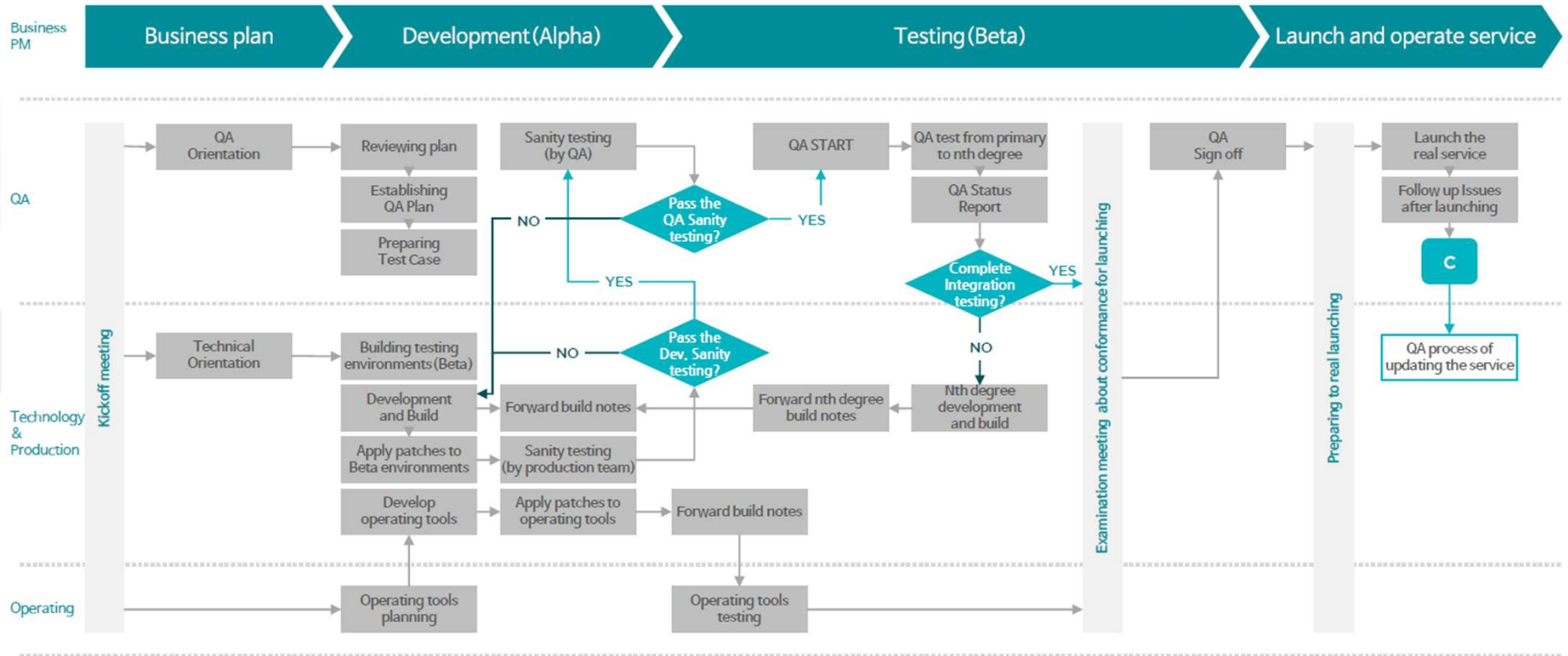
We identify the unique characteristics of each project and leverage a wide range of testing tools to enhance quality and validate performance.

We provide end-to-end support for successful market launches, including platform-specific policy compliance, global expansion expertise, and strategic guidance for app store featuring.

02 Process



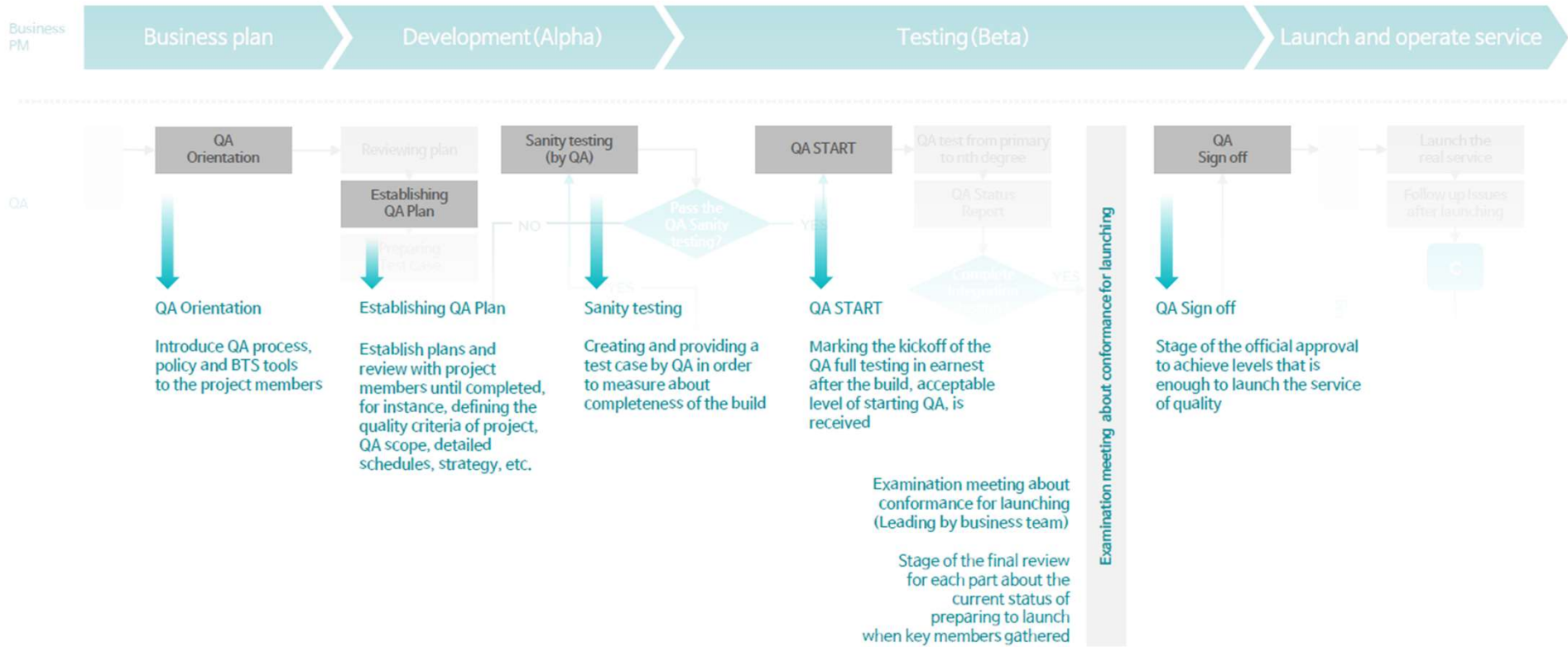
Leveraging experience from more than 300 projects, we apply a systematic QA process to complete build verification on schedule and deliver consistently stable quality.



02 Process



Leveraging experience from more than 300 projects, we apply a systematic QA process to complete build verification on schedule and deliver consistently stable quality.



03 Representative Service Examples



Mobile market management (Google featured, APP Store, ONE Store)

To ensure a smooth and successful service launch, QA testing is conducted in accordance with the latest, up-to-date review policies and guidelines for each app marketplace.

Google Featured

Design	Interface	Permission
Log-in	Google Play service	System
Compatibility	Reject case	Rewards

APP Store

Stability	Performance	Business
Design	Legal Requirement	Reject case

ONE Store

System	Harmful contents	Functional behavior	ETC
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03 Representative Service Examples

Mobile device interrupt test

In addition to in-game features, all test cases related to interactions with native device functions—such as calls and notifications—are thoroughly verified.

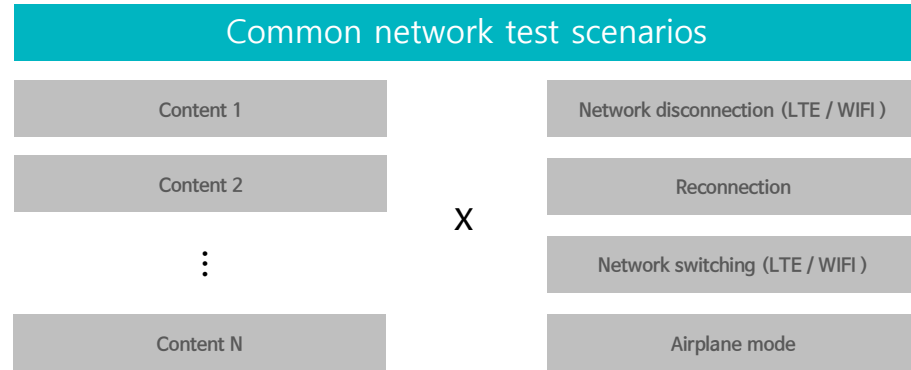
AOS		iOS	
Physical Controls	Software Interactions	Physical Controls	Software Interactions
Volume buttons	Call/Message/Notification	Volume buttons	Call/Message/Notification
Earphones/headset	Device lock/unlock	Earphones/headset	Control center
USB/Charging	Multitasking	USB/Charging	Notification center
Power button	Device settings changes	Power buttons	Device settings changes
Navigation buttons		Home buttons	

03 Representative Service Examples



Network Test

Key functions are identified and selectively tested to verify proper behavior under various environmental changes, including network disconnection, network switching, and airplane mode.



TCP Scenario		
no	action	details
1	계정 로그인	업 실행 후 로그인 진행
2		서버 선택 > 캐릭터 생성 화면 진입
3		캐릭터 생성 진행 > 인게임 진입
4		튜토리얼 퀘스트 진행
5		퀘스트 완료
6		경험치 획득
7	트루리언	공대 완료

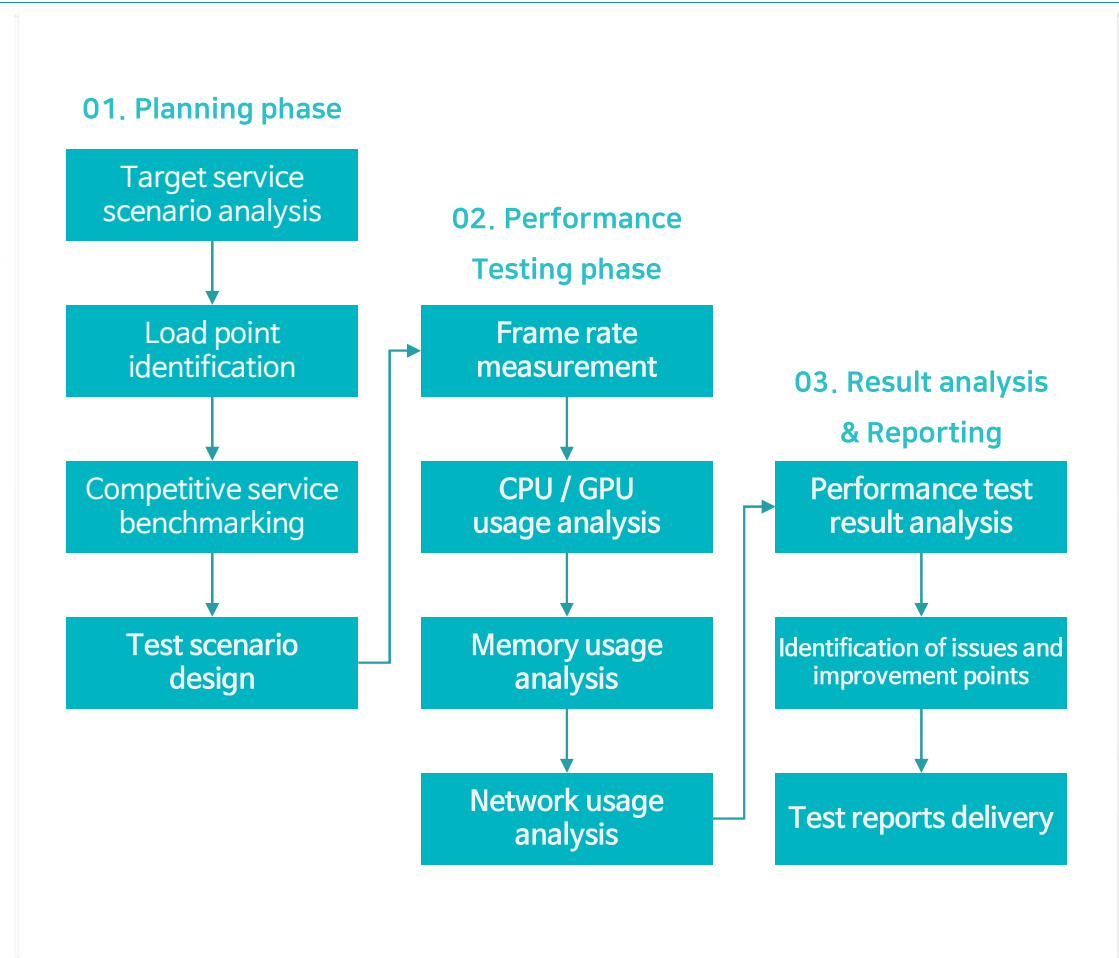
Test Result	Loss(%)	RTT(ms)				
		100	200	300	400	500
	0	95	227	310	390	
	10	120	245	365	440	
	20	150	283	420	485	
	30	190	447	568	650	
	40	228	524			
	50					

03 Representative Service Examples



Client Performance Test

Based on identified load points, we design real user behavior scenarios and utilize performance testing tools to measure and analyze client-side performance.

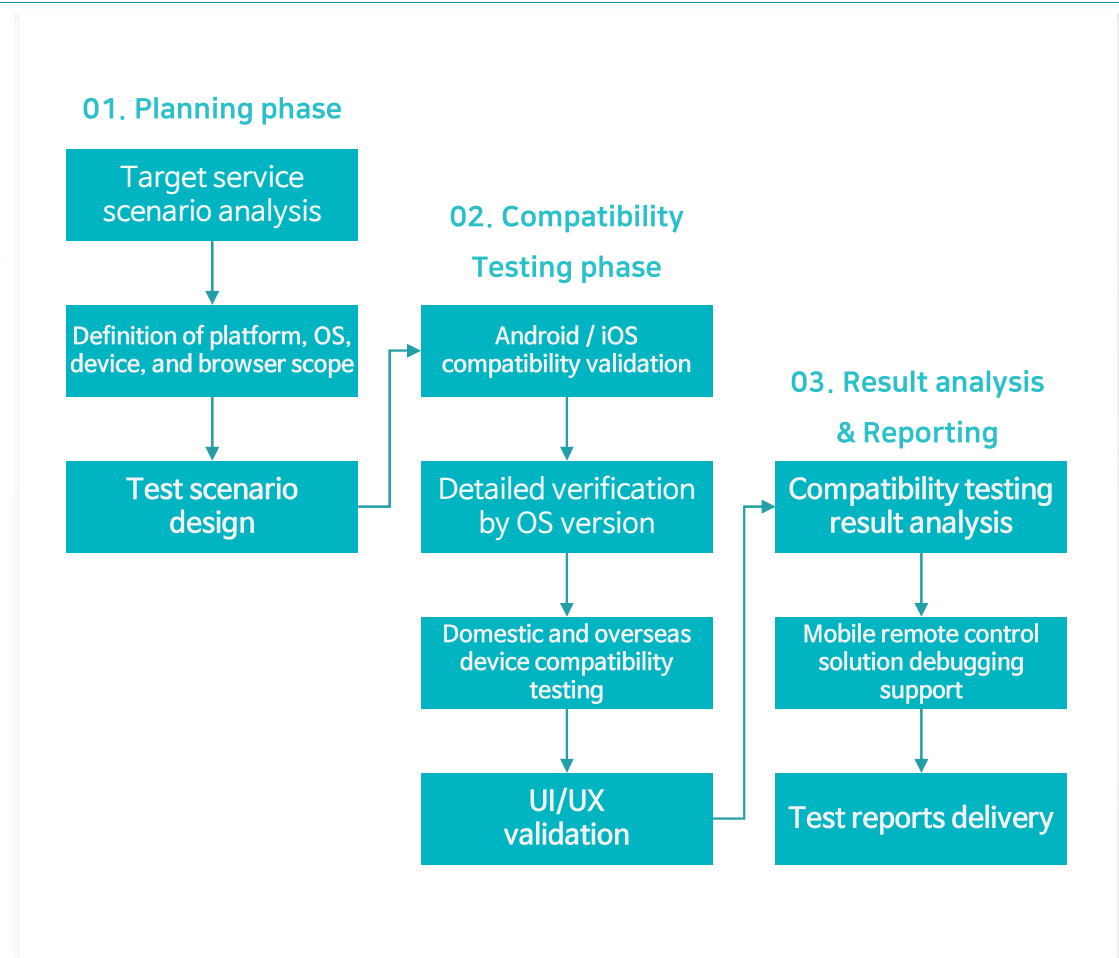


03 Representative Service Examples



Mobile Device Compatibility Testing

We conduct comprehensive compatibility testing to ensure stable service performance across a wide range of devices and operating system environments.



NOIE

Platform (QA)

Quality

```
var b,d=this,e=this  
this.router.therefor  
,a(document.  
,c.router.selected  
this.undelegateEvents  
(this.$el).toggleClass  
this.$el.previewDeviceButtons  
this.$el.keyEvent:function  
this.$el.maybeRequestFileSystem  
this.$el.jackbone.View.extend  
this.$el.listenTo(c.collection,  
,c.announceSearch  
function(){c.overlay  
this.$el.render()  
this.$el.renderThemes
```

01 Role Overview

Mobile Service QA – Platform



What We Do – Platform QA

- Functional QA
- SDK integration Testing
- Platform Back-end Performance Testing
- Compatibility QA
- Platform Integration Guide Review
- Test automation
- API Function Testing
- Admin Tool Testing

We analyze platform architectures and the relationships between service components for both B2B and B2C services. By applying diverse testing tools and methodologies, we ensure quality improvement and performance validation.

In addition, we implement automated regression testing to enable efficient and continuous defect verification.

02 Role Overview

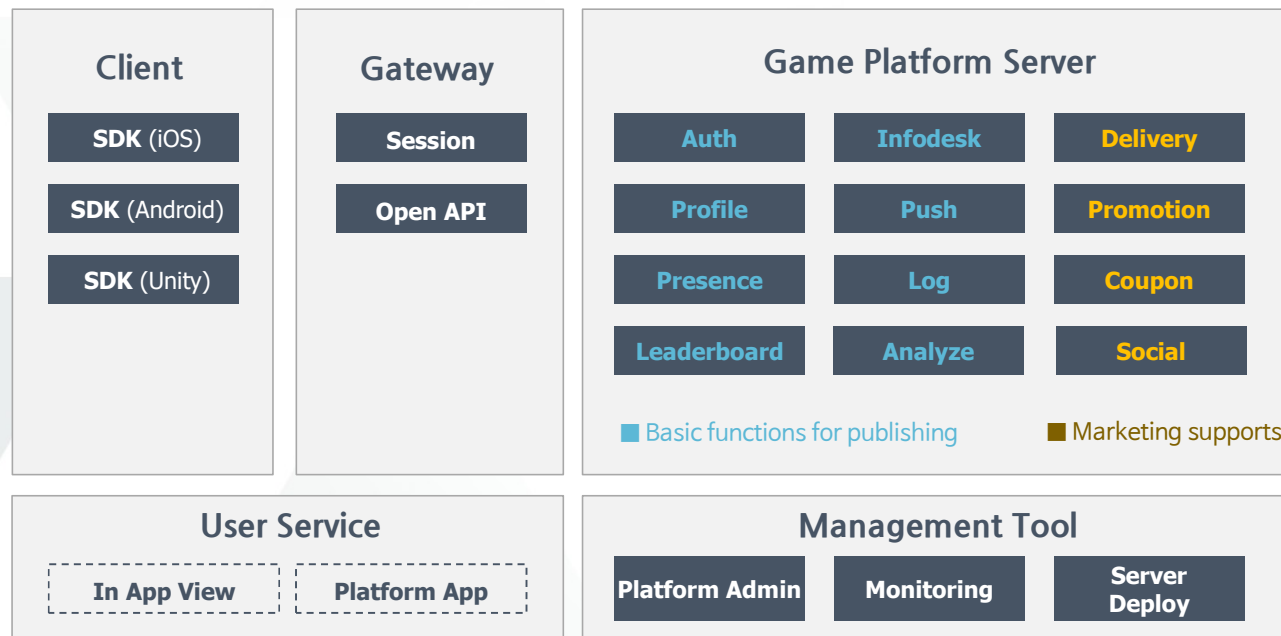
Mobile Service QA – Platform



Platform Accuracy & Security Validation

We apply effective testing methodologies based on an in-depth analysis of interdependencies among platform components.

By proactively identifying risks caused by system changes and deriving improvement points, we support stable and reliable platform service operations.



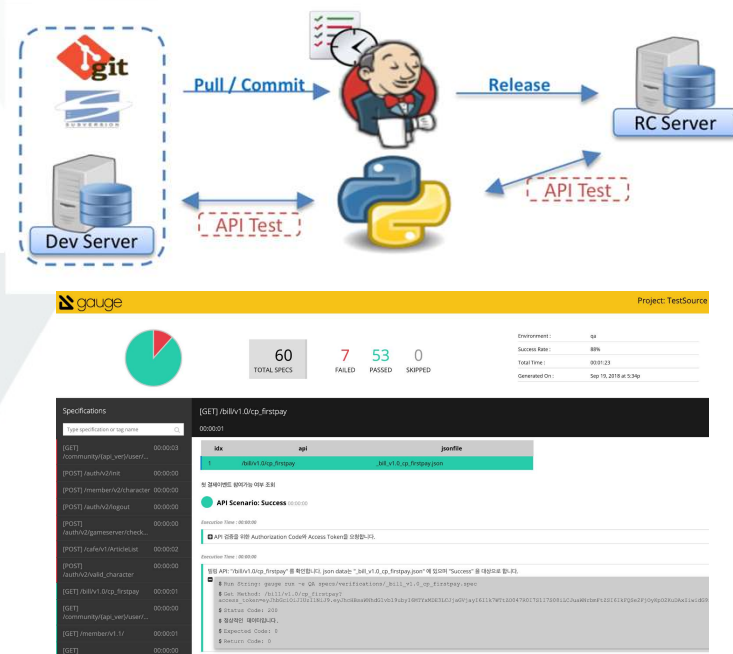
- Platform Integration Developer Guide Review
- SDK Integration Testing
- Open API Functional Validation
- Platform Server Performance Testing
- Platform Operations Tool Validation
- End-to-end Platform Integration Testing

02 Role Overview

Mobile Service QA - Platform

Ensuring Live Service Stability Through Test Automation

We apply test automation to high-usage and mission-critical platform APIs, enabling continuous testing and validation throughout each stage of development. This approach proactively detects issues early and ensures the stability and reliability of live services.



Manual testing of hundreds of APIs was impractical due to limited resources and time constraints

Key APIs were selected by analyzing usage logs, criticality, and major issue cases. Approximately 50 high-impact APIs were defined as automation test targets.

User-scenario-based automation was implemented using the Gauge testing framework.

Automated tests were executed after each build across DEV, QA, and Live environments. This approach ensured baseline service stability with minimal manual intervention.

Test execution results were automatically reported via Slack integration for rapid monitoring.

02 Role Overview

Mobile Service QA - Platform

Service Platform (Back Office) Validation

We support continuous service improvement by validating quality enhancements throughout the Back Office development process and providing ongoing recommendations to clients.

2. 테스트 환경 구성과 차이점

테스트 환경

- envBlue
- 일반적
- 입점사
- QA 또
- SandBo
- 실제
- 실제
- envBlu

envBlue 환

5. envBlue 환경 배포 프로세스

7. 개발 & QA 간 업무 역할

8. 업무 가이드

- 하루에 정해져 있는 배포 시간대가 존재
- envBlue 환경의 경우 정해진 시간이 없으며, 배포 담당자인 "신승복" 님 퇴근 전 까지 가능
- SandBox 환경 경우 하루 2번 배포 가능 (10:30 / 14:30) > Live 일정을 고려 하여, 협의하 에 추가 배포 가능
- 배포 내역 확인 시 아래와 같은 항목에 대해 반드시 확인
- 수정 되지 않은 이슈가 배포 내역에 포함 되어있는지 확인
- 수정 버전이 배포 내역에 기재 되어있는 버전이 일치하는지 확인
- 배포 되어야 하는 스펙이 명확하게 기재 되어있는지 확인
- 배포 티켓 상태 변경 시점
- envBlue 환경 QA 완료 후 상태 변경이 아닌 SandBox환경에 배포 되는 시점에 변경하여 SandBox 배포 요청 진행 되어야 합니다.
- LIVE 전날 SandBox 환경 QA 완료 후 LIVE 환경에 배포되는 티켓 완료 상태로 변경
- 각 환경에 재배포 요청 전 배포 티켓 상태 변경(재배포)
- Wiki Page 업데이트
- 아래와 같은 wiki page 에 이번 Live 배포 티켓에 대해서 기재
<https://wiki.nolcorp.com/pages/viewpage.action?pageId=3333333>
- 배포 되는 티켓에 DB 및 API 배포 티켓이 존재하는지 검토

신규 이슈 및 Reopen 발생
재검증 필요

© NOL Corp

- Propose environment separation by process (Merchant Onboarding, Master, Account, CS, GM, MD, Community, Billing, etc.)
- Define and establish deployment processes
- Update development workflows, configuration management, and manage deliverables continuously
- Update QA processes and produce/distribute deliverables at each stage
- Provide consulting on optimal resource and team composition
- Participate in regular meetings and continuously propose improvements for development and QA strategies

01 Role Overview

Mobile Service QA – Blockchain

What We Do – Blockchain QA

- Wallet Functional Testing
- Compatibility Testing
- Functional Testing
- DAPP Functional Testing
- Developer Tools Functional Testing
- Test Automation
- API Functional Testing
- Transaction Verification Testing

We analyze the architecture and characteristics of each underlying blockchain to verify the accuracy and reliability of blockchain-based applications and services.

Based on extensive QA experience with blockchain-powered DApps, API services, and cryptocurrency exchanges, we provide quality assurance and performance validation for blockchain platforms targeting enterprise-grade stability.

02 Representative Service Examples

Mobile Service QA – Blockchain

DApp Function Accuracy and Reliability Validation

Based on an in-depth analysis of the underlying blockchain characteristics, we validate transactions generated across all DApp service functions to ensure reliable and stable service operations.

The image displays three screenshots of the Wemix Wallet mobile application interface. The first screenshot shows the 'GAMES FOR WEMIX' section with a 'CRYPTORNADO' game card. The second screenshot shows the 'WEMIX TOKEN' section with a '결제이전 시간' (Time before payment) button. The third screenshot shows the 'GAME TOKEN' section with a 'CRYPTORNADO 토큰 거래소' (Cryptonardo Token Exchange) and buttons for '매도 주문' (Sell order) and '매수 주문' (Buy order). Below these screenshots is a screenshot of the Klaytnscope blockchain explorer showing a list of transactions. The table below is a representation of the data shown in the Klaytnscope screenshot.

TX HASH	BLOCK #	TIME	FROM	TO	TX TYPE	AMOUNT(KLAY)	TX FEE(KLAY)
0x577a...57e933	32685541	1 hour ago	0xd452...9c6b5b	0xdcd6...599d9c	Fee...Smart Contract ...	0.000000	0.002181...
0xae8d...e8bd4d	32685541	1 hour ago	0xd452...9c6b5b	0xdcd6...599d9c	Fee...Smart Contract ...	0.000000	0.002181...
0x6e31...91334c	32685541	1 hour ago	0xd452...9c6b5b	0xdcd6...599d9c	Fee...Smart Contract ...	0.000000	0.002181...
0xe868...984200	32685541	1 hour ago	0xd802...819d98	0x42d8...03962d	Smart Contract Exec...	0.000000	0.005738...
0xc4e3...548c7f	32685540	1 hour ago	0xd452...9c6b5b	0xdcd6...599d9c	Fee...Smart Contract ...	0.000000	0.002181...
0xc3fc...b95759	32685540	1 hour ago	0xd452...9c6b5b	0xdcd6...599d9c	Fee...Smart Contract ...	0.000000	0.002181...
0xc40c...0a23a9	32685540	1 hour ago	0xd452...9c6b5b	0xdcd6...599d9c	Fee...Smart Contract ...	0.000000	0.002181...
0x9702...db43cd	32685540	1 hour ago	0xd452...9c6b5b	0xdcd6...599d9c	Fee...Smart Contract ...	0.000000	0.002181...
0xf80b...4a6445	32685540	1 hour ago	0xd452...9c6b5b	0xdcd6...599d9c	Fee...Smart Contract ...	0.000000	0.002181...
0xc800...dec998	32685540	1 hour ago	0xd452...9c6b5b	0xdcd6...599d9c	Fee...Smart Contract ...	0.000000	0.002181...

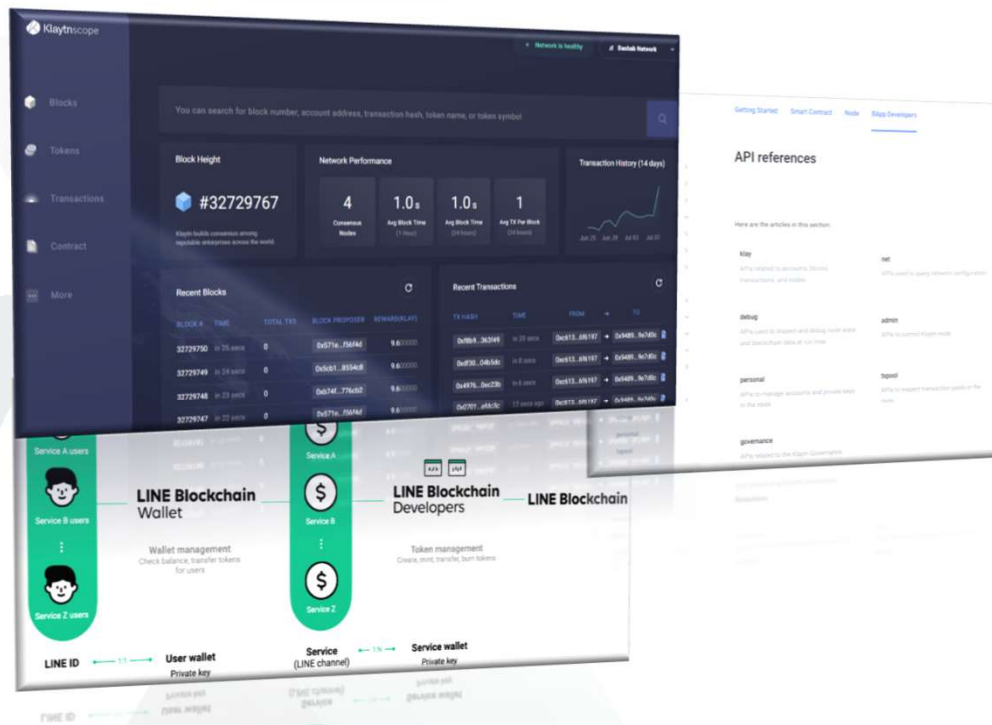
- Cryptocurrency wallet function validation
- ERC-20 and ERC-721 token transfer validation
- ERC-20 and ERC-721 token exchange functionality validation
- Transaction data verification using blockchain block explorer tools
- Ref
<https://wallet.wemixnetwork.com/>
<https://scope.klaytn.com/>

02 Representative Service Examples

Mobile Service QA – Blockchain

Blockchain Developer Tool Function Validation

We verify the accuracy and usability of blockchain developer tools to ensure an environment in which content providers can easily develop DApps and operate services in a stable and reliable manner.



- Validation of core blockchain wallet functions
- Verification of block information and explorer tool functionalities
- Review and validation of developer guides
- Validation of DApp management and service token creation tools
- Ref
 - <https://wallet.klaytn.com/>
 - <https://scope.klaytn.com/>
 - <https://docs.klaytn.com/bapp/json-rpc/api-references>
 - <https://blockchain.line.biz/>



Performance Test

- Unaddressed systemic risks can result in significant financial losses.
- By proactively validating device and server performance, we contribute to service stability and risk mitigation.

Quality

01 Role Overview

Mobile Service QA – Performance Test



What We Do – Performance Test

Unit Performance Testing

- ✓ Measures the maximum performance of individual system components.

Integration Performance Testing

- ✓ Simulates real-world usage scenarios by applying actual user behavior patterns, concurrent users, and load weighting to measure maximum system performance under realistic conditions.

Stress Performance Testing

- ✓ Identifies the maximum achievable performance without predefined targets by pushing the system beyond normal operating limits.

Availability Testing

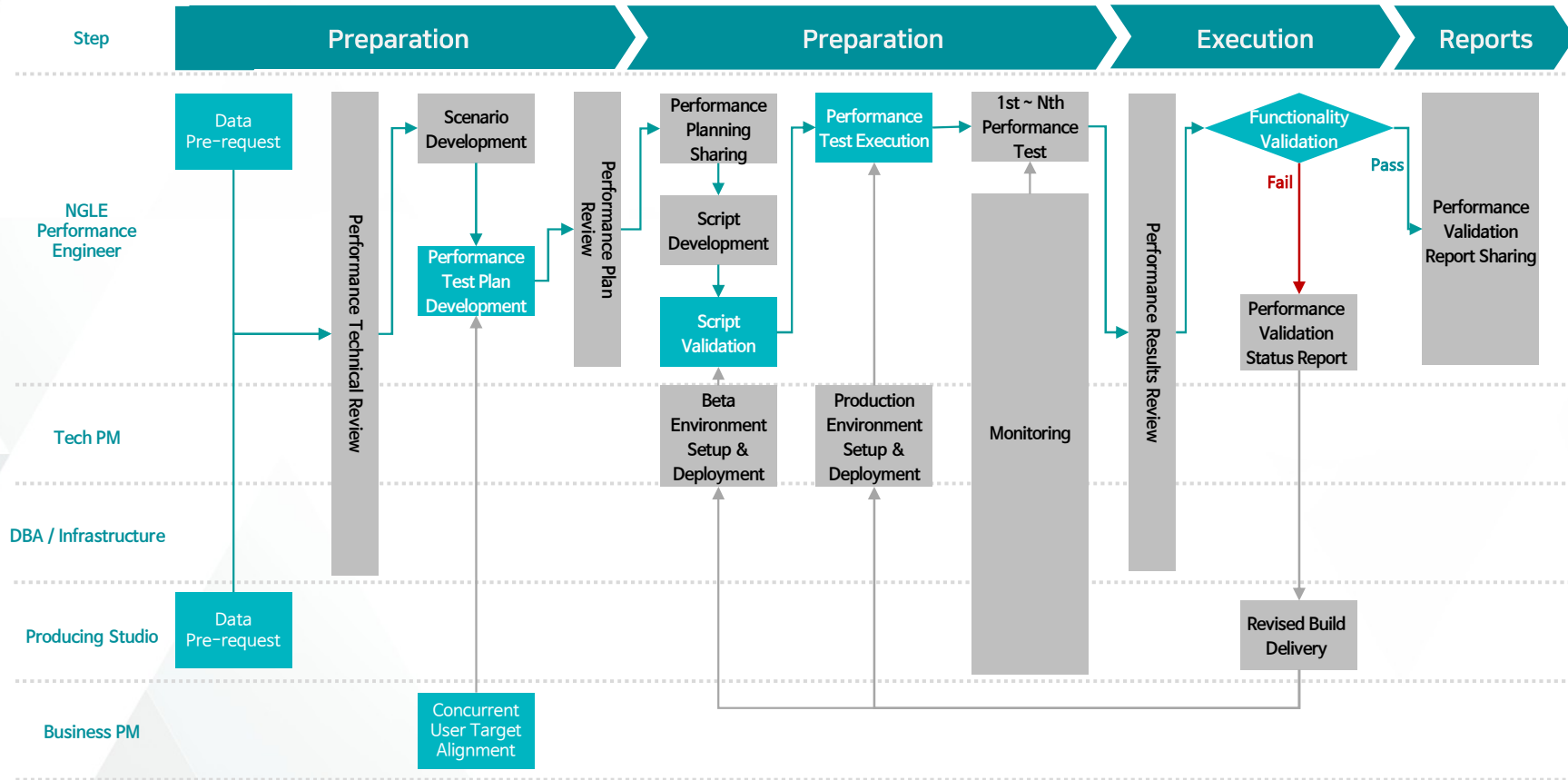
- ✓ Evaluates system resilience and recovery time through distributed, failure, and chaos testing to verify service continuity and identify system weaknesses.

These tests are conducted to determine the system's sustainable throughput and to analyze overall system characteristics.

Through comprehensive server performance testing, we support stable service operations and infrastructure cost optimization by validating system logic, identifying bottlenecks, optimizing performance, and estimating appropriate hardware capacity.

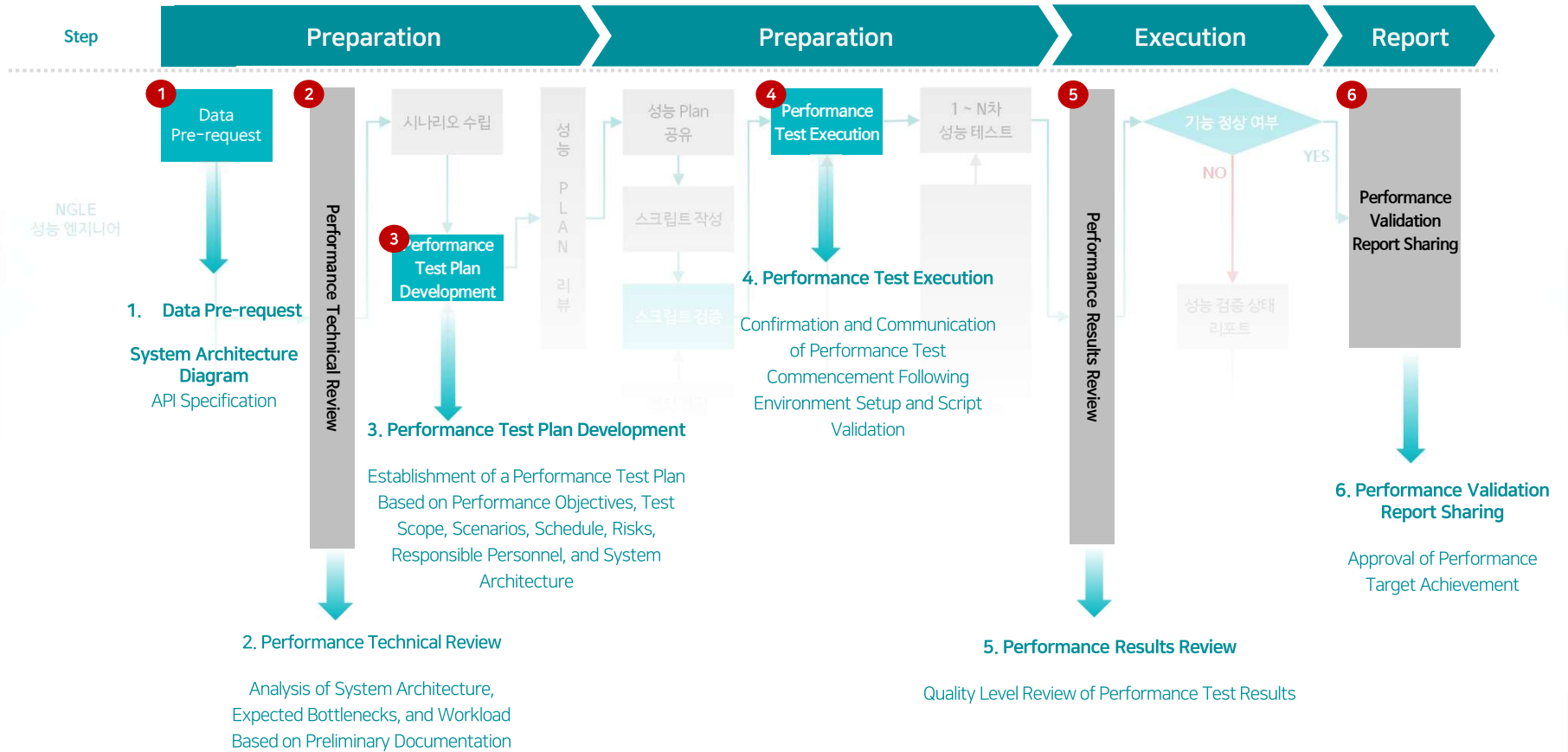
02 Process

Mobile Service QA – Performance Test



02 Process

Mobile Service QA – Performance Test

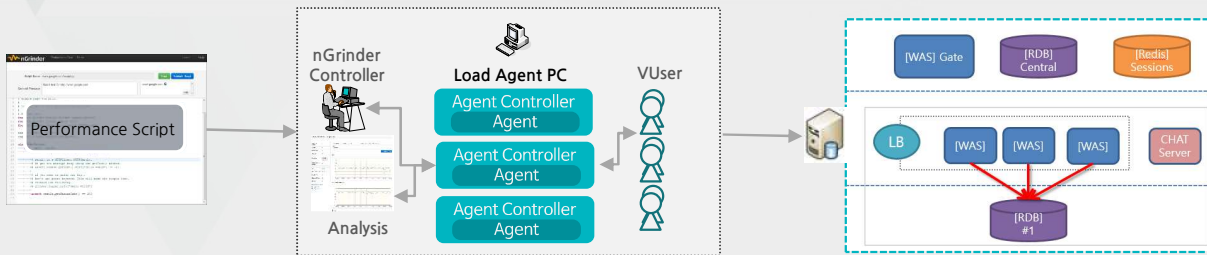


03 Representative Service Examples

Mobile Service QA – Performance Test

System Risk Analysis & Improvement Proposal

Through in-depth analysis of the system architecture, we identify structural issues and reproduce real-world service scenarios to detect bottlenecks. Based on these findings, we provide actionable improvement recommendations to enhance overall system performance.



■ Performance Targets (based on current user)

- 5-min current users : 20,000 Users (DAU 100,000)
- Per single server capacity : 1,000 Users

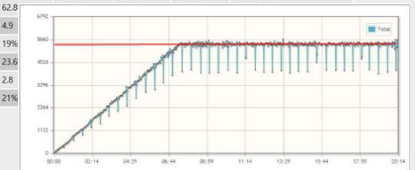
■ Performance Test Scope

- Target Server(WEB) (8 Units)
 - Performance testing conducted on up to a maximum of 8 servers
 - Server quantity required to support the business target of 20,000 concurrent users calculated based on performance test results
- Game DB (MySQL) : 2 Units (Master-Slave Architecture)
- Gate Server : 2 Units
- Gate DB (MySQL) : 2 units (Master-Slave Architecture)
- Cache Server (Redis) : 1 Unit
- Chat Server : 4 Units (Chat Controller 1 Unit, Chat Gate 3 Units)

■ Key Improvement

- Gate Server Load Issue
 - High load on Gate servers resulted in reduced user throughput to service servers and persistent error occurrences.
 - Proposed solution: Nginx configuration optimization and implementation of L4 load balancing in front of Gate servers for redundancy and load distribution.**
- Cache Server (Redis) Load & Single Point of Failure Issue
 - User session data was managed by a single Cache server, posing a full-service impact risk in case of failure.
 - Although the actual load was not excessive, we proposed reducing hardware specifications while implementing a redundant configuration to eliminate the single point of failure and improve stability.**

무선 순위	Risk	상세 내용	경매 상황 및 기대 결과	확인 결과																																																								
상	Gate 서버 장애	Gate 서버 유계 인증 및 Game 서버의 인증 데이터를 공유하는 Gate 서버는 2대로 이중화 되어 있음.	<ul style="list-style-type: none"> Gate 서버 2대 중 1대 장애, 정상 복구인 경우 계정 플레이 중인 유저는 정상적으로 플레이 되어야 함. Gate 서버 2대 중 2대 장애, 계정 접속 시도 유저는 접속이 되지 않음. 계정 플레이 중인 유저는 정상적으로 플레이 되어야 함. 	기대 결과와 동일하며 특이사항 없음.																																																								
상	Game 서버 장애	Load Balance에 의한 분산 구조로 되어 있으며 서버 장애 발생 시 나머지 서버가 처리하게 된다.	<ul style="list-style-type: none"> Game 서버 2대 중 1대 장애, 계정 플레이에 문제가 없어야 함. Game 서버 2대 중 2대 장애 (모든 게임 서버 장애) 	기대 결과와 동일하며 특이사항 없음.																																																								
상	Cache 서버 (Redis)		<table border="1"> <thead> <tr> <th>Thread</th> <th>19,800</th> <th>21,000</th> <th>23,100</th> <th>26,250</th> <th>30,000</th> </tr> </thead> <tbody> <tr> <td>평균 TPS</td> <td>4656</td> <td>5049</td> <td>5474</td> <td>6118</td> <td>7016</td> </tr> <tr> <td>평균 MTT</td> <td>52.1</td> <td>52.4</td> <td>53.8</td> <td>57.4</td> <td>230.6</td> </tr> <tr> <td>CPU</td> <td>61.5%</td> <td>65.5%</td> <td>70.6%</td> <td>79.2%</td> <td>92.5%</td> </tr> </tbody> </table>	Thread	19,800	21,000	23,100	26,250	30,000	평균 TPS	4656	5049	5474	6118	7016	평균 MTT	52.1	52.4	53.8	57.4	230.6	CPU	61.5%	65.5%	70.6%	79.2%	92.5%	목표 TPS : 260 TPS 목표 MTT : 200 ms 이하																																
Thread	19,800	21,000	23,100	26,250	30,000																																																							
평균 TPS	4656	5049	5474	6118	7016																																																							
평균 MTT	52.1	52.4	53.8	57.4	230.6																																																							
CPU	61.5%	65.5%	70.6%	79.2%	92.5%																																																							
중	Chat 서버		<table border="1"> <tbody> <tr> <td>Game Server 8대 평균</td> <td>Load Avg</td> <td>3.6</td> <td>4.1</td> <td>5.3</td> <td>7.7</td> <td>10.2</td> </tr> <tr> <td>Memory</td> <td>22%</td> <td>22%</td> <td>22%</td> <td>22%</td> <td>22%</td> <td>22%</td> </tr> <tr> <td>Gate Server 2대 평균</td> <td>CPU</td> <td>59.2%</td> <td>62.8</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Load Avg</td> <td>4.1</td> <td>4.9</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Memory</td> <td>19%</td> <td>19%</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CPU</td> <td>21.3%</td> <td>23.6</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Game DB (Master)</td> <td>Load Avg</td> <td>2.1</td> <td>2.8</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Memory</td> <td>21%</td> <td>21%</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Game Server 8대 평균	Load Avg	3.6	4.1	5.3	7.7	10.2	Memory	22%	22%	22%	22%	22%	22%	Gate Server 2대 평균	CPU	59.2%	62.8				Load Avg	4.1	4.9					Memory	19%	19%					CPU	21.3%	23.6					Game DB (Master)	Load Avg	2.1	2.8				Memory	21%	21%					4 이하 70% 이하
Game Server 8대 평균	Load Avg	3.6	4.1	5.3	7.7	10.2																																																						
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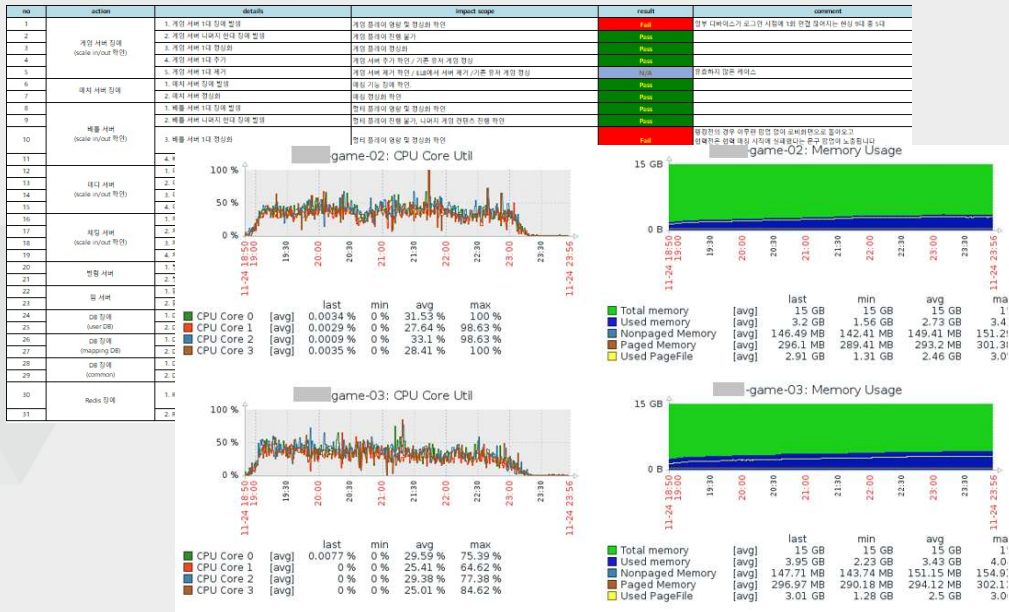


03 Representative Service Examples

Mobile Service QA – Performance Test

Stable Operations Guideline Proposal

We analyze various operational conditions that may arise during live service and conduct testing on exception scenarios, including failure states. Based on these results, we provide comprehensive operational guidelines to ensure stable and resilient service management.



Failure Testing

- Service Server Fail-over Testing
- DB Fail-over Testing
- Redis Fail-over Testing
- Scale In/Out Operation Validation
- System Behavior Analysis Under Failure Conditions

Endurance (Cruise) Testing

- During a continuous 4-hour endurance test, we identified a linear increase in memory usage on service servers, **with memory not being released even after test completion.**
- Through root cause analysis, we detected a server-side logic bug involving memory allocation without proper deallocation. The issue was corrected to eliminate the memory leak and stabilize long-term service performance.

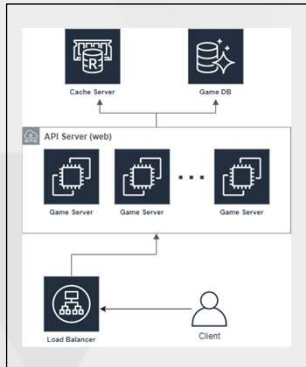
03 Representative Service Examples

Mobile Service QA – Performance Test

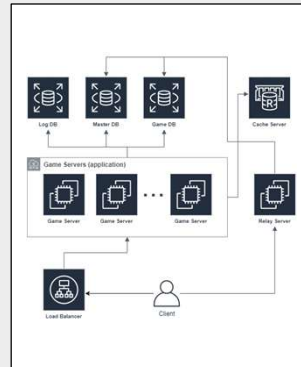
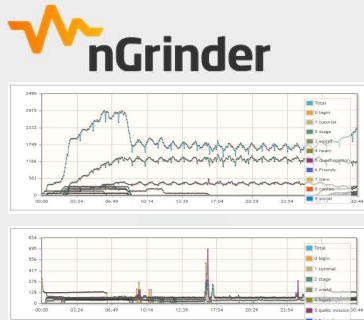


Extensive Experience with Performance Testing Tool

Through in-depth analysis of system architecture and business processes, we select the most appropriate performance testing tools to ensure efficient and accurate validation.



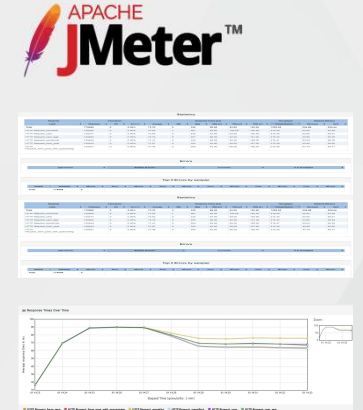
- Mobile Casual Service
- web server



- Service Chat Servers
- websocket



- Web Promotion Page
- Node.js



NOIE

Localization (Localization & LQA)

Quality

```
var b,d=this,e=this
this.router.then(function()
),a(document
),c.router.selected
this.undelegateEvents
).toggleClass
function
maybeRequestFileSystem
backbone.View.extend
listenTo(c.collection
),c.announceSearch
function(){c.overlay
render: function
renderTheme
```

01 Strategic and Professional Game Localization

Localization

◆ High-Quality Translation Through Effective Allocation of Game Localization Specialists



High-Quality Translation Through Effective Allocation of Game Localization Specialists

Game translation requires a distinct approach compared to general translation. Our dedicated team of expert game translators, possessing in-depth knowledge across various game genres, delivers high-quality localization services..



Optimal Team Assignment for Maximum Efficiency and Expertise

We never assign idle personnel to projects. Instead, carefully selected specialists tailored to the specific requirements of each project ensure both efficiency and professional quality.



Translation vs Localization

After translation by native linguists with degrees in linguistics, we provide localization that captures the natural nuances of the target language, ensuring a fluent and authentic experience for players.



Effective Project Management by Experienced PMs

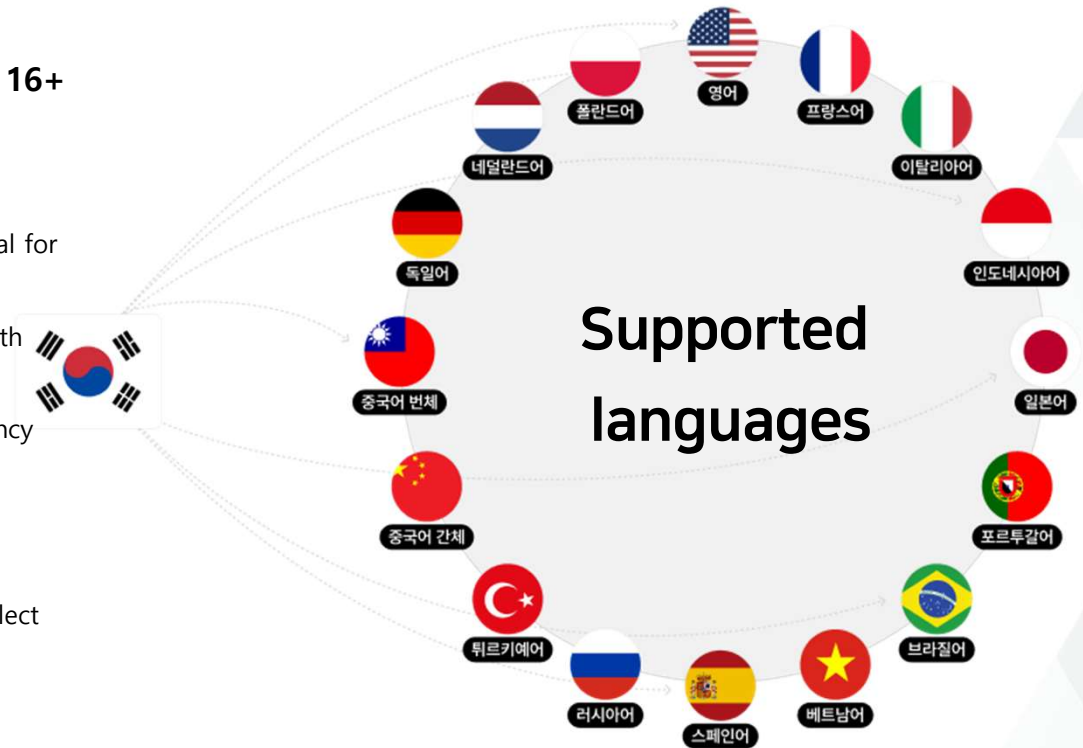
Our project management team, seasoned in handling diverse projects successfully, offers professional services from file management to final delivery, ensuring smooth and reliable project execution.

02 Direct Korean Translation in Over 16 Languages

Localization

◆ One-Channel Communication Through Support for 16+ Languages

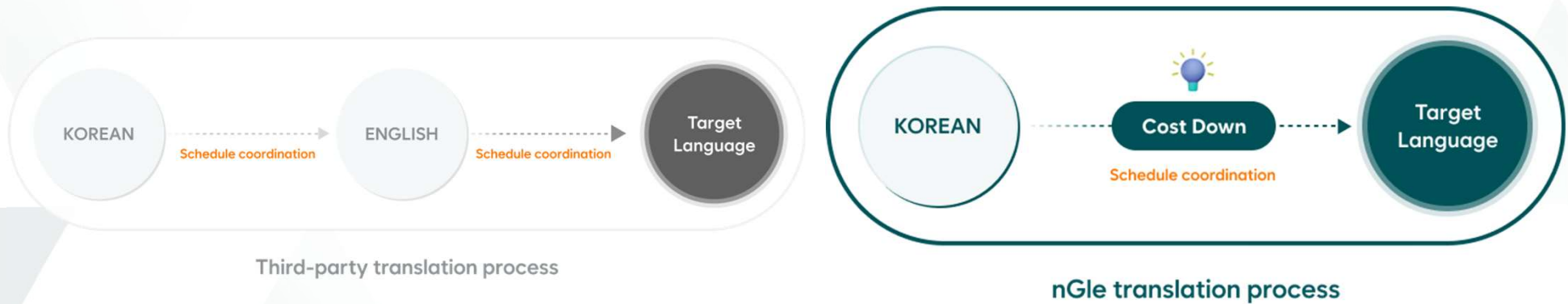
- We provide support for 16 essential languages and various others, crucial for global market expansion.
- By tailoring translation languages according to regions, we maximize both professionalism and user immersion.
- One-channel communication in 16 languages enhances workflow efficiency across projects.
- Based on extensive experience in diverse services and local research, we recommend the optimal service language for each market.
- Leveraging local professionals, we deliver marketing translations that reflect regional trends and cultural nuances.



02 Direct Korean Translation in Over 16 Languages

Localization

◆ Quality Up, Cost & Time Down with Direct Translation from Korean

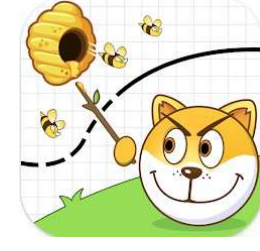
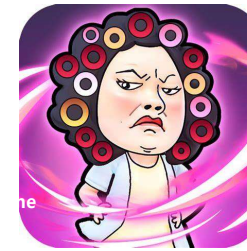
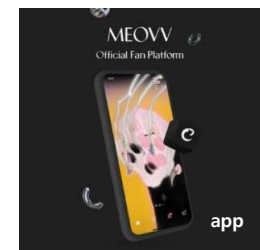
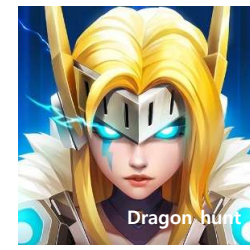


- By translating directly from Korean into the target language—without intermediary translations—we minimize errors and improve overall translation quality. *(Using intermediate translations can increase text length by over 20% compared to direct translation from Korean.)*
- Eliminating intermediary steps significantly reduces both cost and turnaround time.
- All 16+ supported languages can be translated directly from Korean.

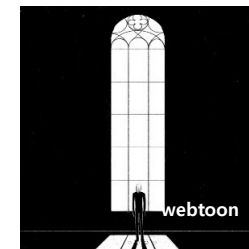
03 Our experiences

Localization experience

Games



Webtoons



Language Quality Assurance Test

Differentiated Language Quality Assurance Based on Years of Experience

Linguistic Test	Visual Test	Rewriting Test
<ul style="list-style-type: none">• - Untranslated or mistranslated text• - Inconsistencies in buttons or UI• - Tone/style issues in NPC dialogue• -Concatenated string display issues• -Duplicated particles (e.g., "the the")	<ul style="list-style-type: none">• UI issues in text areas• Abnormal display due to tag source loading failure• Text alignment issues• Check for issues across different device resolutions	<ul style="list-style-type: none">• Rewriting text as needed based on game context• Suggesting terminology concepts aligned with game genre• Rewriting content to match the overall game concept



System integration

- Extensive experience in IT content development and quality assurance enables us to deliver high-quality SI (System Integration) and content development services.

```
var b,d=this,e=this;
this.c.router.then(function()
),a(document.
),c.router.selected
this.undelegateEvents
("closed").toggleClass
this.togglePreviewDeviceButton
function(e)
maybeRequestFileSystem
Backbone.View.extend
this.listenTo(c.collection
),c.announceSearch
function(){c.overlay
},render:function
of this renderTh...
```

01 Role Overview

System Integration – Web & APP SI

What We Do

- Web&APP Service Integration
- Web Front-end & content Development
- Platform Back-end Admin System Development
- APP sevice – SI Development
- Technical R&D Support

We analyze service platform architectures and the characteristics and interrelationships among service components, applying effective System Integration projects with full accountability, extending through the service operations and management phase development methodologies to support the delivery of high-quality products.

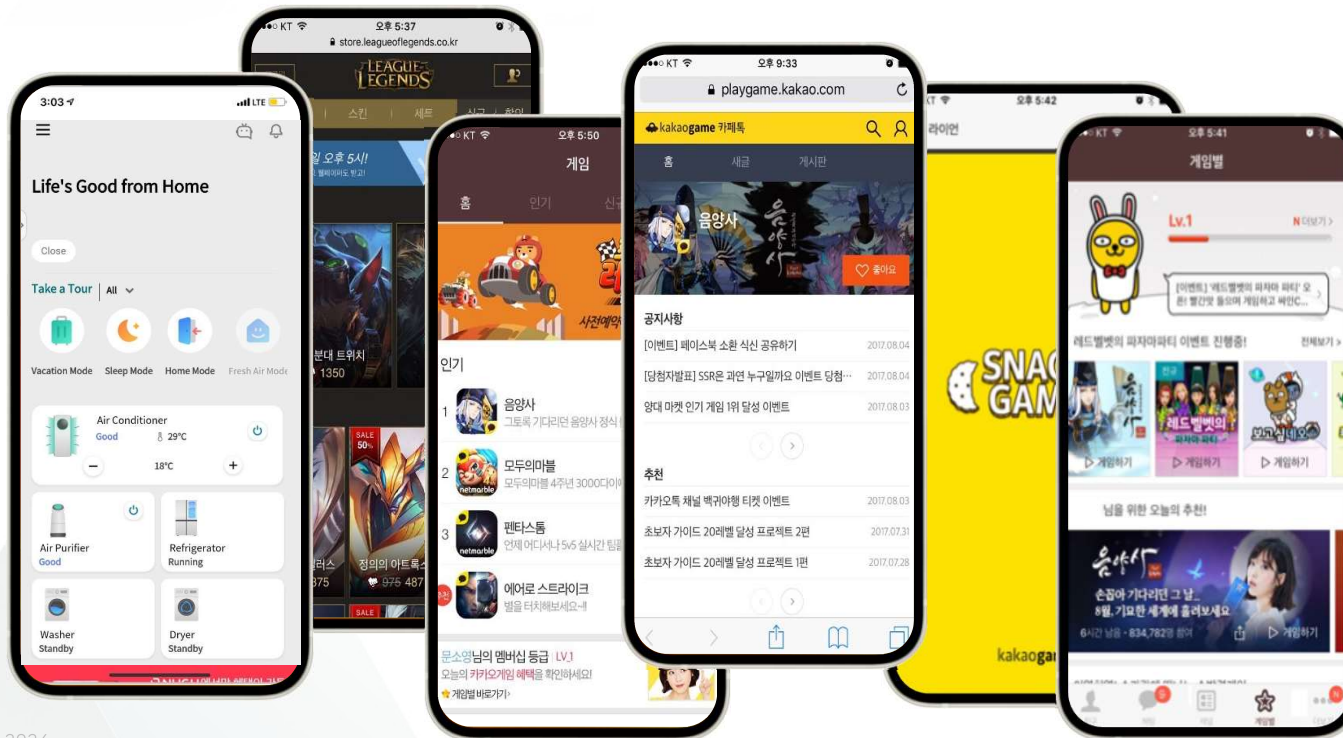
In addition, with a multidisciplinary team of development professionals, we offer **turnkey SI solutions and execute effective System Integration projects** with full accountability, extending through the service operations and management phase

02 Representative Service Examples

System Integration – Web & APP SI

PC & Mobile Service (WEB&APP) Development

We deliver development services across a wide range of Web and App-based solutions, including responsive websites, mobile applications, settlement and billing systems, service operation tools (back-office systems), mobile commerce platforms, voice recognition-based retail services, and enterprise internal messaging systems.



02 Representative Service Examples

System Integration – Web & APP SI

Service Platform (Back Office) Development & Management

We develop and manage integrated Back Office platforms for mobile services and marketplace partners, along with Front-End Web functionalities.

Our scope covers feature development, data integration, UI implementation, and compatibility validation.

1. Integrated Operations Tool Development

- Community Management, CS Management, Event Management, Billing Management

2. Marketplace-Based Service Management

- Partner Onboarding Process, Member Management per Partner, Role & Permission Management, Operational Administration

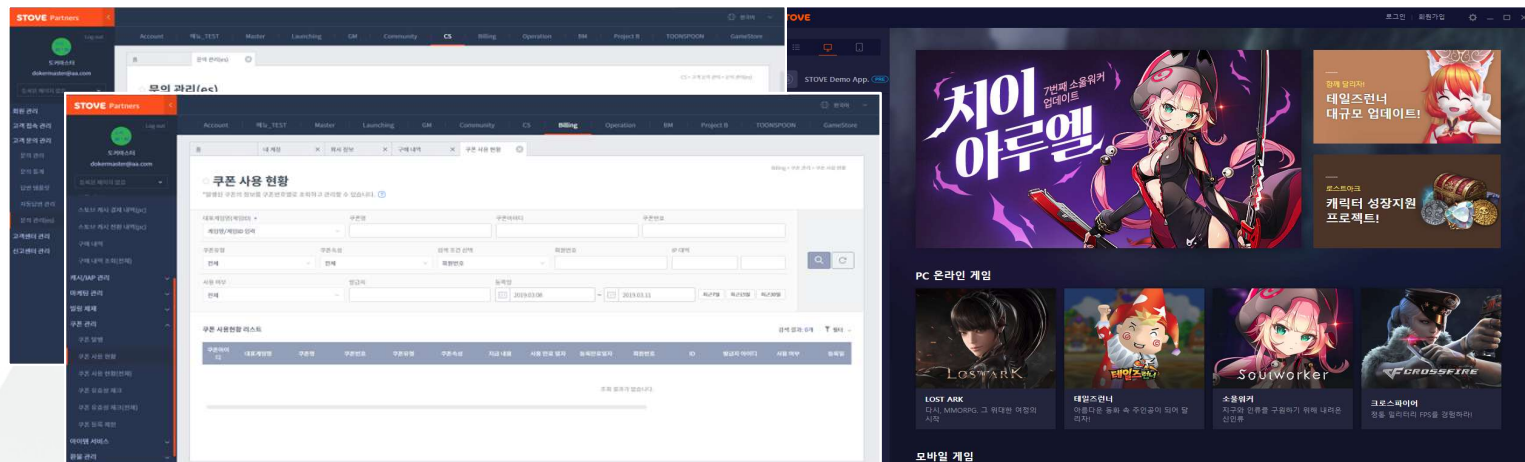
3. Purchase History Analytics



Service Platform

Implemented with a modular architecture to ensure reusability and maintainability of development deliverables.

Ongoing development and maintenance supported by module-level test automation to ensure code quality.

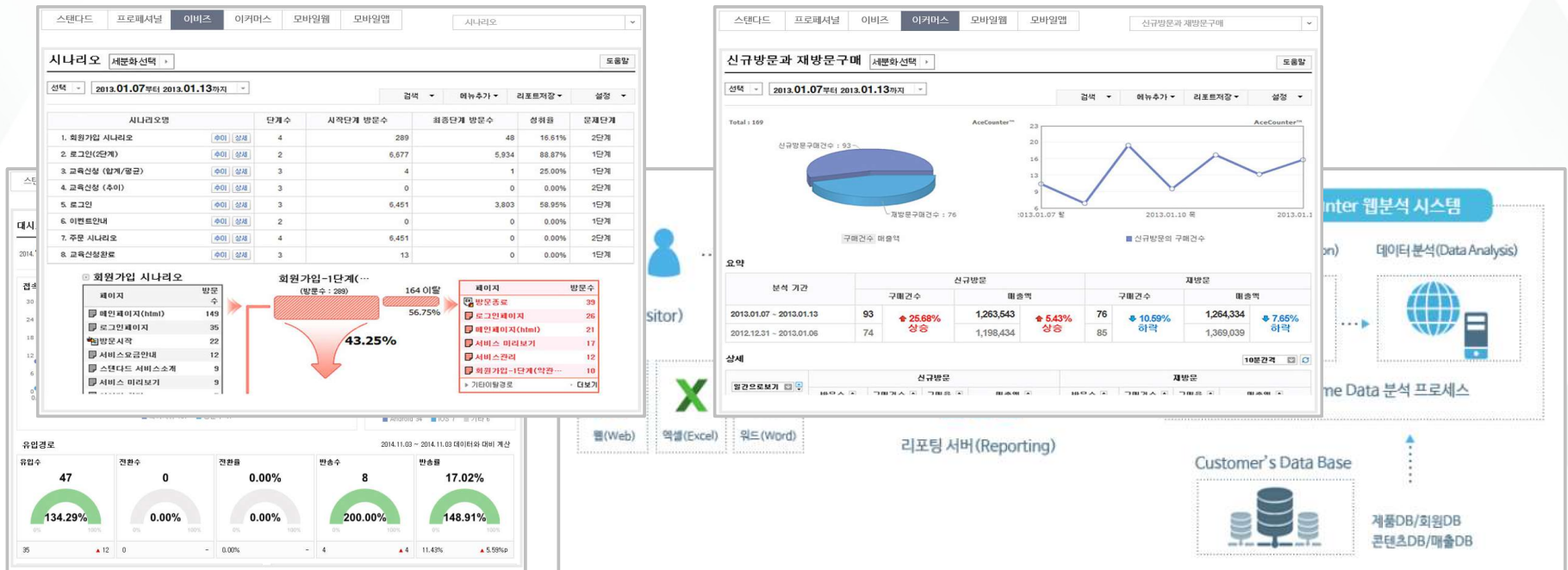


02 Representative Service Examples

System Integration - Web & APP SI

Analytics System Design & Validation

We support system development, test design, and functional and data validation for the "Performance Analytics System" (detailed service name confidential) of Company A, which serves one of the largest client bases in Korea. Our scope includes analytics system architecture design, comprehensive testing framework establishment, and rigorous verification of both functionality and data integrity.





Appendix

- You can explore NGL's key members
- as well as our operational processes and sample project workflows.

A close-up, low-angle shot of a man in a dark suit, white shirt, and patterned tie. He is adjusting his tie with his hands. The lighting is dramatic, with strong highlights on his hands and the tie, and deep shadows elsewhere. The background is dark and out of focus.

OUR TEAM

NGLE is composed of QA, development, and service professionals with backgrounds at leading IT companies in Korea.

Leveraging extensive testing experience across diverse domains, we deliver optimized solutions tailored to each client's business model and industry requirements.

01 Our Team



CEO
So-young Moon
Major Professional Experience

Wemade Co., Ltd.

- Head of Publishing Technology Division
- Head of Technology Planning Office
- BTS QA & Process Governance
- Game Platform Server Development (PM) & Game Service QA (Team Lead)
- Mobile Service QA & Process Design

NHN Corp.

- Platform QA Lead
- Establishment and Implementation of Platform QA Framework
- Advancement of Game QA Process
- Service Stability Improvement & F/U Management

HandySoft

- ISTQB (International Software Testing Qualifications Board) Certified – Served as Director (5th Term)
- Achieved CMMI Level 4 Certification
- CMMI Level 3 Process Management & Project Quality Assurance
- BPM (Business Process Management) Solution QA Lead



Executive Director
Jin-sung Lee
Major Professional Experience

Smilegate Megaport Co., Ltd.

- Head of Game Service QA Team
- Advancement of Game Service QA Process & QA Operations (Domestic/Global)
- Establishment of Mobile Platform (STOVE) QA Framework
- Market Build Management (Google, Apple, Kakao, Facebook, One Store, In-store, etc.)
- Establishment of Build Management & Internal Guidelines

NHN Corp.

- Winner's Club & Winner's Club 2014 Service Evaluation and QA
- PC Online Game Service QA across Multiple Channels
- HanGame Portal Service Planning & PC Room QA Leadership
- Test Case Authoring & Web Performance Testing
- Test Methodology Research & Application of QA Standards (Exploratory Testing, Risk-Based Testing)

Auction Co., Ltd.

- Web service QA

Samsung Electronics (DM Research Center), SW Solution Lab

01 Our Team



Head of Service QA
Seung-tae Kim
Major Professional Experience

Smilegate Megaport Co., Ltd.

- Mobile Service QA Lead - Led Exploratory Testing and Client-Focused QA
- STOVE Mobile Platform QA Lead
- BTS System Architecture Management & QA Process Improvement
- Market Build Management (Google, Apple, Kakao, Facebook, One Store, In-store, etc.)

NC Soft

- QA for Lineage Live Service Updates
- Test Automation TF - BAT Automation & Stress Test Automation Initiative

NHN Technology Services

- Daum Game Services (TERA) QA/Test Lead (CBT, OBT, Commercial Launch, Live Operations)
- Webzen MU Online - 1st CBT QA & Test Lead



Head of Service QA
Dong-gyun Kim
Major Professional Experience

NHN Entertainment

- The Fan & Winner's Club Online 2014 - Service PM, System & Balance Planning
- iOS Game Launch & Analysis, Global Marketing Communication Lead
- Web Service System Data Planning & Metrics Management

NHN Corp.

- Portal Publishing Service QA Lead / Jij.com Publishing
- QAService BASE (PC) QA & Sports Channel Service QA
- Channel Service QA Lead, Channel Promotion Management & Policy Operations
- Platform & Service Policy Establishment and Game QA/PM Support
- B2B Retail & B2B Business Platform PM, PC Café Management System TF QA Lead

(주) NHN Games

- PC MMORPG R2 Development Test Lead

01 Our Team



Head of Platform QA
Ji-yeon Ryu
Major Professional Experience



Head of Platform QA
Ho-yong Shin
Major Professional Experience

Nexon Co., Ltd

- Mobile Service Technical PM(HIT, MapleStory M, Super Fantasy War, Samgukji Jojojeon, and others)
- Mobile Service Launch & Live Operations
- Platform Integration Technical Support

Wemade Co., Ltd

- Mobile Service Technical PM(Marvel Strike Force, Champions Showdown, Icarus M, Everytown, and others)
- Global Service Launch & Operations
- Platform Integration Technical Support

NeoWiz Services

- Overseas Publishing Service Technical PM(AVA, Crossfire, S4 League, Sudden Attack)
- Build Overseas Game Service BI System (Business Intelligence System Implementation)

Hanbit Soft

- Domestic Service Server Development, Operations & Maintenance(FCM Online 1, 2, and 3, Samgukji Cheon, Age of Conan, Granado Espada, and others)
- Daum, Naver Portal Integration & Development
- Web & Mobile Service Development

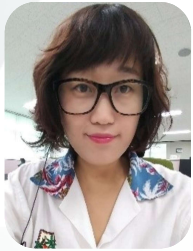
NeoWiz

- S4 League – Domestic Service Server Development, Operations & Maintenance

nGle Co., Ltd

- Head of Performance Testing
- Kakao Platform & Service Stress Testing Lead
- Service: TERA – Performance Optimization across 17 Projects
- Platform: Kakao Channel Service – 8 Project Engagements
- Blockchain: Klavyn (Ground X), Elmo Coin (Nuri Telecom)

01 Our Team



Head of Service Planning

Hye-sung Lee

Major Professional Experience



Head of Service Development

Hyun-woon Ahn

Major Professional Experience



Head of L10n TF

Bowon Park

Major Professional Experience

LG Electronics

- UX/UI Planning for B2B Smart Home IoT Mobile Applications
- Service Planning for H&A Smart Home IoT ThinQ App
- Planning for H&A Smart Home E-commerce and Content Services
- Admin System Planning for Smart Solutions

Koyoung Technology

- Service Planning for Next-Generation SMT Inspection Equipment Based on 3D Image Processing
- UX/UI Design for SMT Inspection Equipment Web Solutions
- UX/UI Planning for Brain Surgery Medical Robot Software
- UX/UI Planning for OCT-based Tissue Diagnostic Equipment Applications

Ngle

- Head of SI/SM Development Team

Crowdworks

- Data Engineering and Data Serving
- Development of Data Pre-/Post-Processing for Platform Services

WiderPlanet(TG360)

- Development of Data Management Platform
- Data engineering

CJ Mezzo media

- Backend Development for Advertising Services
- Data Engineering

Pearl Abyss

- French Localization for Black Desert (PC, Mobile, Console)
- Service Transition Support for Black Desert North America & Europe (Self-Publishing)
- Game Design - Scenario Writing & Quest Design for Black Desert

2bytes

- Global Localization & LQA for Multiple Domestic and International Titles, including TopSpin 2K25, WEMIX, CounterSide, and Dragon Village Collection etc.
- Localization (L10n) Training for New Employees

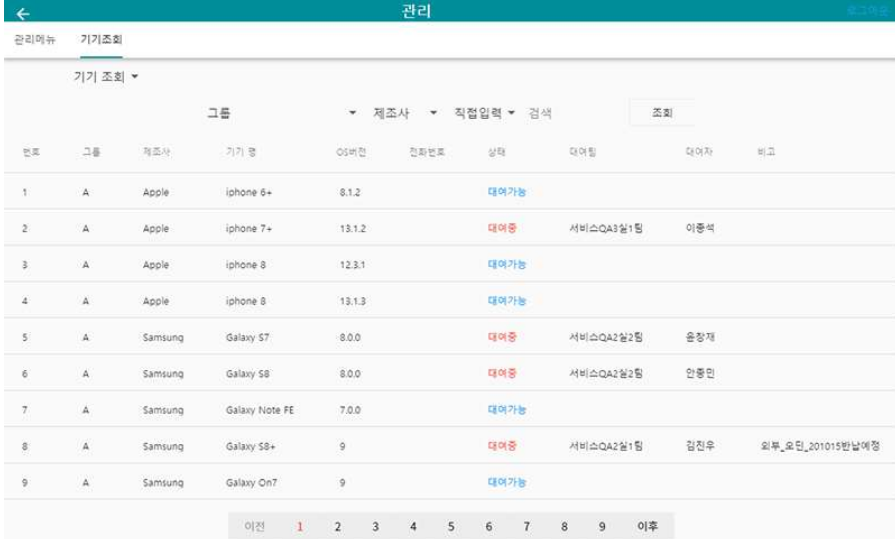
02 Our Ability

Over 380 owned devices covering domestic & international models

OS and hardware compatibility testing through device management system

We own a wide range of domestic devices and manage them through a dedicated device management system.

Regular research on globally and regionally popular devices and OS versions allows us to respond promptly by acquiring necessary test devices, ensuring compatibility with global testing environments.



번호	그룹	제조사	기기명	OS버전	현재버전	상태	대여팀	대여자	비고
1	A	Apple	iphone 6+	8.1.2		대여가능			
2	A	Apple	iphone 7+	13.1.2		대여중	서비스QA3실1팀	이동석	
3	A	Apple	iphone 8	12.3.1		대여가능			
4	A	Apple	iphone 8	13.1.3		대여가능			
5	A	Samsung	Galaxy S7	8.0.0		대여중	서비스QA2실2팀	윤장재	
6	A	Samsung	Galaxy S8	8.0.0		대여중	서비스QA2실2팀	안종민	
7	A	Samsung	Galaxy Note FE	7.0.0		대여가능			
8	A	Samsung	Galaxy S8+	9		대여중	서비스QA2실1팀	김진우	외부_오딘_201015반납예정
9	A	Samsung	Galaxy On7	9		대여가능			



02 Our Ability

Maintain High Quality QA Service for PC and Mobile

We have full-time QA professionals holding ISTQB and CSTS certifications (Software Testing Certifications).

A certified QA professional is appointed as the QA Leader (Test Leader), and service QA is conducted under a structured and systematic process led by the TL.

Successfully performed quality validation for over 300 services, platforms, and web-based systems.



02 Our Ability

Experience Beyond Service Platforms (AR, VR, and Emerging Technologies)

Execution of effective testing strategies based on extensive QA expertise and best practices

Knowledge transfer of VR testing methodologies and operational know-how to small and mid-sized development studios

End-to-end VR service testing support, including methodology, guidelines, and tailored QA solutions

Main	Sub	Detail	Precondition (테스트 조건)	Test Step (실행 순서)	Expected Result (기대 결과)	Result (Chrome)
전체 실행	설정	원자가 설치된 상태	1. 원자 버전 설치	1. 원자가 실행되는 것을 확인	원자가 실행되는 것을 확인	Pass
		업데이트 항목이 존재	1. 원자 버전 업데이트 가능 확인	2. 자동 업데이트가 진행되는 것을 확인	자동 업데이트가 진행되는 것을 확인	Pass
		원자 실행	1. 원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	원자 실행 후 정상 작동	Pass
	입력 제어	원자 컨트롤러가 올바르게 작동하는지 확인	1. 원자 실행 후 컨트롤러 연결	1. 원자 실행 후 컨트롤러 연결	원자 실행 후 컨트롤러가 올바르게 작동하는지 확인	Pass
		원자 컨트롤러가 올바르게 작동하는지 확인	1. 원자 실행 후 컨트롤러 연결	1. 원자 실행 후 컨트롤러 연결	원자 실행 후 컨트롤러가 올바르게 작동하는지 확인	Pass
		원자 컨트롤러가 올바르게 작동하는지 확인	1. 원자 실행 후 컨트롤러 연결	1. 원자 실행 후 컨트롤러 연결	원자 실행 후 컨트롤러가 올바르게 작동하는지 확인	Pass
	게임기 작동	원자 컨트롤러가 올바르게 작동하는지 확인	1. 원자 실행 후 컨트롤러 연결	1. 원자 실행 후 컨트롤러 연결	원자 실행 후 컨트롤러가 올바르게 작동하는지 확인	Pass
		원자 컨트롤러가 올바르게 작동하는지 확인	1. 원자 실행 후 컨트롤러 연결	1. 원자 실행 후 컨트롤러 연결	원자 실행 후 컨트롤러가 올바르게 작동하는지 확인	Pass
		원자 컨트롤러가 올바르게 작동하는지 확인	1. 원자 실행 후 컨트롤러 연결	1. 원자 실행 후 컨트롤러 연결	원자 실행 후 컨트롤러가 올바르게 작동하는지 확인	Pass
	원자	원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	원자 실행 후 정상 작동	Pass
		원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	원자 실행 후 정상 작동	Pass
		원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	원자 실행 후 정상 작동	Pass
원자	원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	원자 실행 후 정상 작동	Pass	
	원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	원자 실행 후 정상 작동	Pass	
	원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	1. 원자 실행 후 정상 작동	원자 실행 후 정상 작동	Pass	



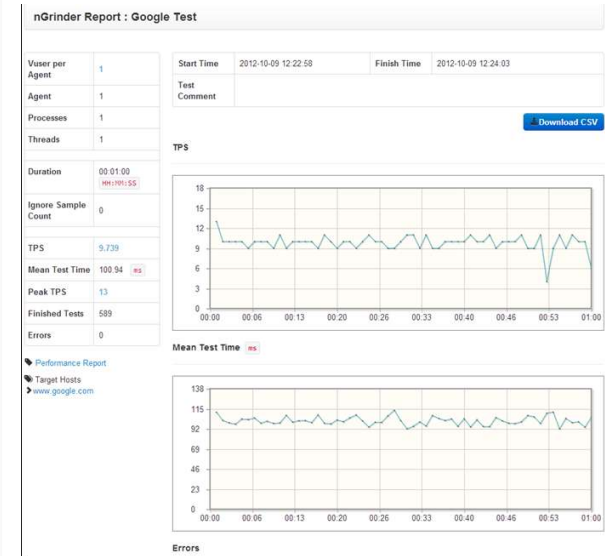
02 Our Ability

Enhancing Service Competitiveness Through Regional Network Load Testing

Given that network conditions vary across global regions, we conduct region-specific network load testing utilizing the EM algorithm to ensure stable and competitive service performance.

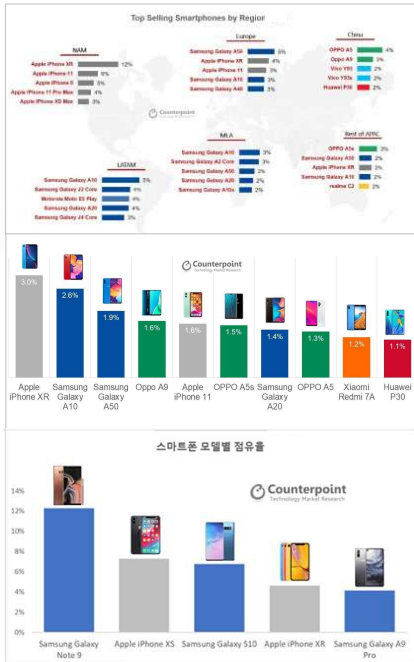
(Network-intensive load testing, security solutions, payment solutions, building cloud infrastructure & support, and analytics & marketing SDK consulting services.)

우선 순위	Risk	상세 내용	장애 상황 및 기대 결과	확인 결과
상	Gate 서버 장애	Gate 서버 유지 안중 및 Game 서버의 공통 데이터를 관리함. Gate 서버는 2대로 이중화 되어 있음.	<ul style="list-style-type: none"> Gate 서버 2대 중 1대 장애. - 정상 로그인 및. - 게임 플레이 중인 유저는 정상적으로 플레이 되어야 함. Gate 서버 2대 중 2대 장애. - 게임 접속 시도 유저는 접속이 되지 않음. - 게임 플레이 중인 유저는 정상적으로 플레이 되어야 함. 	기대 결과와 동일하며 특이사항 없음.
상	Game 서버 장애	Load Balance에 의한 분산 구조로 되어 있으며 서버 한대 장애 시 나머지 서버가 처리하게 됨.	<ul style="list-style-type: none"> Game 서버 2대 중 1대 장애. - 게임 플레이에 문제가 없어야 함. Game 서버 2대 중 2대 장애 (모든 게임 서버 장애). - 게임 플레이가 되지 않아야 함. 	기대 결과와 동일하며 특이사항 없음.
상	Cache 서버 장애 (Redis)	유저 Session 데이터를 관리하는 서버로 장애 시 해당 서버가 관리하는 Session의 유저는 게임 실행이 불가능 하다.	<ul style="list-style-type: none"> Cache 서버 1대 중 1대 장애 (단일 노드 서버). - 게임 플레이가 되지 않아야 함. 	기대 결과와 동일함. 서버 구성 중 단일 노드로 구성 되어 있어, 이중화 또는 Auto-Follower 구성으로 구성되어야 함.
중	Chat 서버 장애	Game 서버의 독립적으로 구분되어 있으며 초기 1대로 구성 예정임.	<ul style="list-style-type: none"> Chat 서버 2대 중 1대 장애 (Chat Gate 서버 1대 장애). - 채팅에 문제 없어야 함. - 게임 플레이 중인 유저는 정상적으로 플레이 되어야 함. Chat 서버 2대 중 2대 장애 (Chat Controller의 Chat Gate 서버 모두 장애). - 채팅이 되지 않아야 함. - 게임 플레이 중인 유저는 정상적으로 플레이 되어야 함. 	기대 결과와 동일하며 특이사항 없음.



02 Our Ability

Target Market Device Share Analysis



Localization, and LQA



Translation, Editing, Proofreading and MTPE

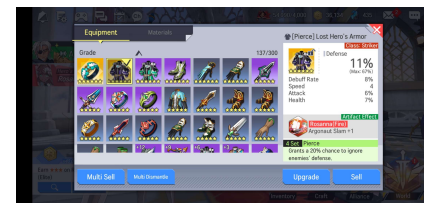
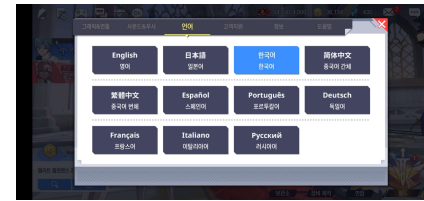


LQA Testing

Category	Category	Category	Summary	Pass Rate	Pass Count
인쇄물	인쇄물	인쇄물	인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
인쇄물	인쇄물	인쇄물	인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
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			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10
			인쇄물 - 100% Pass Rate (10/10)	100%	10/10

Local Language Implementation & Device Compatibility Testing

국문	영문(미국)	영문	영문(캐나다)
한국어	English	English	English
중국어	Chinese	Chinese	Chinese
일본어	Japanese	Japanese	Japanese
스페인어	Spanish	Spanish	Spanish
포르투갈어	Portuguese	Portuguese	Portuguese
독일어	German	German	German
프랑스어	French	French	French
이탈리아어	Italian	Italian	Italian
러시아어	Russian	Russian	Russian



Appendix (1/6)

- Established nGle (Aug 27)
- Developed standard QA processes and methodologies for service and platform testing
- Secured investment from Kakao Games (Dec 15)

<Key Projects>

Kakao Games Corp. – Full-scale QA outsourcing (annual contract)

Joymax Co., Ltd. – QA for one service title

SmartStudy Co., Ltd. – QA for one service platform

2015

- Established server performance testing environments and methodologies for service and platform infrastructures
- Led full-scope server performance testing for newly launched services and platforms of Kakao Games
- Built and provided consulting for QA standard processes and methodologies for Kakao's game division

<Key Projects>

Kakao Corp. – QA outsourcing for Friends IP services and platform (annual contract)

NHN ACE – Data analytics solution validation and data verification

Bigpot Services – Service server performance validation

HandySoft – QA for IoT solution products

AltPlus Korea – QA for two service platforms

Seongnam Mobile App Center – Two short-term projects

Etc. – QA services for small and mid-sized developers, including DasAge

2016

Appendix (2/6)

- Established Corporate R&D Center
- Selected as a Work-Learning Dual System participating company by the Ministry of Employment and Labor
- Signed AI/Machine Learning technical advisory agreement
- Conducted a joint pilot project for service test automation through collaboration with external machine learning experts

<Key Projects>

NCSOFT Corp. - QA outsourcing for platform and one mobile service (annual contract)
 Kakao Games / Genie Labs - QA for Smart TV-based Hold'em Game
 SK Telecom - Validation of additional services for AI speaker platform NUGU
 NAVER Corp. - QA for AI speaker WAVE
 Etc. - QA services for small and mid-sized developers, including Riot Services

2017

Established China Branch (Dalian)

New Business Initiatives

App UI/UX Consulting
 Infrastructure System Planning & Development (Integrated App Market Billing System) Service
 Web Admin & Event Development
 Localization QA (Korean-Chinese / Chinese-Korean)

<Key Projects>

Smilegate - STOVE platform (Back Office) QA and server API test automation
 Nuri Telecom - QA for blockchain-based energy trading platform and services (Ghana, Africa)
 NAVER Labs - QA for AWAY navigation
 LINE Financial - Web QA for global launch of fintech service (cryptocurrency exchange)
 SNOW Corp. - QA for new service launch project
 Wemade Services - QA for Icarus MHNC Services - QA for one new service
 Signal & Co / YJM Services - QA for two services
 NextAge - QA for AR-based new service

2018

Appendix (3/6)

Signed agreement with Korea Institute of Startup & Entrepreneurship Development for in-house venture incubation and operation

New Business Initiatives

FunQA / FGT (Focus Group Testing)

Mobile & PC Service Operations and Customer Support (CS)

Testing and General Process Automation R&D

Mobile Application Development

<Key Projects>

Smilegate – Expansion of full-scope QA contract for STOVE platform

Ground X – QA for Klaytn (blockchain platform & services)

Way2Bit – QA for BORA (blockchain platform & services)

LINE Plus – Development of Trident Test App for service platform, SDK integration testing, and development guide validation

Playwith – QA for Rohan M

Wemade Tree / Nabu Studio – QA for blockchain-based game services

YJM Games – QA for Samgukji Inside

Webzen – Payment testing and market compliance validation for Chinese game services

IPIXEL – QA for AR-based game services

Neowiz – QA for Idol Champ and Edith Corp services

Clover Games – QA, operations, and CS for Lord of Heroes

Life MMO – QA for Map Gaming Platform

BigTree – Development of mobile fortune-telling application

Devsisters – QA for Party Party

2019

New Business Initiatives

CS Development of hyper-casual strategy mobile games and AR-based mobile services (in-house venture)

Development of smart factory-related service functionalities

Performance testing execution and consulting

Global service operations and customer support (CS)

<Key Projects>

INE Plus (NTS) – QA for blockchain services

Travelly – QA for machine learning-based travel curation service and joint development for future initiatives

Friends Services – QA for Crypto Dragon game service

Ground X – QA for Klip (cryptocurrency wallet service)

Devsisters / Natris – QA for one new service project and annual contract signed for upcoming projects

Junki IP / Wemade – QA for blockchain-based game services

2020

Appendix (4/6)

<Key Projects>

Ground X - QA for cryptocurrency-related platforms
Flex / IvreLab - QA for HR system platforms
Class101 Korea - QA for system platform
Travelly - QA for travel platform
Frenkly - QA for voice communication platform
Kakao Entertainment - QA for location-based platform
Vision Holdings - QA for VR-based idol content platform
NAVER Shopping - Platform QA
Friends Services - QA for BORA ecosystem / blockchain services
LINE Plus / Studio - QA for game services including Rangers and POP2
LINE Play - QA for LINE Play and super casual games

2021

2022

<Key Projects>

NAVER Z - QA for metaverse-related services
PressA - QA for Steam-based services
LINE - QA for payment systems
NAVER - QA for web systems
MetaBora - QA for game services
Wemade - QA for game services
Smart Food Networks - QA for web systems
5minlab - Compatibility QA for game services
Momenti - Application compatibility QA

Appendix (5/6)

<Key Projects>

- Hyundai Motor Company – Selected as a primary QA partner
- Ignite – QA for Kia Motors CPO platform
- Alu – QA for Youngpoong Bookstore web & mobile applications
- N Tech Service – QA for NAVER Pay and related services (Whale, Shopping, Weather, Notifications)
- The Black Label – QA for fandom application services
- Epid Games – QA for Trickal
- Netmarble – QA for Blade & Soul Revolution

2023

2024

New Business Initiatives

- Expansion into multilingual localization and LQA services (16 languages)

<Key Projects>

- LINE – QA for game services and platforms
- SOCAR – Service QA
- Ottm Labs – QA and localization for P2E game services
- Genesis Nest – Localization services
- Kakao Games – Localization services
- DillyHub – Localization services for various webtoons

Appendix (6/6)

<Key Projects>

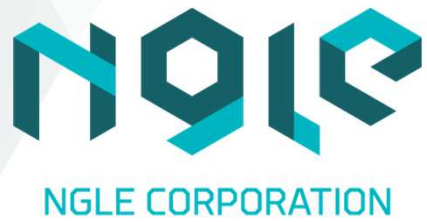
- LINE Plus – QA for platform and game services
- Com2uS Holdings – QA for Ares (Taiwan, Hong Kong, Macau)
- AXG – QA for web services
- KRAFTON – QA for game services (China branch)
- Clover Games – In-game localization for <Lord of Heroes>
- Peppercon – In-game localization for <Style Tale>

2025

<Key Projects>

- Pearl Abyss – In-game localization for <Crimson Desert> for 11 languages

2026



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