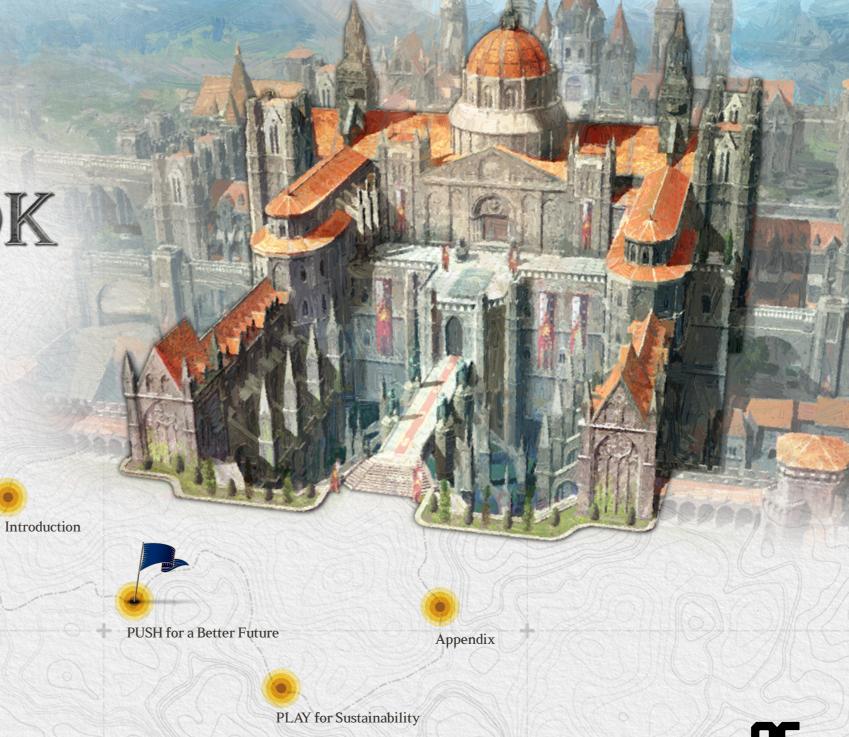
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NCSOFT SUSTAINABILITY REPORT



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Cover Story

NC's efforts and commitments to sustainability management are manifested as a playbook map which helps players successfully navigate a game.

Interactive User Guide

This sustainability report was published as an interactive PDF to enable users to move to a specific page and/or an associated website.

Go to the first page Go to the 'Contents' page

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Web site: www.ncsoft.com

Who We Are

Ushering in a brand new future where all are connected by joy, NC aspires to assist in the creation of a new frontier where truly impressive experiences await. NC will persevere in making this dream a reality.

COMPANY OVERVIEW

Name of company NCSOFT Corporation March 11, 1997 Establishment Type of business Developing and publishing online mobile game software CEO Kim Taek-Jin 4,627 (as the end of 2021, on a non-**Employees**

consolidated basis)

GLOBAL NETWORK

NAME OF CORPORATION	LOCATION	DATE OF ESTABLISHMENT	TOTAL EMPLOYEES	MAIN BUSINESS
NC WEST HOLDINGS ¹⁾	Washington, the U.S.	2012. 12	390	GAME PUBLISHING / DEVELOPMENT
NC JAPAN KK	Tokyo, Japan	2001. 09	175	GAME PUBLISHING / DEVELOPMENT
NC TAIWAN CO., LTD	Taipei, Taiwan	2003.08	101	GAME PUBLISHING / DEVELOPMENT
NC VIETNAM VISUAL STUDIO CO., LTD	Ho Chi Minh, Vietnam	2020. 01	138	ART OUTSOURCING
NC EUROPE, LTD	Brighton, the U.K.	2004. 07	9	GAME PUBLISHING

¹⁾ NC Interactive (established in Jun. 2000), ArenaNet, LLC. (acquired in Dec. 2002), NC West Holdings (established in Dec. 2012 as a holding company)

CORE VALUE





PASSION True commitment Passion to Never ending challenge to create to quality never stop trying a joy-filled world

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What We Create

On the strength of best-in-industry development technology and service capabilities, NC pushes the boundary into a host of platforms and services, including but not limited to the Lineage series, AION, Blade & Soul, and the Guild Wars series.

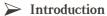




Cultural Content



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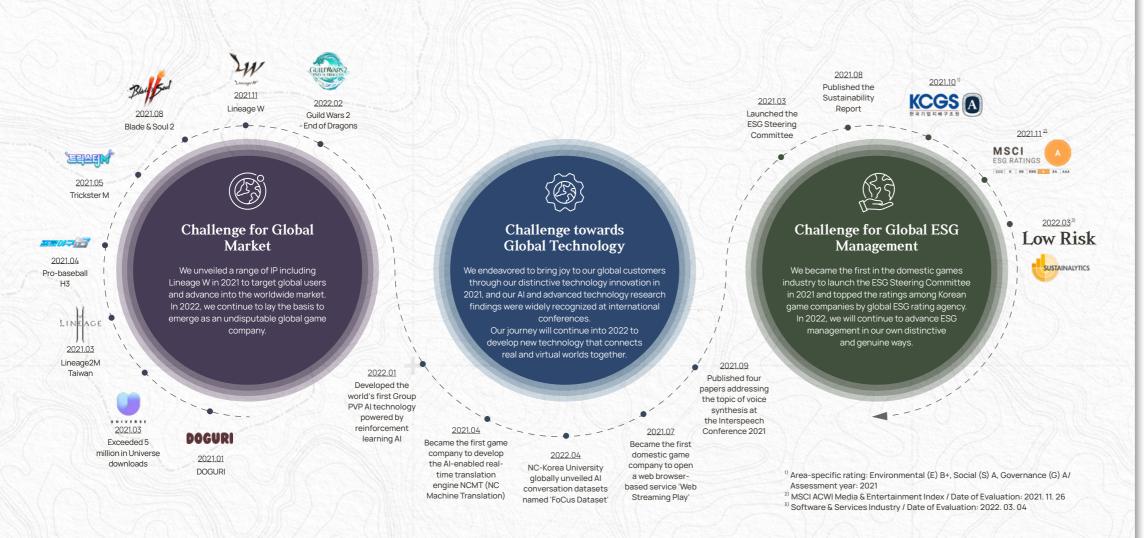
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NC Global Challenges

Driven by its corporate values of 'Push, Play', NC is pushing the limit to bring joy, technology, and future into new heights. In 2021, we endeavored to launch a range of IP, advanced technology and embrace ESG management to emerge as a global game company. Our relentless journey continues to rise to new challenges in ushering in a new world connected through joy.



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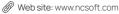
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Chairperson's Message -ESG Steering Committee

Dear Valued Stakeholders,

As the Chairperson of the NCSOFT ESG Steering Committee, let me first begin by extending my deepest gratitude to our shareholders, customers, partners, and employees for their everlasting interest and on-going support.



In 2021, NCSOFT took the very first step to advance sustainability management under the motto of 'taking an earnest initiative in attaining the best possible outcome'. We launched the ESG Steering Committee and its relevant organization in March for the first time in the Korean games industry, and published the NCSOFT ESG PLAYBOOK 2020 in August to showcase our achievements and our commitment to ESG management. Our efforts to rise to the new challenge of embracing ESG management generated meaningful outcomes as we topped the ratings among Korean game companies by domestic and international ESG rating agency alike.

As our journey for sustainability management has just started, we realize that we may have to fine-tune our approaches and rechart our course along the way. Last year, we learned from stakeholder feedback that we needed to take a more transparent and proactive approach to communicating with our internal employees and external customers. This invaluable insight led us to expand our communications from the early development phase across the entire business operations and establish a new culture of development that fully reflects customer feedback. Internally, we will initiate management strategy meetings to share and discuss our corporate approaches and pending business issues with our employees as part of our corporate culture.

In tandem with this, we will define 'The Right Play' 'Digital Responsibility', and 'Qualitative Leap of Society' as the core values of our sustainability management and take actions to live by these values.

First, we will comb over our content to reduce hate and discrimination within the content while embracing a broader definition of diversity so that each and every user of NCSOFT's content feels connected through 'The Right Play'.

Second, we will fulfill our 'Digital Responsibility' to ensure that our user enjoy our service more safely and that ethical considerations are always heeded when it comes to technology development.

Third, we will work to bring positive environmental impact as a member of society and provide future generations and communities with wide-ranging opportunities to contribute to our 'Qualitative Leap of Society'.

We look forward to your keen interest and advice to our efforts in honoring our commitment to sustainability management, and we count on your presence in our journey towards 'joy of taking an earnest initiative towards the best possible outcome'.

Thank you.

Chairperson of the ESG Steering Committee
Yoon Song-Yee



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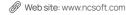
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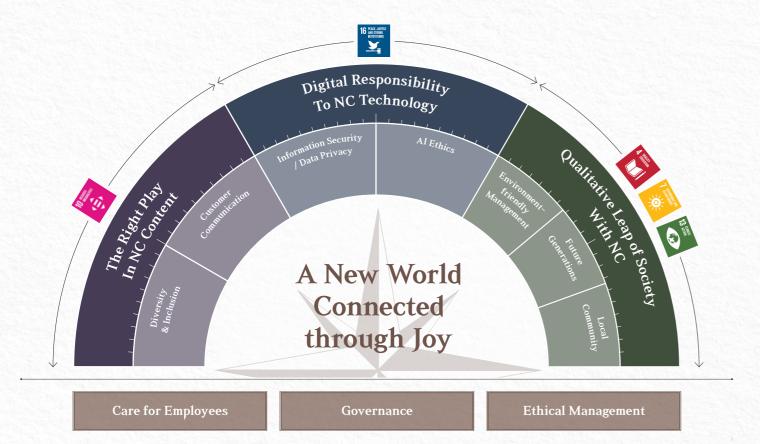
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NC ESG Management Value

NC dreams of a new world connected through joy and will define its own value of sustainability management and systematically advance sustainability management through the ESG Steering Committee and its working-level organization.







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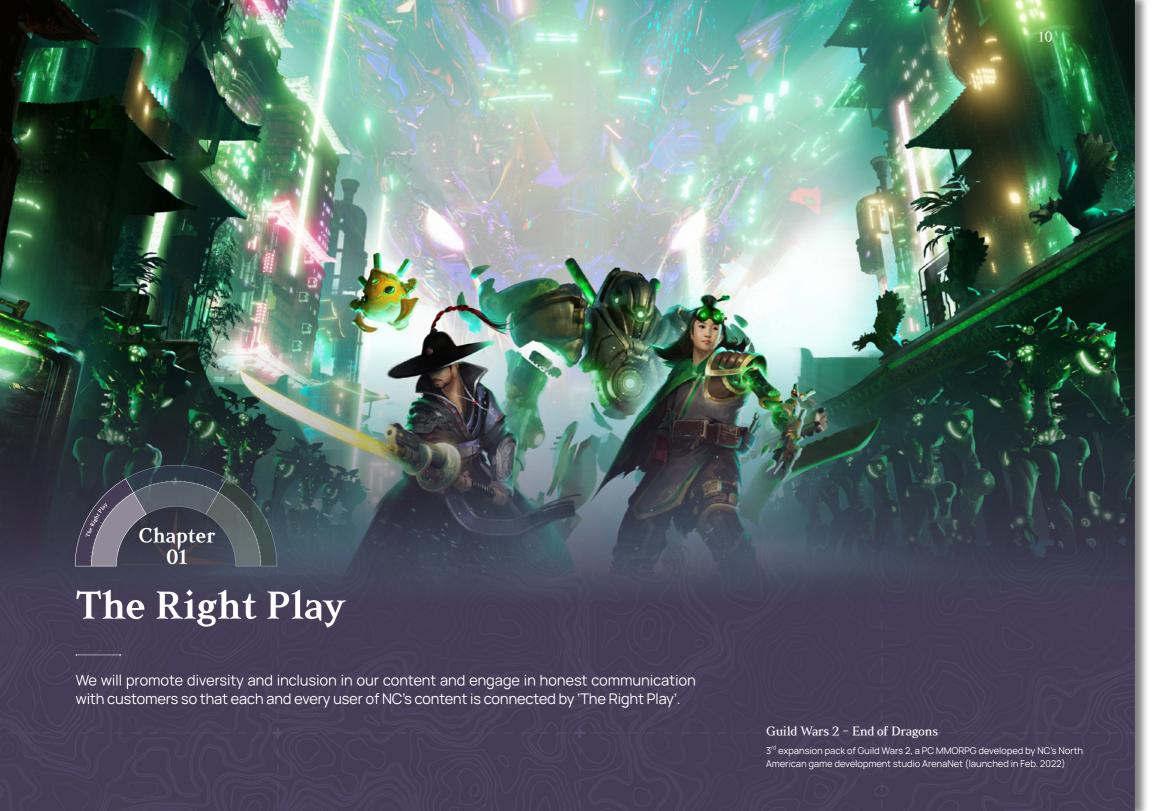
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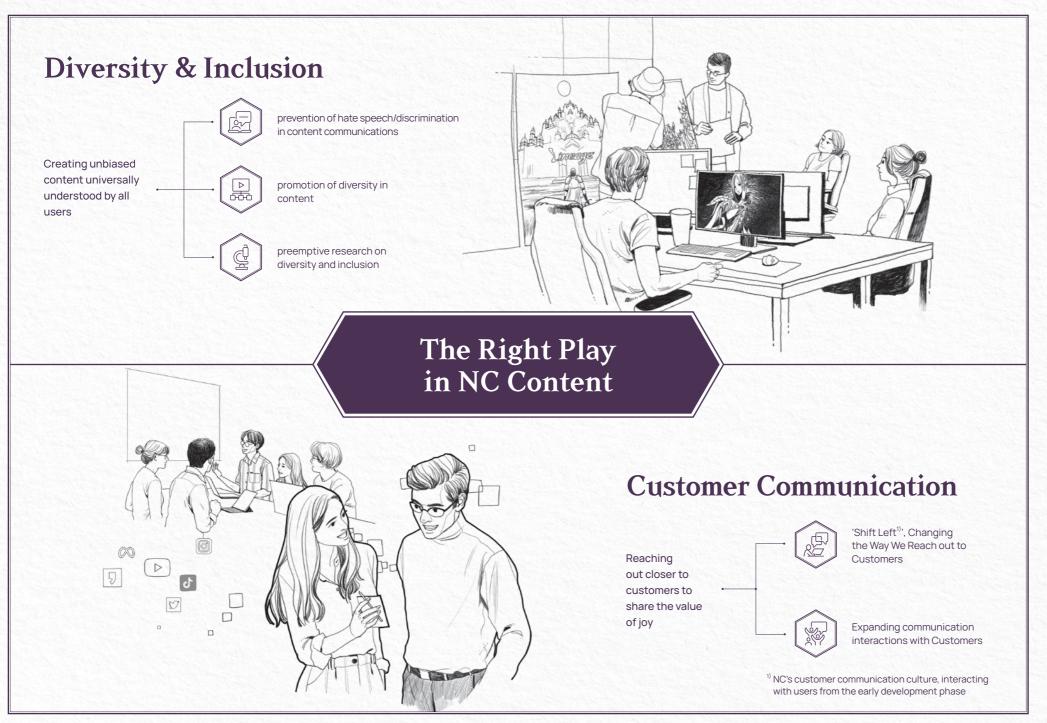
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Web site: www.ncsoft.com



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NC Diversity & Inclusion Framework

Diversity & Inclusion (D&I) represents NC's sustainability management strategy to create The Right Play. This means that we will respect and embrace cultural and superficial diversity while eliminating all forms of hate and discrimination in our content and service offerings. As a result, we will produce content that is universally understood and foster a world in which joy connects us all.



A world where everyone is connected by joy

Vision

Bias-free content that users can universally understand

Approach



Prevent hateful and discriminatory communications



Improve diversity in content



Preemptively conducting research on D&I



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Preventing Hateful and Discriminatory Communications in Content



To deliver an inclusive environment for content users, we develop technical responses to respective communication areas to prevent hateful, discriminatory, and other inappropriate expressions within the content that we deliver.

Defining Inappropriate Language within Content and Introducing Technical Responses

To create a more inclusive and friendly environment for users from the content communication aspect, we classify inappropriate language into the following categories: discrimination (discrimination and hate speech), bias (biased value judgements), rudeness (rude language), illegality (expressions that incite illegal and/or vulgar behavior), and sexual harassment. This definition serves as the basis for us to develop and systematically introduce technical responses to each communication area where words are spoken by users and sentences are generated by Al.

Technical Responses by Communication Area

Area		Technical Response
Words	Chatbot (Paige Talk)	Respond to words spoken by users which are recognized through hate speech recognition technology
spoken by users	Spam filtering	Develop technology to recognize illegal/vulgar language
	/masking	Develop spam filtering/masking technology to prevent and restrict exposures
		 Apply to Lineage W, Blade & Soul 2, Trickster M, Lineage2M, and Lineage2M_NR
		Develop and apply operator tools to allow for real-time live responses
		Develop spam filtering technology available in Korean and 13 other languages
Sentences	Response	Develop technology to prevent the generation of inappropriate or biased speech in its extended definition from mere slang and
generated by	generation in chatbot	discriminatory remarks to speech that may offend other users
Al		Plan to apply technology to prevent the generation of hate or biased speech in PAIGE 2022
	Machine translation	Apply the set translation principles governing hateful/politically-charged/disparaging expressions to all machine-translated games
		 Identify terminology that may raise issues among nations

^{*} Inappropriate language: Our definition of inappropriate language extends from mere hateful remarks to risky and reckless solicitation and incitement committed by AI to potentially offend people.



COMMUNICATION AI

Expressed in human words

PAIGE



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Improving Diversity in Content



NC engages in a host of activities to embrace cultural diversity and prevent risks in launching our products in the global market.

Culturalization

Our culturalization initiative aims to prevent hate and discrimination while embracing cultural diversity in the content and services that we deliver.

Defining Culturalization

Culturalization refers to reviews that are performed to create content that users can universally understand and effortlessly immerse themselves into based on the understanding of superficial diversity (gender, age, race, physical disability, etc.) and cultural diversity (language, dress, customs, moral norms, etc.) of countries around the globe.

Culturalization Activity

We review our compliance with applicable laws and policies to prevent any disruption to our global game launches. In addition to filtering political and cultural issues, we also improve all components of content, including but not limited to language localization, plot setting, character description and directing. To provide the best-possible play experience to all our users, our culturalization includes 'The Right Play' in our contents.

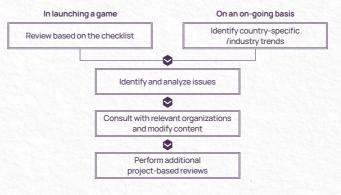
Culturalization Details

Area	Details
Before launching a game	Perform culturalization reviews from the early game development phase Filter a range of issues related to target markets before globally launching a game Reinforce content components in a way to embrace diversity and appeal to culture-specific sentiments
After launching a game	Respond to political and cultural issues after launching a game by continuously collecting data on user trends Perform localization and culturalization reviews on the updated content of live games
On an on- going basis	Apply culturalization-based filtering to the machine translation of in-game chats Share regulations/taboos in respective major markets as well as guides on their current conditions Establish a global collaboration system to reflect local user sentiments

Quality Assurance (QA) Activity

We deliver our content in consideration of its compliance with the language or cultural taboos, laws and regulations, and moral and ethical values of respective countries, and inspect such content from the D&I viewpoint. To raise the bar on our inspections, we reinforce our system to provide training and collect information on current affairs and humanities to gauge the domestic and international landscape while constantly upgrading our ethics checklist to cope with emerging D&I issues.

Country-specific Content QA Process



Implemented QA Inspections

Game	Inspections Made		
Blade & Soul	Detected and blocked negative signals such as cross-border conflicts or wars Eliminated elements in specific flag content that were reminiscent of the Rising Sun Flag Eliminated the Red Star, Bomb and Z in newly-added costum items		
Linage W	Modified the hand-shaped drag guide displayed in the Enchant Wooden Doll operation screen in reflection of concerns that this might encourage misandry		
AION (released in North America)	Modified slavery-themed dungeons, lines and quests		
Others	Removed elements that can concern and analogize political or social issues (election day, symbol of specific political parties, or specific candidates)		

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Process to Embrace D&I within Content

NC embraced diversity and inclusion in Guild Wars 2 through our systemic process. Under this process, the DEI Advisory Council decides on the proposals made by the DEI (Diversity, Equity and Inclusion)¹⁾ Group and ACR (Asian Cultural Representation)²⁾ Group on an on-going basis and Upper Management grants the final approval.

- ¹⁾ An employee resource group that consists of employees from diverse cultural backgrounds to discuss the topic of D&I on an on-going basis
- An employee resource group composed of nearly 30 employees representing Asian cultures to discuss game designs and social issues from the D&I viewpoint on a monthly basis

Collecting Diverse Feedback through the Interim Development Review Process

As part of our development review process, we ensure that the projects under progress are experienced and receive feedback from diverse groups categorized by age, gender and preference in an effort to create a development environment that values D&I.

- 01. Review and supplement items required to create a game environment that respects D&I for customers
- **02.** Embrace feedback from wide-ranging customers by soliciting their candid feedback and reflecting such feedback in games
- 03. Completion of The Right Play delivered by NC games

Embracing D&I in Content: Guild Wars 2

D&I in Game Characters and Play Systems

NC reflected D&I elements even from the game planning phase so that all players feel respected while playing our game. Our game characters and plots include over 30 LGBTQ+ elements, along with gender balance in non-player characters or NPCs. Driven by our design philosophy that "Our users need to feel contented when encountering other players", we introduced duo cooperative engagements and group fishing/waterborne mobility content so that our game ecosystem centers around cooperation rather than competition.

Reflecting Multicultural Components

To render our game environment more inclusive, we produced game soundtracks through collaboration between traditional Korean musical instruments and western orchestra performance. We also created NPCs based on historical Korean heroes such as Yoo Gwan-sun and Lee Tae-young and reflected Korea's traditional games including playing yut and fivestones within our games.

D&I Application Process





Creating characters that reflect D&I principles



Content on cooperative engagements, fishing and waterborne mobility



Producing game soundtracks through collaboration between Korean traditional musical instruments and western orchestra performance



Reflecting Korean culture (NPCs named Yoo Gwan-sun, Korean traditional games)

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Preemptively Conducting Research on D&I

NC partners with academia in conducting research to deliver our services and content to all users without any physical, cultural, and social discrimination.



Improving user accessibility and usability

We choose designs that render our games more accessible and usable so that even players with physical limitations can fully enjoy our games. This philosophy drove our research to make PC games that require keyboard and mouse operations readily enjoyable in the mobile and console environment. To this end, we engage in research to identify and systemize major design factors adopted by industry peers to improve the accessibility and usability of their offerings.



Increase value of D&I in characters

NC has conducted research to increase the character diversity and inclusion in our games to be released in the global market. This is done by selecting games that were universally appealing across global markets in 2021 and we analyzed their characters based diverse keywords to measure sympathy factor of these games. The research findings generated will lay the basis for us to develop a character that can gain sympathy from global fans with various preferences.



Studying community scalability

Since 2020, NC has been conducting industry-academic relations with Games and Life Lab (Director: Professor Young Yim Doh, Researcher: Se Yeon Lee, Ka Ram Eum, Seok Jun Kang, Poo Seung Koh) of KAIST CT Graduate School. The subject of this study was a comparative analysis of community activities of various game fans using the consumer characteristic analysis research frame of Games and Life Lab. This research was inspired by the fact that game fans voluntarily document and share their game experience through social network channels. In engaging in such research, we were able to extract major keywords used by players in social network communities and design factors that trigger such keywords.



Analyzing the value of game IP design

We ensure that we maintain and increase the core values of our Intellectual properties (IPs) in developing new games on the strength of our wide-ranging IP. As part of such endeavors, we analyzed the design value of our IPs by identifying the common ground between the joyful experience we deliver to fans as a game developer and the value experienced by these fans. This research project was undertaken on our game Guild Wars 2, and the research findings will serve as reference data in designing our game content to be released across the global market.

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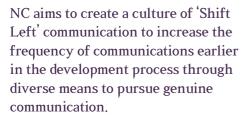
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Customer Communication

Shift Left, Changing the Way We Communicate with Customers



"At NC, communicating with users means 'Shift Left': we will move everything to the left and work together with users from the very start. This also embodies NC's commitment to completely take off its old self and put on the new self"

- Moon-young Choi PDMO

Expanding Communication Early from the Development Phase

We communicate with users for our games under development as well as for those being serviced, and reflect feedback from our future users.

NCing, NC Games Created Together with Users

We share a variety of stories associated with our games – their development purpose, production process and behind-thescenes stories – with our future users early from the development process to collect and reflect their feedback into our development work. We initiated internal communication when we unveiled to our employees a prototype video illustrating the development process of a project in Q1 of 2022. This was followed by a video publicly disclosed on our five game IPs under development, and two more trailer videos released for Throne and Liberty and Project E that will constitute our next-generation original IPs on Youtube and other major official channels. We aim to take a step further from engaging in internal communications and unveiling game videos and continue with a host of NCing activities to allow our future fans to directly interact with our developers to share their feedback and ask any questions they may have.

Changing the Way We Communicate on Our Released IP

NC reaches out ever closer to our game users so that they interact with us through wide-ranging channels while playing our games.

Expanding and Diversifying Communication Channels

While we primarily communicated with our users through postings made within our games or on our websites, we have expanded our communication channels to Youtube, blog, social network and other diverse channels as well as embracing video formats. This allows our users to conveniently stay updated and interact with us.

Providing a Venue for Genuine Communication

We continue to provide our key development personnel and users an opportunity to engage in in-depth communication. Our employees responsible for developing and operating each game directly communicate with users and answer their questions in real time to pursue genuine communication.

Supporting Intuitive and Transparent Communication

We allow our users to directly input their feedback on changes made to the game or new information made available and to vote to make their voices heard in order to establish a communication system to transparently collect customer feedback.

Director's Talk for Lineage W

Our Director's Talk serves for executives in charge of Lineage W and its development and business personnel to directly share new information on the game and interact with users.

In particular, we used this venue to state our position that we were proactively exploring countermeasures to illegal software of Lineage W. This was followed by a system update made to address such illicit software in less than a month, and we have continued to share with users our crackdown activities concerning such unlicensed software.

Blade & Soul 2 'On-Air' Series

Our Blade & Soul 2 developers and business personnel not only addressed the questions raised by Youtubers but also directly answered the questions posted on Opinion of Daehyeob (User), the Q&A board on the game's official website as well as questions raised by viewers during live broadcasts.

Immediate Feedback Gathering: Creating a Voting System Please answer the questions below. I was able to access accurate information in a timely manner. I look forward to uninterrupted service delivery. I suggest that more details be provided. I suggest that more effort is made to prevent its reoccurrence and improve services. Information on future action to be taken will be appreciated.

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Lineage W 'Director's Talk'



Visual R&D video 'CACCIA (hunting)'



Blade & Soul 2 'About Stat'



Teaser video on NC's new IP for 2022



Blade & Soul 2 'Update Preview'



Behind-the-scene story for CACCIA production

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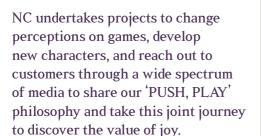
Additional information about NCSOFT can be found on the website.



Click on the play button to watch the video

Customer Communication

Expanding Communication Touchpoints with Customers



Projects to Change Perceptions on Games

Driven by our 'PUSH, PLAY' philosophy, we have continued with our relentless journey to imagine what joy is and to pursue innovation to bring our imaginations to reality. As part of such efforts, we launched NC PLAY PROJECT brand campaign to answer the question of 'What is joy, and where does it come from?' In so doing, we presented brand new perspectives on games through the combination of a suite of art genres and built consensus with customers that the unlimited imaginative power of games could bring joy that was never-before-possible.

Artists who participated in NC PLAY projects and their outcomes



Produced five media art works which reinterpreted the worldviews and characters of NC games in collaboration with the media artist Yang Min-Ha, and displayed them along the media wall of our Pangyo R&D Center lobby



Produced 'The Overlay', a webtoon series featuring NPCs who appear in our game worldviews as main characters, and published 4 parts(total 15 episodes) on our blog and BUFFTOON



Interpreted game plays through the art of dingbat, an image language, and awarded in the Communication category at the Asia Design Prize 2022



Published a book titled '24/7
Playground' and authored by 7
renowned Korean novelists on the topic
of 'the future of joy', released wideranging content including audio books
by authors and awarded in the Digital
Campaign Communication of the 'iF
Design Award 2022'

Blog

DOGURI, Our New Character to Reach Out to Millennials and Gen Z

We launched a new character named DOGU-RI, which was inspired by Looting Raccoon in Lineage 2M under the slogan of 'So what if I'm a total mass? It's OK because I'm so cute!'. We present this character through a wide array of social network channels and feature DOGURI in webtoons, meme, illustrations and other diverse content to further



expand and diversify our communications. DOGURI is used as the narrator on the online campaign 'Rookie Club' created for rookies to share the mistakes they make in the workplace and in taking online workplace survivor tests. With over 300,000 and 4,000,000 participants joining each of these activities, DOGURI is widely relating to millennials and Gen Z.

Operating Communication Channels through Blog, Youtube and Social Networks

We operate communication channels through blog, Youtube, and social networks for customers, and present branded content that embodies our distinctive viewpoint and philosophy in reflection of the characteristics of different channels. In 2021, we reorganized our blog for global fans and create a global page on Facebook to communicate our corporate and game news to fans and users the world over.



Youtube Facebook Instagram

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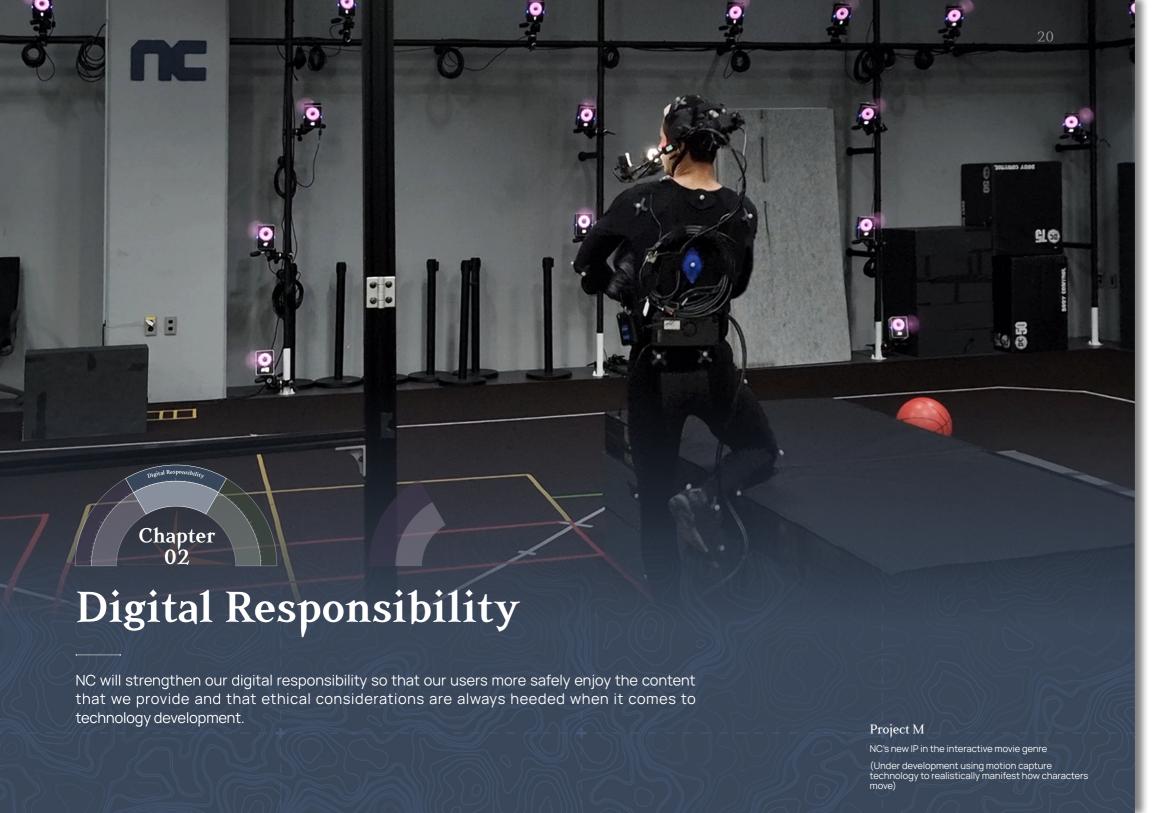
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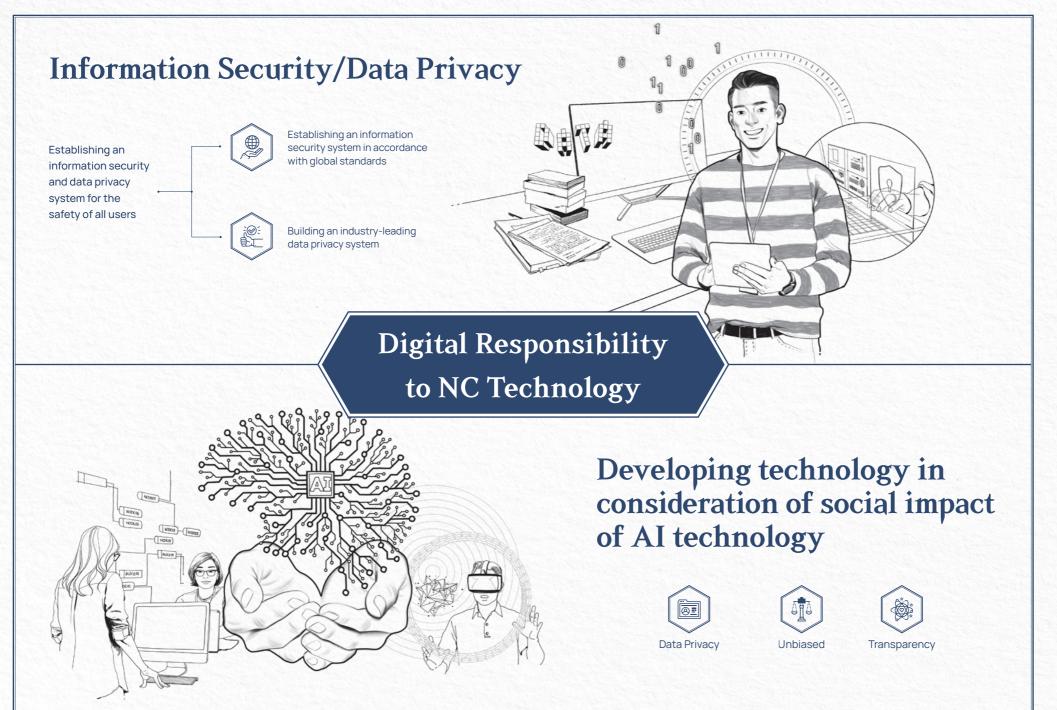
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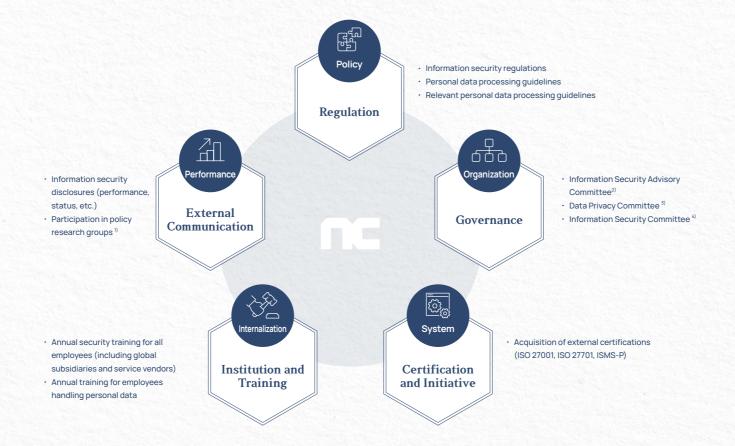
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Establishing an Information Security System in Accordance with Global Standards

To bolster the safety of personal data and information assets, we are establishing our own information security system that aligns our policy, organization and system and strengthens such linkages while maintaining this system in accordance with global standards.



- ¹⁾ Participated in a research group led by the Ministry of Science and ICT to studying ordinances related to information security disclosures (Jun. 2021 ~ July. 2021), and in a future security policy research group supervised by the Future Policy Research Division of the Korea Internet & Security Agency (KISA) (Feb. 2022 ~)
- ²⁾ Technical Working Group (TWG) established to consult on common security-related operational policies between NC and its subsidiaries and to prevent security breaches

Members CIO, CITD, Head of Information Security Center, Chief Information
Officers from subsidiaries, and the Technical Working Group

- ³⁾ Consultative body mandated to decide on major issues including workrelated modifications concerning personal data protection
- Members
 Head of Privacy Protection Division, Head of Information Security
 Center, Head of Legal Division, Head of Communication Center, and
 Head of Ethics & Compliance Division
- (a) Consultative body mandated to decide on major issues including workrelated modifications concerning information security

Members Head of Information Security Center, Head of Privacy Protection
Division, and executives at major departments under the CIO/CEO/
CTO/CLO/CHRO

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Dedicated Information Security Organization

NC's Chief Information Security Officer (CISO) serves as the head of the Information Security Center and oversees general information security operations. Pursuant to the nation's Communications Network Act, we ensure that our CISO has earned a master's or doctoral degree in information security or information technology in Korea and abroad. Our current CISO has a doctoral degree in science and over 20 years of experience in the areas of information security and information technology. Under the Center are Privacy Protection Division, Security Policy Division, Security Operation Division, Security Technology Development Division, and Information Security Inspection Division which perform their respective functions and collaborate with other relevant departments to protect information assets.

As part of our information security governance, we also operate a process to report major information security issues and make decisions accordingly.

We have newly defined our own information security management system by establishing a company-wide information security management system in line with our business growth and pursuing functional consolidation with global subsidiaries, and are operating an organization and a process that spans our entire global operations in 2022.

To deliver safe service to customers, we have created an independent organization responsible for overall service operations from service planning to launching as well as a security assessment process while operating the Red Team to independently and consistently assess vulnerabilities from the third-party viewpoint and check if there are any security loopholes 24/7. We have also created an assessment team for our information security operations to bolster our year-round assessment and audit function.

In 2022, we set our business strategies to secure the safety of global game/service launches and support global collaboration, improve remote work productivity and advance our security threat response system, eliminate security threats that undermine business performance, and bolster our organizational expertise in reflection of domestic/international security trends. We operate Security Care Service as an integrated global security assessment system to maintain and advance the information security management system of our subsidiaries in Korea and abroad. Furthermore, we create and operate an integrated global monitoring environment and work to establish an industry-leading security environment to emerge as a truly global company.

NC-Information Security Management System Alignment



Privacy Protection Division (Personal Data Protection Operations)

PMO Team (Business strategy and task management/global security management, etc.)

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Information Security Regulations

NC stipulates and abides by its information security regulations. Such regulations apply to all our employees, including contract and dispatched workers, and to all individuals and companies who conduct work under signed contracts with NC and each and every individual accessing our worksites. In 2022, work is underway to create a 'Global Security One Team' to lay the basis for our integrated global security management, and we plan to establish our global security policy while overhauling internal regulations and making necessary amendments.

Information Security Policy and System Audit

We have established our information security policy and system in accordance with international certification standards, and receive internal/external audits at least twice a year. In 2022, our Information Security Center will conduct separate security operational audits to encourage working-level departments to internalize our security system and to help set the right course ahead for our information security operations. We have achieved ISO 27001, the international information security management system certification set by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) as well as the national information security system standard of ISMS-P to further safeguard personal data and bolster our information security.

Prevention of and Response to Security Breaches

We define 'prevention of and response to security breaches' as the core mandate of the Information Security Center to prevent such breaches from ever occurring and swiftly respond to them when they do occur. To provide sound and secure game services to our users, we conduct advance reviews on security vulnerabilities that may give rise to unauthorized use (content security, resource modulation, core analysis, and game play security) while performing security work including bot-assisted detection specialized in game security. In an effort to minimize the possibility of security incidents occurring, we implement preventive activities for a range of possible breaches by eliminating risk factors for security breaches, conducting year-round monitoring, analyzing causes for threats and their pathways, and preemptively responding to them, and control the damage from DDoS attacks. We also work with relevant departments through diverse collaboration mechanisms to share information and ensure prompt recovery in the event of security incidents. For incidents that have a grave impact on our business, the CISO is mandated to contact top management for emergency reporting.

Information Security Inspection Division was split as an independent organization to primarily perform regular security checks on our overall game services. The Red Team under the direct leadership of the Information Security Center is also responsible for identifying vulnerable areas in advance to respond to security incidents before they occur.

Information Security Training

In tune with our corporate atmosphere unique to a game company, we produce appealing training content in TV show parody format to engage all our employees in a security-focused culture. 'Company-wide security training' was attended by a total of 4,539 employees and reached 100% in completion rate.

In addition, security campaigns are launched each month in diverse formats including webtoons, guides, and card news, to help our employees raise their security awareness on an on-going basis. From 2022 onwards, we plan to provide our new hires in the development category with training on development security, and to create or reinforce tailormade training for all employees, employees assuming specific positions, employees handling personal data, and developers.

Domestic/International Information Security Certification



ISMS-P
(Scope of certification plaync game services)



ISO 27001 (Scope of certification: NCSOFT services)

Information security training





Information Security Campaign



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Building an Industry-leading **Data Privacy System**



To safeguard the personal data of our customers, we keep our system up-to-date to become an industry leader in protecting data privacy.

Personal Data Protection Management System

We have launched our game services in 46 countries across the globe, and have analyzed data privacy laws in over 50 countries, including 46 countries where we operate. This informed our work to provide preemptive compliance guidelines on major country-specific regulations and create an industry-leading security environment in so doing.

NC's data privacy vision is 'Privacy Best Practices in the Games Industry', and this drives its endeavors to implement the following strategic tasks of ensuring global privacy compliance, building a privacy risk prevention system and a safe customer data use system, and bolstering the privacy by design approach. Our personal data protection management system is operated in accordance with applicable laws and regulations, and aids in the advancement of our game services across the worldwide market. We aim to extend the scope of our personal data protection management system to subsidiaries in the years ahead.

NC's Personal Data Protection Management System



Regulatory



Member managemen system



Protection of rights for the data subject



Personal data lifecycle



measure



Personal data processing activity documentation

Dedicated Personal Data Protection Organization

Our head of the Privacy Protection Division also serves as the Chief Privacy Officer (CPO). Under the Division are the Privacy Protection Policy Team and the Privacy Protection Operation Team to be exclusively responsible for developing personal data policies, raising employee awareness, preventing privacy risks, and operating our personal data protection management system. The Privacy Protection Steering Committee chaired by the CPO makes decisions on important issues such as personal data breaches and changes in personal data protection operations. The Committee meets at least twice a year on a regular basis, and convenes along with the Information Security Committee to propose agenda items and gain approval in relation to corporate security and personal data.

Personal Data Protection Policy

NC manages the personal data of all its service users in accordance with relevant personal data processing guidelines and applies plaync personal data processing guidelines to all its game services. In line with our advancement into the global games market, we have stipulated our Global Privacy Policy to enable our global users to refer to our personal data protection policy. We have minimized the collection of personal data in accordance with respective personal data processing guidelines, do not store sensitive information as specified in the Personal Data Protection Act, and securely store personal data such as credit card/account information that is likely to pose high risks when leaked through encryption and de-identification. We solely use personal data collected and stored as such for their intended purposes only, and do not loan, sell or provide such data to third parties. We make sure that personal data is immediately disposed of once it has fulfilled its intended purpose. NCW abides by personal data protection regulations in the US and EU, and regularly reviews best practices to apply them to its data privacy policy. Any new vendors who process personal data on behalf of NCW are subject to NCW's data privacy and security contract.

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Additional information about NCSOFT can be found on the website.



Plaync Relevant personal data processing guidelines

personal data processing

activities

Information Security/Data Privacy

Guarantee of the Right to Informational Self-Determination

NC ensures that anyone wishing to become a PLAYNC member fully understands the details on its 'personal data collection and use' prior to providing their consent. The collected personal data is provided to vendors when we gain consent from users to satisfy intended purposes only – payment agency service, customer counseling, and user verification among others – and no third-party access to such data is allowed for purposes other than aforementioned ones. The My Page section of the PLAYNC website provides a user-friendly interface which makes it easy to check, modify, or handle personal data or suspend or terminate a membership.

NC established its Cookie Policy to notify users of the Cookies collected and their purpose of collection and to gain their consent. Users can directly check and choose among the Necessary, Functional, Performance or Analytical, and Targeting/Advertising categories, and are informed of the purpose of collection and the retention period of each category. Our Cookie Policy also specifies details on the data collected by respective Cookie categories.



Personal Data Impact Assessment for Our Services

To bolster personal data protection for our game services, we conduct preliminary personal data impact assessments in launching or altering services. Such assessments are performed against a checklist, and measures are taken to rectify issues in need of improvement identified as a result of assessments prior to opening the concerned service. To raise employees' awareness on personal data impact assessments, we provided a briefing session to relevant departments and post notices on our intranet to ensure such assessments are conducted as part of the service planning and design phases.

Personal Data Protection Training

Personal Data Impact Assessment Process

process

We provide personal data protection training to assist our employees handling personal data in safely performing their given work. In 2021, we provided such training to our subsidiaries as well as to NC, and a total of 1,161 employees participated in 'personal information protection education' for personal information handlers, achieving 100% in completion rate. NC will expand this to cover all employees in 2022. Furthermore, personal data protection training will be conducted for employees in team leader and above positions, and will be extended to employees newly assigned to work handling personal data. We plan to launch campaigns to raise awareness on data privacy through NC Privacy Active.

Personal Data Protection Reviews Prior to Service Launching

Prior to launching app services, the TS Team under the leadership of the CTO performs integrated technical reviews, along with QA, personal data protection and information security reviews. Relevant departments examine review items in each phase, and the Privacy Protection Division reviews items related to personal data protection. In 2021, this launching preparation process applied to our game services to review them prior to their release, and reviews were performed on compliance with data privacy regulations to make necessary improvements.

Personal Data Protection Review along the Supply Chain

NC identifies, manages, and supervises its personal data processing vendors to take stock of their personal data protection management and prevent privacy risks along the supply chain. A vendor checklist has been also developed to review their personal data protection management system once a year. In 2021, a total of 40 vendors were reviewed. When necessary improvements are identified as a result of reviews, the concerned vendor will be provided with our data privacy rules and compliance guides, and receive more stringent year-round reviews to improve their personal data protection management.

Risk Overall Impact **Protection** management **Process** assessment measure and outcome monitoring · Identify the overall service Perform impact assessments · Provide protection · Develop action plans in · Identify overall outcomes accordance with assessment to analyze whether personal measure guides for generated as a result of · Review the service for its data is collected and used in respective issues results to manage and measures taken personal data collection advance according to assessment monitor risks · Document and manage

outcomes

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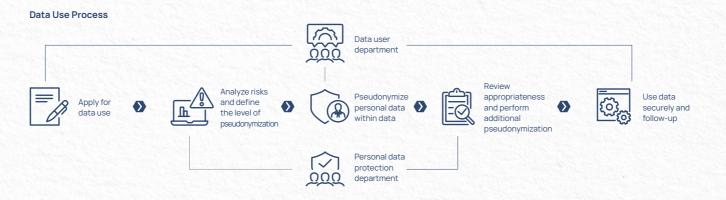


Technical Measures for Personal Data Protection

- We operate security systems such as F/W, IDS, IPS, and WAF among respective networks to create vigilance against intrusion, and any DB that stores personal data is located in an IDC isolated on a separate network to fundamentally prevent any external access.
- We deploy DB access control solutions to ensure that our DB storing personal data is accessed by authorized user IP only, and continually monitor DB data query and access history.
- Whenever an employee who handles personal data is away from his/her workstation for a period of four or more hours, their system access is blocked automatically to prevent illegal access to the personal data processing system and any resulting data breaches. If there is an inevitable reason that the system needs to be externally accessed, such access is allowed in accordance with our secure authentication procedures (VPN log-in and OTP authentication)
- We have installed the vaccine program to detect and block malicious codes in real time. This program performs automatic policy (pattern) updates at least daily, and full scans are conducted at least once a week to respond to malicious codes through detection and blocking.
- **6** We have developed and operate password creation rules for users to set secure passwords and login accordingly.

NC's Data Use Process

We have established our data use process to respond to the enforcement of the amendments to the Personal Information Protection Act and the Credit Information Protection Act as well as tightening Al laws, regulations and systems and to provide greater support for internal data use. A video was produced and publicized for our employees to fully use the established process, and data use reviews were conducted on more than 10 occasions in 2021 to facilitate internal data use. This process applies to our employees, including contract and dispatched workers who conduct work under signed contracts with NC, and each and every individual accessing our worksites, as well as in using the personal data of service customers managed by NC, our employees and partners for additional business purposes, externally providing such data, or in linking such data. Our data use process is operated by departments using data and in charge of personal data protection.



Our Response to Personal Data Breaches

In December 2021, a counselor working at our customer center NCSOFT Service took some photo with the mobile phone, which resulted in a customer data breach. Pursuant to applicable laws, the customer concerned was notified of this incident within 24 hours upon its identification, and this was reported to competent national authorities. To bolster security operations at NCSOFT Service, security stickers were placed and personal data protection training was provided to all counselors.

Data Privacy Training for NCSOFT Service Counselors

Period : Jan. 12, 2022 ~ Jan. 13, 2022

Target : All counselors received retraining irrespective of whether

they have completed such training before

Training content : Previous training focused on understanding the Personal

Information Protection Act

Retraining for all counselors addressed personal data breaches that occur at customer centers in real-world settings and their

prevention

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NC Al Ethics Framework

Core Values As Artificial Intelligence (AI) is emerging as the paradigm of our time, we need to set principles and guidelines for technology development to ensure that AI technology remains human-centered and evolves as such. NC vows to doubly ensure that user data is protected and that no social bias is generated in developing AI technology, and that we design our AI technology in an easily understandable manner.

This reasoning lies at the core of our NC AI Ethics Framework, and will be built into our technology development and operational process.



User privacy should be respected and all personal data should be protected in both its collection and application.

We comply with all applicable laws and obligations to protect the privacy of personal data used in Al learning.

Major Activities Implemented

Abide by internal/external data use policies

Establish a personal data de-identification processing system

Prevent user-identifiable logging

Conduct data security and handling training



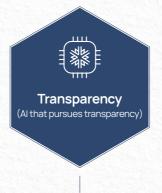
The development and application of Al technology should remain fair and free from any prejudices or biases.

We eliminate biases in learning data and continuously verify learning outcomes to ensure that Al does not invoke discrimination, hatefulness or prejudice.

Create a dictionary to define inappropriate expressions

Develop a system to prevent the generation of inappropriate speech

Conduct Al impact tests based on fairness/unbiasedness



Al technology should be easy to understand and should be able to explain the process of decision that led it to its outcome.

We improve competencies to explain Al technology to render its decision-making process easier to understand, while proactively working to share major relevant information and technology.

Disclose the operational principle and key technology of Al models

Disclose interpretable and explainable Al conversation datasets

Develop an Al behavioral pattern analysis system

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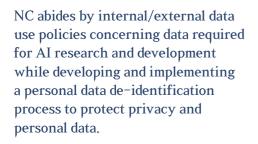
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Data Privacy



Compliance with Internal/External Data Use Policies

We have stipulated our own data use policy and process to abide by domestic/international data security regulations and ensure the safe use of data. This policy and process also applies to our Al research and development.

Step 1	Apply for data use	Apply for data use reviews through the internal service desk channel
Step 2	Analyze risks/define the level of pseudonymization	Analyze data risk levels in advance in consideration of the purpose and method of data use and its use conditions Complete data risk analyses and define the level of pseudonymization
Step 3	Pseudonymize	Pseudonymize in accordance with the method and level of pseudonymization defined by the personal data protection department
Step 4	Review appropriateness and perform additional pseudonymization	Review the appropriateness of pseudonymization including the possibility of fulfilling the intended purpose of use, following pseudonymization Review the level of pseudonymization based on pseudonymized sample data Request additional pseudonymization when the results are substandard
Step 5	Use data and proceed with follow-up management	Continuously monitor whether the possibility of personal identification increases during the pseudonymization process Continuously monitor whether measures are taken to secure the safety of the pseudonymization system and technical/managerial protection measures are maintained (When provided externally) Collect the document from external vendors confirming that data was disposed of when its intended purpose is fulfilled and/or the retention period expires, and relay the document to the personal data protection department

When using publicly available data, we proactively abide by the license and use policy of the concerned organization to maintain data security

Prevention of User-Identifiable Logging

To protect the personal data used for Al learning, we prevent user-identifiable logging. While it is possible that a user's behavioral pattern data is extracted when Al analyzes such patterns, we make sure that no log data that leads to the identification of the concerned person is left behind. As an example, such security measures are implemented for Lineage PC 'Clone Wars'.

Establishment of a Personal Data De-identification System

NC's AI R&D organization has taken one step further from developing an internal data use process to establishing a personal data de-identification policy, along with its processing system to apply the policy while working continuously to pursue improvements from the policy, system, and process aspects.

Personal data de-	Design plans to pseudonymize personal data concerning internal/ external data		
identification	Verify internally/externally collected data for containment of personal data		
policy	Verify the license concerning publicly available data and abide by its use policy		
	Perform complete cross-validation on publicly available data for their containment of personal or inappropriate data		
	Develop data generation/management/deletion plans according to the characteristics of service log data, crawling data and other data		
	Establish guidelines to process and validate personal de-identification		
Personal data de-	Automate the linkage along the data processing pipeline and define phase-specific authorities		
identification system	Build infrastructure to log data use and track down breach paths when such breaches occur		
	Develop personal data recognition technology (numeric, pattern recognition, character, context combination within chats)		
	Develop encryption, de-identification, and deletion technology		
Personal	Step 1: De-identify automatically through personal data recognizers		
data de- identification process	Step 2: Test manually		
	Step 3: Distribute data tested for personal data de-identification		
	Step 4: Perform re-learning on personal data recognizers concerning newly discovered personal data annotation data and, update the model		

Data Security and Handling Training

We provide regular training on data processing methods in line with their characteristics, data pseudonymization, prevention of personal data breaches, and precautions to take in handling personal data. We also ensure that employees handling personal data sign the security pledge prior to accessing data as part of our security system to prevent any illicit use and leak of data.

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Unbiased

NC has introduced a system to eliminate inappropriate language from AI data and develop an unbiased AI system in line with its ceaseless commitment to developing and applying bias-free AI technology.

Developing a Dictionary to Define Inappropriate Terminology

To ensure that conversation data used for our Al service development are free from any inappropriate or biased expressions, we are building a dictionary to define such terminology. This dictionary serves as the basis for filtering that is deployed for the recognition of conversation and conversation generation/output.

Our definition of 'inappropriate expressions' here extends from mere discriminatory or hateful comments to a variety of language that may offend people. This definition applies to categorize inappropriate expressions and develop the dictionary.

Given that conversation data may convey vastly different messages depending on the situation or characteristics involved, we have graded inappropriate expressions and define our responses accordingly.

Grade Definition	
Grade 1	Context-independent and justifies restrictions in and of itself
Grade 2	Context-dependent, and lends to potential harmful
Grade 3	Context-dependent or highly contextualized, and requires direct assessment to determine its harmfulness
Grade 4	Not classified as expressions of hate nor as posing any harm

We will continue to expand our dictionary of inappropriate expressions and extend its scope of application and services.

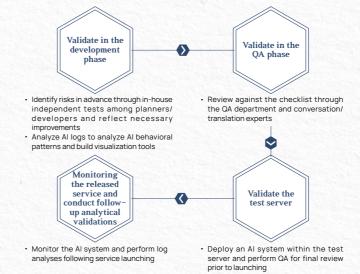
Building a System to Prevent the Generation of Inappropriate Language

NC has extended our notion of inappropriate language in building a system to prevent the generation of such language so that our system not only prevents insult and other discriminatory words but also make sure that users do not feel offended. We classify Al-generated speech into biased, impoliteness, and politeness, and design our system in a way that any language that does not fall into the category of biased pursues politeness rather than impoliteness to ensure that our users engage in conversations while respecting and caring for each other. This system will be deployed for our PAIGE 2022 Chatbot.

Al Impact Testing Based on Fairness /Unbiasedness

To deliver positive game play experience to customers, we are building fairness and unbiasedness into our Al system. To this end, we design a wide array of test scenarios and conduct 4-steps Al impact tests in developing Al services.

4-step Al Impact Test



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NC improves AI systems' competences to explain, and publishes papers to externally share their operational principles.

Disclosing Al Models' Operational Principles and Key Technology

We actively share Al-related information and technology and contribute to improving our competences to explain Al's decisionmaking process and outcomes as well as users' understanding in this regard. We disclosed over 10 Al research papers and open source codes in 2021 to share our key data and technology, which testifies to our efforts to facilitate users' understanding of inner workings of Al models in decision-making.

Disclosing Interpretable and Explainable Al Conversation **Datasets**

We disclosed FoCus Dataset (For Customized conversation dataset) as Al conversation datasets which lend themselves for interpretation and explanation. Users of FoCus Dataset go beyond the realm of merely using given learning data as it is often the case with conventional machine learning, but are able to identify the source of conversation data and how such data is collected and processed. This allows for tracking down the source of decisions made by Al and contributes to elevating users' understanding of Al models.

Building an Al Behavioral Pattern Analytics System

We are building AI log analytics and visualization tools to enable Al systems' behavioral decision-making and pattern analysis to meet intended design requirements. This makes it possible to explain and interpret the behavioral decisions made by Al systems.

Al Research Papers Published

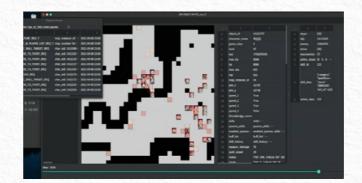
Al Content 1. Legend Reborn

- players in 8 vs. 8 battle

- 1. Multi-Agent Reinforcement Learning Invades MMORPG: 'Lin-
- eage Clone Wars' (GDC 2022) Introducing Lineage 'Clone Wars' and 'Legend Reborn' powered by reinforcement learning-based Al

2. N-Singer: Non-Autoregressive Korean Singing Voice Synthesis System for Pronunciation Enhancement (INTER-SPEECH 2021) Introducing a non-autoregressive singing voice synthesis model to synthesize the voice singing Korean language ballad music

Al behavioral pattern analysis visualization tool



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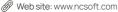
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Disseminating AI Ethics

To disseminate AI ethics across our society, NC engages in conversation with world-renowned scholars, conducts joint research with external partners, and sponsors research activities.

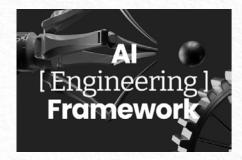
Expanding Communication through the Al Framework Series

NC operates the AI Framework series as a year-round special project designed to boost leadership and ethics in the AI era. This project features Yoon Song-Yee, our Chief Strategy Officer holding discussions with renowned scholars in the AI field to present their fresh perspectives and directions forward in relation to AI technology.

The details of these talks are made publicly available on our official NC Youtube account and blog. We will continue to collaborate with great minds of our time in the areas of political science and philosophy among others as well as with top-notch Al researchers to broaden the scope of our Al communications.

Al Framework Series

Category	Торіс	Interviewer
AI [Ethics] Framework	A New Perspective on Al Technology for 'Human-centered Al'	Fei-Fei Li, Professor of Computer Science at Stanford University, Co-Director of Stanford Human-Centered Al Institute
Al [Education] Framework	The Role of the Ethicist in the Era of Al	Rob Reich, Professor of Political Science at Stanford University, Associate Director of Stanford Human-Centered Al Institute
Al [Engineering] Framework	Embedded EthiCS for Future Engineers and its Ultimate Goal	James Mickens, Professor of Computer Science at Harvard University, Co-Director of Harvard Embedded EthiCS
Al [Human] Framework	The Use and Role of Al Technology from the Philosopher's Perspective	Alison Simmons, Professor of Philosophy at Harvard University, Co-Founder of Harvard Embedded EthiCS
Al [Society] Framework	Ethical Dilemmas to Solve for Co-existence with Al	Alex Byrne, Professor of Philosophy at MIT, Head of the Department of Linguistics and Philosophy, MIT







Al conversation datasets Joint Research

NC teamed up with Korea University to conduct joint research and unveiled FoCus Dataset (For Customized conversation dataset) as Al conversation datasets. The joint research team published and announced the research paper at the AAAI 2022, one of the world's most prestigious conferences on AI, in February 2022, and we will jointly host a workshop with Korea University to share our research findings in the second half of 2022. FoCus Dataset, the world's first-ever Al conversation datasets that simultaneously leverage both user persona and external knowledge, is distinguished for its ability to achieve conversation technology at a performance level often attained with super giant language models even without relying on such models. We made research data widely available as we concurred on the research approach to propose new conversation technologies in consideration of the cost and environmental issues that arise in the Natural Language Processing sector, and will serve as an active participant in the NLP research community by engaging in discussions and technology development.

Sponsorship for AI Ethics Research

NC Cultural Foundation has continued to sponsor the development of AI ethics curricula at MIT ('NC Ethics of Technology Fund') and Stanford ('NC Fellows Fund') for the past two years since 2020. In particular, the Stanford NC Fellows Fund, which was set for termination in 2022, has been extended by renewing the agreement and our sponsorship will continue until 2025 to further advance and expand our efforts to develop and distribute educational curricula for the next three years. In 2021, we signed a curriculum development agreement with Harvard, a world-renowned educational institution, to serve as a sponsor for 'Embedded EthiCS' The research findings generated through such sponsorships will be managed and used on an on-going basis along with collaboration with our partners.

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contribute to the qualitative leap of our society.

Project R

NC's new IP in the action battle royale genre

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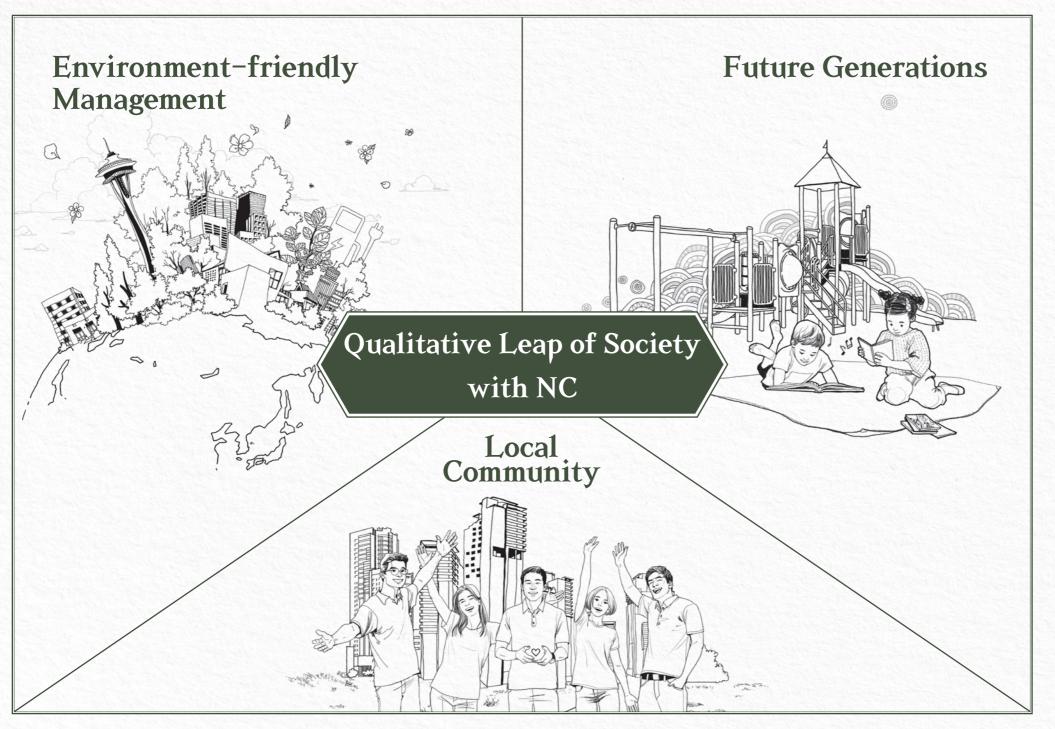
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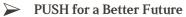






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Environment-friendly Management



To conduct business in a sustainable and eco-friendly manner, we develop our implementation system, governance and investment plans and take a multi-faceted approach to environmental management.

Environmental Management Policy

NC has stipulated its own policy and principles for responsible and sincere environmental management as part of its long-term commitment to bring positive environmental impact environment-friendly management.

Environmental Management Principles

- 1. NC recognizes its environmental impact, develops response measures, and engages in on-going management and monitoring.
- 2. NC considers the environment in developing technology and delivering services.
- 3. NC complies with the environmental laws and regulations in the countries where its offices and data centers are located.
- 4. NC provides employees with environmental training and information, and encourages them to participate in environmental protection
- 5. NC transparently discloses its environmental performance through sustainability reports and other corporate media.

Environmental Management Implementation System

We are clearly aware of the importance of environment-friendly management, and are fully committed to advancing environmental management. Specifically, we set our goals for energy conservation, waste reduction and water consumption reduction and continue to work to attain the set goals.

Reduction of Energy Use/Waste Generation/Water Consumption

Category	Reduction Plan in 2021	Expected Benefits
Save energy	Switch to LED lighting and install light dimmers at the underground parking lot of the Pangyo R&D Center (Basement floors 2-4)	Expected annual reduce power consumption by 116.6MWh
Reduce waste	Continue with recycling campaigns at the Pangyo R&D Center (Facility Management)	Reduce the generation of general waste by 5%
Reduce water consumption	Operate a grey water system at the Pangyo R&D Center	Save water consumption by 6,723 m ³

Environmental Investment Plans and Their Implementation in 2021

Investment Plan	Progress
Switch to LED lighting and install light dimmers at the underground parking lot of the Pangyo R&D Center (Basement floors 2-4)	100% (KRW 39 million)
Switch to water-saving faucets at the spa facility of the Pangyo R&D Center	100% (KRW 2 million)
Switch to long-life UPS batteries at the Pangyo R&D Center	100% (KRW 204 million)
Switch to LED lighting and install light dimmers at the underground parking lot of NC Tower I (basement floors 3-6)	100% (KRW 20 million)

Dedicated Environmental Organization

Company-wide Decision-making Organization

Our ESG Steering Committee as the C-level body is responsible for managing, supervising and making decisions on major plans and their implementation in relation to environmental management including response to climate change and ecosystem protection.

Dedicated Environmental Organization

The ESG Management Division is exclusively responsible for managing our company-wide environmental activities and overall environmental impact. The Division was established in 2021 to improve our operational capabilities concerning environmental management, and consists of personnel dedicated to advancing environmental management. The ESG Management Division, as a dedicated environmental organization, is mandated to establish an environmental management system, develop policies, and manage company-wide environmental data. Such work is performed in collaboration with working-level environmental organizations, and each of these organizations provides environmental data within their scope of management.

Working-level Environmental Organization

Department	Scope of Management	
Property Infra Division	Energy consumption at our own/ leased office buildings	
Service Infra Division	Energy consumption at data centers	
Benefit Partner Division/ Workplace Motivation Division	Food waste discharged from cafeterias and other locations, and energy consumed by company vehicles	

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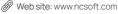
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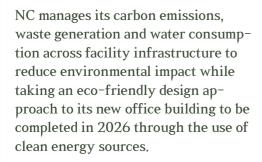
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Environment-friendly Management

Building Environment-friendly Facility Infrastructure



Pangyo R&D Center and NC Tower I

Reducing Carbon Emissions

NC has switched to LED lighting for underground parking lots at the Pangyo R&D Center and NC Tower 1 to reduce the emission of greenhouse gas, and installed light dimmers to lower brightness by default and increase brightness when motion is detected. In addition, we plan to make the switches to LED lighting at some of the common-use space(elevator hall) of the Pangyo R&D Center and high-efficiency boilers at NC Tower I as part of our efforts to reduce carbon emissions in 2022.

Reducing Waste

All garbage and waste from our Pangyo R&D Center are discharged and managed by registered recycling companies. Since January to March in 2022, the recycling rate of total waste generated has remained at 33% on average.

Reducing Water Consumption

Our Pangyo R&D Center has installed a grey water system within the building to self-treat the domestic sewage internally generated and reuse the grey water. This enabled us to save nearly 6,723 m³ of water in the course of 2021. We have also switched to water-saving toilets and urinals, and replaced faucets installed at our in-house spa with water-saving ones certified under the environmental product declaration program.

Data Center

NC's data centers pursue efficiency in energy consumption through introducing free cooling for computer room air conditioning, maintaining constant temperature and humidity conditions for server rooms, turning off servers not in use, using nighttime electricity for ice thermal energy facilities, and embracing a chilled-water system. We also continue to provide data center employees with environmental training to raise their awareness on the operation of eco-friendly facilities.

New Office Building

Our new office building to be completed by 2026 is being prepared as a green building by factoring in environmental protection and energy saving from the design phase. This new building will be equipped with a range of devices for energy efficiency management and facilities powered by clean energy sources and will achieve green certifications.

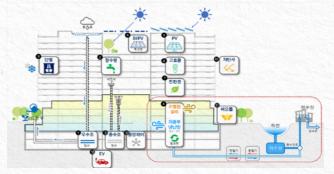
Sustainable Architecture

In hosting an international prize contest for our new office building, we received sustainable construction proposals in the areas of energy conservation, renewable energy, and green building certification. We are specifically considering the introduction of a water source cooling and heating system which leverages the seasonal temperature differences of stream water as a renewable energy source specialized for our new office building. Using water source energy helps us reduce cooling/heating energy and mitigate urban heat island effects by reducing the size of rooftop cooling towers. We will put eco-friendliness before all else in considering building resources including energy, water, and materials.

Renewable Energy Plan for the New Office Building

Category	Photovoltaic (PV) Power Generation	Building Integrated Photovoltaic (BIPV) Power Generation	Water Source
Installed Capacity	54kW	35kW	600RT
Use of Energy	786.3MWh/year(180toe/year)		

Eco-conscious design for the new office building



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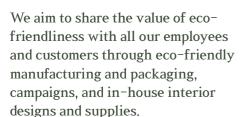
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Disseminating the Value of Eco-friendliness



Distribution of Eco-friendly Products

Launching Eco-friendly Products

The '644' Smart Store, as a seller of DOGURI character merchandise, plans eco-friendly products to reduce CO₂ emissions and waste landfills. Launching DOGURI X PLEATS MAMA Eco Bags, an upcycling product manufactured using recycled yarn extracted from used PET bottles collected in Jeju, and 'DOGURI-patterned socks' made of recycled yarn, the store shared the value of eco-friendliness with customers.

Eco-friendly Delivery

The '644' Smart Store chooses eco-friendly delivery supplies which include paper boxes, paper tapes, paper bags, and cushioning paper. In addition, all delivery supplies were standardized to minimize the use of disposables.

Eco-friendly Campaign

Customer Campaign on Environment Day

In commemoration of Environment Day in 2021, we launched the What's in Your Pocket with DOGURI campaign: when customers take a photo of their eco-friendly items within their bag and the garbage they collected and post such photos as proof on Instagram or Twitter, we presented them with Zero Waste Kits and Eco Bags through a lucky draw.

In-house Campaigns

Our in-house open lounge serves beverages in mug cups to reduce the use of disposable paper cups, and has installed a waste collection box to sort seven different types of plastics to help employees learn proper ways of sorting out recyclable waste. We have equipped our Pangyo R&D Center with a bike parking lot and a repair shop to encourage bike rides to reduce carbon emissions generated from commutes. The bike parking lot is able to accommodate up to 355 bikes and provides bike-only E/Vs to make it easier for employees to choose bikes as their favored means of commuting.

Eco-friendly Office

To provide an eco-friendly office environment, we continue to consider greener options in choosing interior materials and office supplies. For our leased office spaces at Pangyo Alpharium Tower 1 and 2 that we moved in in 2021, E0-graded plywood with 0.5mg/L or under in formaldehyde emissions was chosen for the finishing of custommade furniture, main hall floorings with heavy foot traffic were covered with Green Label Plus-certified carpets that satisfy indoor air quality standards, and areas where PCs are installed were finished with greencertified anti-static OA tiles that prevent electrostatic discharge and are free from concerns over cadmium, lead, mercury and other heavy metals. We ensure that our office desks and meeting tables are certified by the Green Guard program and choose eco-friendly chairs certified against UL's testing program specialized in indoor air quality



Launching DOGURI X PLEATS MAMA upcycling products



Eco-friendly packaging/delivery by the 644 Smart Store



Green Guard Certification

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Supporting Future Generations to Flourish



To help our children grow and flourish, NC develops early childhood learning programs and produces play-based child development content for both children and their family to enjoy.





ISO certification, a curriculum pilot-run in China



Discourse on a sustainable future



'Chimney ghost' by Lee So-Young

'I am a cat' by No Seok-Mee

Laughing Peanut's Curriculum

Laughing Peanut, NC's directly-operated workplace daycare center, provides a foreign language learning program for toddlers called NC CONGCONG, along with wide-ranging independently developed programs. We share such programs with the wider society to go beyond employee welfare towards the betterment of early childhood education and contribution to social development.

NC CONGCONG

NC CONGCONG'S curriculum maintains the highest possible quality through continuous updates made possible with the help of advice and assessments offered by professors. We have independently developed and are implementing an online learning management system for the systemic management and operation of its curriculum. Such efforts enabled us to achieve the ISO 29990 (learning service management system) and ISO 29991 (foreign language learning service management system) certifications for the first time in the world as an infant education institution. We have remained certified to date and were additionally certified against ISO 21001 (educational organization management system) in 2021. We also ensure that we provide invaluable linguistic and cultural experience to children living in the globalized era. For instance, NC CONGCONG operated a pilot run at a kindergarten directly operated by Beijing Normal University in China, and NC CONGCONG's books were published in China in November 2021 through the People's Education Press.

Children Discussing a Sustainable Future

Laughing Peanut supports children who are the future leaders of our society to grow into a responsible member of a sustainable society. 'A Meteorological Play' encouraged children to take interest in climate change induced by environmental pollution and think about ways to protect the planet earth by creating a greenhouse effect experience zone within the classroom.

Laughing Peanut for Community

Leveraging its knowledge accumulated in developing learning content, Laughing Peanut publishes books addressing a variety of topics each year as part of our social contribution activities. We would like to help all children who will grow to live in the globalized world as well as children taken care of by Laughing Peanut to develop an unbiased view and mindset towards the world and broader ideas and flexible thinking.

Play-based Development Content

For the wholesome growth of our future generations, NC is producing 'HELLO TINY' as content for both children and their family to enjoy. 'HELLO TINY' presents play methods as 'play recipes' that anyone can easily learn and enjoy for fun. With the philosophy that play forms an integral part of competitiveness required to nurture creative talent of the future, we ensure that children and their parents spend time together for mutual growth and connect with each other.

Key Content

- Play content created in collaboration with governmental agencies (Korea Disease Control and Prevention Agency, Ministry of Education, Ministry of Sports, Culture and Tourism)
- Play content designed to promote learning benefits for little children (unplugged coding, Youtuber experience play)
- Play content for emotional development that was undermined amid COVID-19 (outdoor activities, etc.)
- Play content to care for the socially underprivileged and respect diversity (Countries in the World game, sign language support for videos)

In particular, we collaborated with the Ministry of Education and the Korea Disease Control and Prevention Agency to help children learn social skills and promote their emotional development, which was hindered amid the prolonged virtual leaning in 2021.



HELLO TINY X Ministry of Education

Produced a total of three play campaign videos with a goal of helping schools perform their intended functions (education, social skill development)



HELLO TINY X Korea Disease Control and Prevention Agency

Produced virtual play content (online play, etc.) and content to learn COVID-19 rules through pay

We will continue to provide play content to support children as our future leaders for their balanced growth and development.

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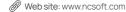
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NC Cultural Foundation¹⁾ runs a host of programs to enable our future generations to unlock their creativity and pursue unbiased growth.

¹⁾ As a non-profit organization established with the funds provided by NC in 2012, the NC Cultural Foundation engages in a wide array of projects with its eyes set towards the creation of value for the qualitative quantum leap of our society and for the increased care for the socially underprivileged. In 2021, NC has performed compliance reviews on the Foundation with the help of the compliance officer.

program to encourage teens to pursue science careers.

This program has been operated since 2016 to provide greater educational opportunities for

underprivileged teenagers. Participants are given the chance to learn scientific theories and

engage in hands-on experimentation to experience scientific thinking along with mentors who are

undergraduates from the Massachusetts Institute of Technology (MIT). This allows students to see

how science is applied to our day-to-day life and used to resolve social issues to eventually develop

interest in science. While this program was suspended amid COVID-19 in 2021, it was resumed for 12

teenagers at a Jongno-gu Children Welfare Center, Seoul, in January 2022. We will continue with this

MIT Special Science Program

Projectory

The name Projectory implies that individual members undertake Projects as they wish in a Laboratory setting. Projectory provides children who will lead the future with an opportunity and an environment to engage in a variety of experiments and experience 'safe' failures to unleash their imagination and push the boundary.

Horizontal Relationships & Self-directed Activities

All members of Projectory are equal regardless of their age, grade or status. They address one another through the nickname of one's own choosing and use non-hierarchical language in freely interacting with each other. This enables them to fully manifest their ideas and embrace different opinions without bias to experience respect for diversity. Furthermore, children directly plan and implement their own projects in line with their own distinctive methods and pace. Driven by self-directed execution, they enjoy the very process of challenging themselves without fear of failures and continue to push the limit. Such an environment opens up unlimited possibilities for children and lays the basis to develop creative confidence.

Activity participants

305 persons (monthly average)

72 underprivileged teens (under the MOU signed with local children centers in Jongno-gu, Seoul, Korea)

Activity support



MIT special science program

PROJECTORY CHARACTER ANIMATION

Participating in the 9th Gwangju Biennale

At the international conference held as part of the opening ceremony of the 9th Gwangju Biennale in 2021, Yoon Song-Yee, the Chairperson of the NC Cultural Foundation Board of Directors, delivered a talk on 'The importance of a creative environment for future generations'. We created a booth to introduce our Projectory program, and operated an activity space for two months for applicants to plan and execute their own project. This served to interact with teens who could not participate in Projectory due to distance limitations and identify a high level of consensus on the need for creative spaces.

379
exhibition participants (teens and adults)

Over **3**hours of activity on average
(54 persons attended weekly)

Publishing Children's Books

We publish children's books with diverse themes spanning disability, gender, and culture to help children learn how to respect diversity. Following < Observing Donggu> and < Wind>, we worked to publish the third such book in 2021. This book is set to be published in Q3 of 2022 and will address the topic of diversity to contribute to better embracing differences. We will also increase the recipients of our book donations by 20% from the previous year to nearly 600 public and small-sized libraries nationwide and donate the sales proceeds to support children.

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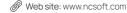
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Improving Inclusion for Future Generations

NC Cultural Foundation supports communication for people with disabilities and sponsors research on gender equality to ensure fairness in our future society, aspiring to shape an unbiased world for future generations.

AAC1) (Augmentative and Alternative Communication)

NC cultural Foundation implements the AAC or Augmented and Alternative Communication project to help people with disabilities address inconvenience they face in communication and improve perceptions on communication disabilities. We have created the AAC app and made it freely downloadable online. In 2021, the number of downloads rose by 20% from the previous year with nearly 25,400 average daily users, and continued to rank first in the number of cumulative downloads among AAC apps in Korea. We are a sponsor for the Korean Society for Augmentative and Alternative Communication (KSAAC), the largest and only such society that operates in Korea, and provide sponsorship for the AAC best practice contest to facilitate and expand the nation's AAC ecosystem.

¹⁾ AAC represents ways of communicating that augment or alter spoken language for people who face difficulties in expressing or understanding linguistic expressions



Ranked 1^{st} in cumulative downloads among domestic ACC apps

(downloads up by 20% y-o-y)

Future Plans for AAC Service Operation

We will further streamline the AAC app use process to make it more convenient for users while minimizing the time taken for vocabulary search to realign and reinforce its functionality. To this end, we have analyzed relevant papers and similar services, and collected feedback through interviews and surveys conducted on those who communicated through AAC or have related expert knowledge, including professors, speech therapists, special education teachers and people with disabilities. Our plan is to provide Al-generated voices that represent a variety of user voice styles by leveraging our Al speech synthesis technology. We will also deliver optimal tailormade services by conducting vocabulary research to expand the scope of vocabulary applied to our AAC app and classify vocabulary according to user levels.

Sponsorship for Gender Equality Research

It was discovered that COVID-19 aggravated gender inequalities which resulted in degenerating female employment, increasing burden of care, and rising domestic violence. In particular, Korea and the wider Asia Pacific Region rank significantly low in the Gender Equality Index. NC Cultural Foundation took note of the need for policy and institutional improvement as a solution to such gender inequality issues, and chose the RAND Corporation, a leading private research institute which studies and develops a range of systems that form the basis for policy making. By supporting research and academic activities directed towards gender equality, we aim to contribute to building a sustainable and equal society. In 2022, the RAND Center for Asia Pacific Policy (CAPP) will launch a gender equality initiative to establish a multinational research group and engage in academic exchanges and joint research projects through workshops and conferences. This will create a platform to share research findings including discussions, videos and publications, and form partnerships with the Frederick S. Pardee RAND Graduate School and other Asian educational institutions to conduct joint research among students.

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Supporting Future Generations with Capacity Building



NC supports the development of cultural content talent and provides a range of learning opportunities through industry-academia cooperation.

Partnership with KAIST

NC has been partnering with the KAIST Graduate School of Culture Technology since 2018 to nurture creative, convergence-driven talent and promote mutual networking. We have jointly participated in the 'culture content R&D professional development project' led by the Korean government since 2020 to conduct joint research, provide NC scholarships and engage in wide-ranging industry-academic activities. In 2021, we joined hands to participate in the exhibition titled 'Game & Art: Auguries of Fantasy' and hosted at the Daejeon Museum of Art, and to plan and operate two courses in the game track for the Graduate School of Culture Technology. (Professor in charge: Ju Han Nam, Young Yim Doh, Sung Hee Lee, Jeong Mi Lee)

Course 1. Game Design Project

This project-based course allowed KAIST graduate students to directly create and execute next-generation games. The ultimate goal of their project undertakings was to submit their creations to the ACM CHI Conference – Student Game Competition, a renowned international conference in the HCI (Human Computer Interaction) field. KAIST's role here was to help design the game concept and assessment criteria in consideration of this competition. Also, employees from the Game Design Lab in NC engaged in practical lectures, feedback offering and evaluation. A total of five teams participated in the course competition, and top ranking teams were granted awards worth KRW 7 million in total. Specifically, the Classy Trach Monster team participated in the international student game competition and was awarded in the Transformative and Transgressive Play category.

Student Game Competition: Winners Category: Innovative Interfaces Perseptione's Feet: A Foot-Saced Approach to Play in Virtual Reality by Jahar Han, Adaberia L. Smoone Category: transformative and transgressive play Lasay Trans Monster: An Educational Game for Teaching Machine Learning to Non-major Students by Joonhyung Bae, Karam Eum, Haram Kwon, Seoline Lee, Juhan Nam, Young Yim Doh



Announcing the award winning of the Classy Trash Monster team

Course 2. Game Research Colloquium

In the second semester of 2021, we invited collaboration experts in the game development and research sector to hold seminars. In addition to attending such seminars, we recommended lecturers and helped pay for lectures to support graduate school learning.

Seminars NC attended

Category	Торіс		
Visual Center	Next-generation game graphic production trends		
CTDD (Chief Technical Design Director)	Evolving game development through TGD (Technical Game Design)		

Capacity Building for Global Future Generations

NCW implements the Game Narrative Mentorship Program each year to provide feedback to those wishing to develop their career as writers and narrative designers. In 2021, a total of 288 people applied for this program.

Program Contents

- One-on-one mentoring
- Portfolio review and feedback offering
- Discussions/lessons/workshops across diverse specialty areas
- Q&A sessions

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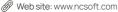
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Local Community

Contribution to the Games Industry and Communities



Our Membership at Game Associations

Association	Membership Fee
Korea Association of Game Industry	KRW 120 million for annual membership
Korea Internet Corporations Association	KRW 50 million for annual membership
Game Culture Foundation	KRW 200 million for donation (made in 2021)
Game Self-Governance Organization of Korea	KRW 200 million for annual membership
National Academy Engineering of Korea	KRW 1.3 million for annual membership (2021-2025)

Sponsorships for the Development of Game Culture

Sponsorship

NC sponsors a range of events with an aim to help small/mid-sized game companies expand their market influence to raise awareness on these companies, identify outstanding indie games, and create a wholesome game culture.

Sponsorships Provided in 2021

Sponsorship for the Busan Indie Connect Festival (BIC) 2021

Sponsorship for the PlayX4 2021 'Space X' booth for small/mid-sized companies

GSTAR 2021 Sponsorship for the 'BIC Showcase X GSTAR 2021' booth (60 indie games displayed)

Education

We directly participate in and sponsor a range of educational projects to help improve perceptions on game culture.

Educational Projects Joined in 2021

'Game Culture Talk - 2021' by the Game Culture Foundation to help parents properly understand games

'Talk Concert to Create a Wholesome Game Culture - Game Stories' held by the Game Rating and Administrative Committee and the Jeju Contents Agency

"Talk Concert held to improve perceptions on games at the online Jeonnam family camp 2021' hosted by the Jeonnam Information & Culture Industry Promotion Agency

Making Social Contribution Donations

We supported educational welfare for underprivileged teens who were left behind in care and learning amid COVID-19. In partnership with the On&On Seongnam learning support project undertaken by the Seongnam City Youth Foundation, we helped pay for essential meals and snacks for teens who participate in the project.

Donating the Balance of Welfare Cards

Our employees donate the balance of their annual welfare card points to UNICEF, ChildFund Korea, and World Vision among others. They can choose any organization that they personally wish to donate to, and also decide whether to donate temporarily and which area to donate to.

Supporting Community Public Interest Advocates with Capacity Building

Teaming up with five organizations including the Seongnam GOOD Foundation, we supported the 'Seongnam Citizen Growth School' educational project designed to help public interest advocates working in the Seongnam community (local people and volunteers) with capacity building. This included providing education for proposal writing, basic accounting, and publicity work as well as special lectures to these local activities from respective sectors, and 265 activists participated on a cumulative basis in 2021.

NC Dinos' Sports Social Contribution Programs



D-NATION

NC Dinos launched its own CSR brand D-NATION to continue with its community Social Contribution activities in a more systemic manner. The name D-NATION was created by combining Nation that Dinos aspires to achieve and Donation which collectively refers to all activities undertaken by the team to contribute to society. Under this brand name, NC Dinos will engage in a variety of activities that serve communities in the three categories of 'companion', 'sharing' and 'future'.

Support for Children and Teens

NC Dinos supports children and teens in various ways. In 2021, the team launched the 'Junior Dinos Membership' project to provide free admission memberships to 955 vulnerable children in the Gyeongnam region. NC Dinos will resume the School Day program in 2022, which was scaled down amid COVID-19, and engage in a variety of activities.

Other Sponsorships

NC Dinos leverages its capabilities as a sports team to implement wide-ranging community sponsorship projects.

- Broadcast public interest advertisements on the electronic scoreboard of the baseball stadium (campaign launched by Gyeongnam Provincial Police Agency to find long-term missing persons)
- Supported less-fortunate groups in proportion to player performance (donated nearly KRW 37 million raised in proportion to the homeruns and scores made by players in 2021)
- Donated baseball supplies to local schools (worth nearly KRW 60 million in 2021)

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Local Community

Contributing to Communities through Culture

Leveraging our core business capabilities in the games industry, NC supports and disseminate arts, music and other diverse cultural activities.

Project to Merge Games with Art

The exhibition titled 'Game & Art: Auguries of Fantasy' jointly hosted by NC, the KAIST Graduate School of Culture Technology and the Daejeon Museum of Art at the Museum's Creation Center between June and September of 2021. We unveiled the works of our NC PLAY PROJECT, a brand campaign we launched to improve awareness on games through the interplay between games and art genres, including media art, webtoons, novels, and dingbat arts with varying game-related themes.







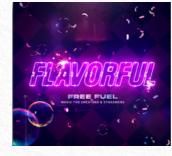


Game & Art: Auguries of Fantasy exhibition

Free Fuel, Free-of-Charge Music Distribution Project

NC reaches out to different customers as well as game users and practice the value of sharing by making music, the universal language, freely available to contribute to the qualitative leap of our society. As part of such efforts, NC's sound center implemented 'Free Fuel' project to produce background music inspired by artists on our global fan platform UNIVERSE and distribute the music, The project name Free Fuel means Fuel or energy that adds fun and impressive experience to creations Free from worries over royalty payment. Providing free access to music, we aim to create a flourishing environment and fully support cultural industry activities in the 4th Industrial Revolution era where online activities have come to bear paramount importance. The music is made freely available for anyone in need of music, from creators who have just begun their career to community children who need to use audiovisual learning materials and seniors on online learning platforms. Furthermore, we have placed no limitations on the generation of profits from advertising aligned with the number of views so that people can safely use the music without copyright concerns.

DISTRIBUTING 19 Sound Track





Free Fuel Project

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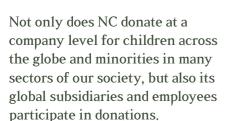
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Local Community

Contributing to the **Global Community**





NC West Holdings is undertaking the Cultural Moments Initiative to help both management and employees broaden their awareness about Diversity, Equity, and Inclusion (DEI). As part of this initiative, events are hosted to celebrate Black History Month, AAPI Heritage Month, Disability Pride Month, Pride Month, and International Women's Month. To facilitate employees' volunteering and donation to non-profits under this initiative, Fidelity Workplace Giving Marketplace was established as an integrated donation platform to consolidate donation channels that were previously fragmented. This allowed the company to donate USD 30,799 to its communities in the course of 2021.

Donations Made in 2021

Event	Detail
AAPI Heritage Month	Donated USD 8,398 (KRW 9 million) in total including employee and corporate donations
Pride Month/LGBTQ+	Donated USD 5,461.48 (KRW 6 million) in total including employee and corporate donations
Mental Health Awareness Month Fundraiser	Donated USD 4,543.50 (KRW 5 million) in total including employee and corporate donations
Winter Fundraiser	Donated USD 12,396 (KRW 14 million) in total including employee and corporate donations ¹

Dupport 7 organizations including the American Foundation for Suicide Prevention







Donating School Supplies Featuring Spoonz/TWOTUCKGOM

Providing work experience opportunities

NC Vietnam Visual Studio (NCVVS) launched ARTIVA ART Challenge to offer access to free-of-charge education provided by top-notch game art professionals. This helped create the ARTIVA community of nearly 900 members, and talented individuals chosen through the event were given an opportunity to tour around the NC Vietnam Visual Studio in addition to receiving free-of-charge education.

NCVVS strives to promote the human rights of women and equal employment opportunity. In 2021, the company participated in an event to share insights for the games industry with female students at Maya Academy of Advanced Cinematics (MAAC), a local arts education institute in Vietnam.

Extra Life

ArenaNet has been an active participant in Extra Life, a project designed to support sick and injured kids, for the past five years as of 2021. A suite of fund-raising events was hosted for 'Guild Wars' and 'Guild Wars 2' in 24/7 streaming format in the entire North American region, with over 54,000 people viewing and reaching the set goal of raising USD 130,000 (total project funding about USD 500,000). The funds raised as such were donated to Children's Miracle Network Hospitals aligned with Extra Life.

Donating School Supplies Featuring Spoonz/ **TWOTUCKGOM**

We donated school supplies featuring Spoonz and TWOTUCKGOM characters worth nearly KRW 170 million to the NGO Life of the Children: the first round of KRW 100 million donations went to Kenya, Uganda, and Burkina Paso in January 2021, and the second round of KRW 70 million donation to Myanmar, the Philippines, and Kyrgyzstan.

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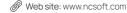
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Additional information about NCSOFT can be found on the website.



Web site: www.ncsoft.com

Free-flowing Communication

NC pursues an inclusive corporate culture that promotes shared growth. To this end, we work to create a corporate culture that promotes flexible communication among all employees and aligns like-minded employees towards the joint journey of challenging themselves to attain their shared goal.

NC 2021 First Half Note

Our NC 2021 First Half Note served to present our wide-ranging challenges (hosting the NCDP 2021, launching new services, advancing into the global market, and improving the efficiency of game development) and corporate news (expanding work spaces, ESG management), sharing with our employees our internal efforts to push the boundary and the status of our overall business operations.

Featuring organizational heads and Chief Officers, the Note communicated our corporate news by detailing their background, context and progress made, along with the CEO sharing his ideas on how each of the topics addressed could impact NC's business conduct. The NC 2021 First Half Note was viewed by more than 50% of our employees.

The video was edited in a way to help viewers effectively and promptly understand the message, and included diverse visuals, subtitles, and music to increase viewers' engagement. English subtitles were also created to make this more accessible for employees at overseas subsidiaries.

NCSOFT Developers Party, a New Culture of

Development Driven by Sharing and Communication

In May 2021, NC hosted the NCSOFT Developers Party (NCDP) 2021 as our leading knowledge sharing conference that represents our development culture. Celebrating the 4th anniversary in 2021, the NCDP 2021 presented 52 online conferences under the slogan of PUSH, PLAY to feature 74 lecturers, consisting of wide-ranging programs that include conferences to share the efforts made for game development and their outcomes, showcases to share our internal development work and research findings, and R&D presentations.

The NCDP 2022 hosted in May 2022 was organized systematically by focusing on sharing our development knowledge to provide in-depth expert lectures and presentations that are the very features of this knowledge sharing forum under the slogan of 'Re Focus, Re Connect'. The program consisted of <Open Lectures> to share lecturer's capabilities and experiences, and <Know-How Lesson > on topics that employees want to hear. Additionally, it was conducted in the form of < IT developer BJ Lectures > in individual streaming format, and <General Lectures> which is broadcast online and offline simultaneously.

Strategy Sharing Meeting

NC hosts strategy sharing meetings to provide an opportunity to exchange ideas on our ways forward.

These meetings serve to share our mid/long-term directions and goals and identify strategic tasks that should be implemented in the upcoming years. This also allows us to communicate CEO/ CSO's messages on our future directions and their insights into market trends and to collect feedback from participants through Q&A sessions and discussions.

Following the first strategy sharing meeting, feedback was gathered on the appropriateness of its content and communication methods, and this informed our work to further improve future

Going forward, we plan to regularly hold such meetings by segmenting them into theme-based strategy sharing, company-wide strategy sharing, and the sharing of pending internal issues.

[Comments Made by Participants in the 1st Strategy Sharing Meeting]

"It was helpful to learn about where our company is headed" "It was my first time to hear about our company strategies, overall business ideas, and our shared challenges, and it was quite a mind-blowing experience"

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Extensive Talent Recruitment Pipeline

NC is willing to invest in any possibility and opportunity to recruit brilliant talent. We are building a broad talent recruitment pipeline by job category and position that spans internships, industry-academia cooperation and the recruitment of entrylevel and experienced employees in consideration of the inherent characteristics of our business that requires individuals to bring their diverse competence and experience to collaborate and complete given projects. As of the end of 2021 compared to the end of 2017, our total number of employees rose by 44% or 1,414 persons, and the number of female employees increased by 57% or by 560 persons. Our annual average ratio of female new hires rose¹⁾ from 30.6 % in 2017 to 33.3% in 2021. NC West Holdings partners with Handshake, a career network which connects educational institutions, along with LinkedIn, Diversityjob. com, ArtStation, and MobyGames among others as external recruitment channels while using social network channels for its recruiting campaigns to diversify its talent recruitment pipeline.

1) Including executives, regular employees and contract, dispatched workers

Development and Recruitment of Future Talent

Each year, we hire interns and provide them with the opportunity to directly experience department-level work. Top performers are given the chance to come on board as full-time employees upon graduation. To secure exceptional junior-level talent, we introduced the starting salary program in 2021 which eliminates the salary cap for new employees hired through open recruitment as the first to do so in the industry. We have also significantly raised our internship wages and adopted other exceptional compensation policies to recruit outstanding talent. This allowed us to achieve the highest number of nearly 100 participants in our new internship program in 2021. The monthly wage for our summer interns rose from KRW 2 million to KRW 2.5 million in 2021.

Recruitment of Outstanding New Talent

Anyone wishing to join NC is able to register their profile at any given time, and this allows us to build a pool of talent that we can immediately turn to whenever a job opening comes available. We also launch recruitment campaigns at Stanford, MIT, UC Berkely and other prestigious global universities to proactively seek out talented individuals all around the world. Even amid the COVID-19 we keep communicating with job applicants by providing metaverse recruitment fairs and one-on-one online job counseling.

NC Vietnam Visual Studio recruited students in partnership with MAAC and Arena Multimedia, top-tier animation training academies in Vietnam, in the areas of 3D animation, visual effects, and game art design. The company hired 16 of them as full-time employees following the closing of the training program.

Recruitment of Industry Professionals

NC is diversifying our recruitment channels and methods to secure professional talent. We are also shifting from inbound recruiting to outbound recruiting to directly search for candidates rather than waiting for candidates to submit their applications through our hiring platform.

In 2021, we scaled up our direct sourcing by expanding our personnel and recruitment organization. We are building multifaceted talent pipeline through our employee referral program which encourages our existing employees to become recruiters themselves to recommend exceptional candidates as their colleagues.

Internal Career Development Opportunity

At NC, a range of internal mobility programs are under operation to support employees' career development and assign the right talent to the right job. Each year, more than 300 employees are given a chance to test their limit through the year-round internal job posting program and the Ban-Idong Program implemented in large-scale open recruitment format.

Internal Job Postings

Any department with open positions may post internal job vacancies, and any employee may apply for such vacant positions. We also operate a year-round job posting system to enable our employees to rotate between jobs and move to a department of their choice. This enables our employees to expand their work experience to meet their own career goals and needs.

Ban-Idong Program (Team Transfer)

This talent rotation program has been operated since 2018 to allow our employees to apply for new projects and departments in line with their individual career development goal

Category	Unit	Ban-Idong Program	Internal Job Posting	Total
Postings	No. of cases	796	649	1,445
Applicants	No. of persons	343	280	623
Successful Applicants	No. of persons	224	77	301

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Anchor Meeting

In 2021, Anchor Meetings were held in April and August, and were operated to bolster employees' goal management. Our plan for 2022 is to provide more detailed guides to our employees attending Anchor Meetings so that they raise the bar in managing their goal and stronger support is provided for performance generation and individual growth.

Individual Performance Appraisal

In 2021, our individual performance appraisals were further fine-tuned for its operational process to improve their objectivity and fairness. Preliminary reviews were made between employees assessed and their supervisors to narrow the perception gap, and the assessor feedback process was reinforced to improve the acceptance of assessment outcomes on the part of employees.

In 2022, we will continue to improve our individual performance appraisal process to establish its procedural fairness by proactively gathering employee feedback and identifying and making necessary improvements.

Executive Performance Appraisal

In 2021, executive performance appraisals were made based on their performance generated for the concerned year and their contribution and leadership.

For 2022, we plan to advance our executive performance appraisal system through systemic goal management and interim reviews to render this system more objective and rigorous.

360-Degree Feedback

Our 360-degree feedback is operated annually, and helps our employees receive 'honest and candid' feedback from their colleagues connected through work to promote their individual growth and betterment. Going forward, this program will be reorganized in a way to improve its effectiveness while alleviating burden on employees, boosting support for individual growth in a substantial way.

Reasonable Compensation

NC operates a variety of systems to provide employees with industry-leading compensation.

- 1. Our compensation system follows the high-performance, high-compensation policy, and is based on fair and reasonable processes in accordance with the decisions made/approvals granted by the Compensation Committee.
- 2. We aspire to set the industry's best standards in terms of total compensation.
- 3. We provide compensation for new IP launches and development outcomes in consideration of the inherent characteristics of our industry.
- 4. We operate the Starting Salary System¹⁾ to eliminate seniority in determining compensation.
- 5. We compensate key talent with exceptional treatment.
- 6. We compensate employees in proportion of the work they accomplish, rather than through the blanket wage system.
- 7. We operate a personalized retirement pension system.

Variable Compensation

PI (Performance Incentive)		- Pay incentives in alignment with organizational/individual performance (annual)
D-PI (Development PI)	Launching Bonus	Pay incentives to employees who contributed to the development and launching of new games/IP Target: Members of the responsible organization + members of the collaborating/contributing organization
	PS (Profit Sharing)	- Pay incentives to members of the organization who contributed to new games/IP, business and service operations to compensate for their part of the overall performance - Target: Members of the responsible organization + members of the collaborating/contributing organization

Building Sound Labor Relations

At NC, the labor-management council is up and running to promote the common interest of labor and management and facilitate communication pursuant to the Act on the Promotion of Workers' Participation and Cooperation.

The council consists of three members from management and three employee members. For members representing employees, candidates are recruited among the entire employees, and their appointment is finalized through an online vote attended by all employees, excluding executives. In March 2022, the Q1 2022 labor-management council meeting was held to appoint new joint chairs from labor and management respectively, a secretary and grievance handling committee members.

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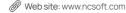
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¹⁾ Starting Salary System: Pay annual salary to top performers according to their competency and expertise without any set standards or restrictions

NC University

Bolstering Job Expertise and Developing Leadership

Each month, we provide programs to learn the knowledge and skills required in respective core job functions and to develop leadership competency. In particular, we continue to expand micro learning content which helps employees immediately apply their learnings to their work as well as seminar-format learning programs that share the experience and knowledge of internal/external experts. In 2021, 171 courses opened and were provided in 191 sessions, with 9,995 employees attending on a cumulative basis.

Composition of Learning Content

Game Design	Game Art	Programming
Technology Trend	Global Business	Leadership/ Management
Development Management	Data Intelligence	Team Program

Tailormade Education by Organization/Job Function

Tailormade programs are operated to help newly-created organizations improve their expertise or to cater to specific learning needs. From 2022 onwards, we will expand programs to develop common skills and competencies required at all levels.

Hosting specialized seminars



Held 4 times in the game design category, attended

COCY employees in total



Held 7 times in the project management category, attended

Supporting the acquisition of licenses

- Licenses supported
- PMP (Project Management Professional)
- PRINCE2 (Projects IN Controlled Environments)
- No. of employees who acquired such licenses in 2021: 4 persons
- Expected benefits: Gain knowledge on appropriate standards/procedures to manage and execute projects and verify its level
- Support target: Full-time employees with job/work fitness in relation to such licenses

Company-wide Data Competency Training

To disseminate a data-based work culture, we operate data analytics and coding courses to employees wishing to take such courses. From 2022 onwards, we will further diversify the learning curriculum and open more course sessions.



courses on a cumulative basis in 2021

Building Partnerships with Educational Institutions

In partnership with the KAIST Graduate School of Culture Technology, we provide our employees an opportunity to observe the graduate classes provided by the School. Our employees with expertise in game development also serve as lecturers for graduate courses to contribute to nurturing creativity/ convergence-driven future talent.



Observing graduate school classes in 2021



Leadership Education Program

The core role of leaders at NC is to make sure that individual employees feel valued within their organization and to help build connections between the organization and employees as well as consensus among employees.

We provide onboarding programs for newly-appointed team leaders and division heads to strengthen their leadership skills, along with leadership assessment programs. We also offer employees in division head and above positions the 'Catch up' program to acquire knowledge, understand trends and develop insights, and NC Hakdang (NC Leaders Forum) to attend special lectures provided by key opinion leaders. In addition, employees in team leader positions are provided with leadership programs that address the areas of organization, work, people, and selfmanagement. In 2021, we ran multiple programs on the topics of communication, trust, and respect among others in line with prolonged remote work.

BTS(Best Team Start) Program

Our Best Team Start (BTS) program aims to engage team leaders and members alike to build a team culture that promotes connectivity and mutual growth and to generate performance by changing the way we work. In 2021, the focus was on communication among employees to increase team-level solidarity amid the protracted remote work period. Specifically, a wide array of programs are under operation on the topic of strengthening emotional solidarity to understand each other's work/communication habits, manage conflicts, build psychological stability, and make ground rules.

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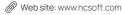


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Welfare & Benefits

In 2021, we realigned our welfare and benefits programs including housing loans, Post-Scholarships, and family event support while expanding these programs in line with the creation of new work spaces (Alpharium Tower). As COVID-19 subsides, we will arrange facilities and programs for our employees to take care of themselves through quality meals and workouts, and improve access to corporate condominiums (resorts) for their travel and rest.

Category	Support Area	Description
Infrastructure	Daycare center	 Provide childcare, education, health and safety programs on the basis of an internally-developed IT operation management system Open two daycare centers with 100-person capacity at Alpharium Tower 2 (2022)
	In-house café	Operate cafes on the 1st/2nd floors of the office building (with fairtrade-certified coffee beans and baristas from diverse cultural backgrounds)
	Library	• Provide more than 40,000 books published in Korea and abroad, regular publications, and multimedia to all employees
	In-house cafeteria	 Provide 6 different kinds of breakfast, lunch and dinner meals (simultaneous dining available for 754 persons) Open the My Fresh Bowl section to provide menus made from Good Agricultural Practices (GAP)-certified agricultural products and vegan menus (2022)
	Medical center	Directly employ 7 specialists including medical specialists, nurses and physical therapists Provide physical therapy (10 beds), dermatology (3 beds), IV fluid administration (4 beds), and vaccinations
	Fitness	Operate personal PT, GX activity rooms, screen golf, an indoor gym, and a spa (sauna which includes a Korean dry sauna) Open fitness facilities at Alpharium Tower (including 3 personal training program rooms)
	Psychological counseling	Provide the Calm Program to promote employees' psychological stability Operate 2 mental counseling rooms for employees and their family members Develop and distribute a self mind care app for employees to take care of their mental health
Welfare & benefits	Medical plan	Provide insurance to help pay for hospitalization and out-patient treatment for employees and their spouse, children, and parents
	Welfare card	Provide welfare points worth KRW 2.5 million per year to all employees (including those taking leave) Enable employees to use these points as they wish for hobbies (game, travel), medical tourism, culture and self-development
	Living support funds	Provide loan support for up to KRW 30 million at below-market-average interest rates
	Housing loan	Support employees to pay interest on housing loans of up to KRW 100 million for their residential stability
	Company condominium (resort)	Allow all employees to choose from a nationwide network of 44 condominiums and resorts
	Convention hall (wedding hall) support	Provide free year-round rentals between 11 am to 5 pm on Saturdays and Sundays
	Post-Scholarship	Support new full-time recruits (less than 2 years career) with undergraduate/graduate student loans worth up ro KRW 15 million
	Others	Support all employees in taking leave for family events and provide them with financial assistance and supplies Provide ticket price discounts for games played at NC Park in Changwon, support NC Dinos for holiday games and provide special group attendance rates Consolidated wedding anniversary benefits into birthday benefits to resolve the issue of discrimination between unmarried and married employees in receiving anniversary gifts a lactation room exclusively for female employees who need to breastfeed and rest

Healthy Workplace Culture

Since 2019, in response to the special working culture of the game industry, NC has abolished the comprehensive wage system and preemptively improved the workplace culture by introducing an optional working hour system(flexible working system). This gives employees the flexibility and opportunities to freely set their commuting hours within the average 40-hour work week and arrange their working hours within the monthly range. In addition, NC tries to avoid unnecessary long working hours and ensure the work-life balance by initiating a new GateOff system in 2021, which restricts employees' access to office space beyond the maximum monthly working hours.

Furthermore, to support maternal protection and work-family balance, all legally-stipulated leave systems are available, including parental leave, maternity leave for both mothers and fathers, and family care leave and some maternal protection policies go beyond our legal obligations. NC is also committed to creating a family-friendly working culture through long service leave and vaccination leave.

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Establishing an Occupational Health and Safety Management System

We implemented health and safety activities in line with the health and safety system that we established in 2020. These included creating the Occupational Health and Safety Management Committee and hosting its quarterly meetings (3 meetings in total), stipulating health and safety management regulations, conducting risk assessments, examining musculoskeletal risk factors and performing health check-ups, and conducting walkaround inspections on the office building as a contractor (weekly) as well as joint health and safety inspections on subcontractors operating at our company (twice including the initial inspection performed in Q3). In 2022, our plan is to make improvements in line with the risk assessment results of the previous year, regularly convene the Occupational Health and Safety Committee, and conduct health check-ups, job trainings and risk assessments. In our capacity as a contractor, we will also continue with walkaround/joint inspections while reinforcing our health and safety operations by verifying subcontractors for their risk assessments and offering them guidance. In tandem with this, we will develop a response system to the Serious Accidents Punishment Act in preparation for its enforcement.

Operating the Occupational Health and Safety Committee

NC's Occupational Health and Safety Committee, composed of equal number of members from labor and management, meets regularly to discuss health and safety issues. The Committee consists of three members from labor and three members from management, including labor and management representatives, and serves to regularly share opinions on the prevention of occupational injuries, work environment review and improvement, and other health and safety measures in general. Work is underway to commission professional occupational health and safety organizations to provide all Committee members with training to bolster their health and safety competency. To promote our health and safety communications, we share the results of Committee meetings held and have opened our own wiki page for our internal occupational health and safety operations.

Workplace Safety Improvement

Between October and December of 2021, our Pangyo Office (Pangyo R&D Center, Alpharium Office) and NC Tower I received risk assessments performed by inviting external professional organizations. It was discovered that our overall average risk level was acceptable (8.12 for Pangyo Office, and 7.5 for NC Tower). In 2022, we plan to make improvements based on these risk assessment results, and this will lower our risk level to the Very Low range (3.65 for Pangyo Office, 3.1 for NC Tower). We are planning another round of risk assessments in the second half of the year to verify improvements made and check hazards and risk

Safe In-house Facilities

Our joint walk-around inspections are made at least guarterly to ensure the safety of our in-house facilities in conformity with the Occupational Safety and Health Act. In line with the increasing use of EVs, we are placing fire blankets to respond to fires involving EVs at the underground parking lot of our Pangyo R&D Center. For the Pangyo R&D Center itself, we plan to install a gastype fire extinguishing system to put out fires early on that occur within electric panels. Furthermore, we have distributed the NC Safety White Paper outlining emergency stairs and emergency instructions to follow in the event of a fire while consistently providing training to employees. We will introduce oxygen content measurements to ensure worker safety in the enclosed areas of machine rooms, and renovate the rest areas for our Facility Management service provider.

COVID-19 Support

Domestic

To ensure a company-wide response to COVID-19, NC operates the COVID-19 Working Group that consists of the HR Center, PH Center, and the Property Infra Division as well as COVID-19 wiki as an internal COVID-19 communication channel. Our companywide work arrangements are aligned with the government's social distancing policy, and our employees can apply for work-fromhome accommodations in consideration of their departmentspecific/individual work conditions. Our employees traveling overseas for business are provided with trip accommodations and meal expenses for the self-quarantine period. Since February 2022, the NC Medical Center has provided test kits and performed tests for the convenience and safety of our employees. In March 2022, the Center was designated as a medical institution for respiratory treatment, which made it possible for our employees to automatically register with the integrated system of the Korea Disease Control and Prevention Agency without the need to visit external clinics, hospitals or testing centers.

Overseas Subsidiaries

NC West Holdings and its subsidiaries supported employees with remote work arrangements, informed employees' families of proper response to COVID-19, a certain allowance and offered COVID-19 vaccination leave. NCJ provided upto three days of paid vaccination leave to encourage employees to get vaccinated. Those who tested positive were granted five-day paid leave, along with self-test kits, food and beverages delivered to their home. In addition, restrictions were lifted on the number of leave days for childcare/nursing care leave, which was previously five days. NC Taiwan implemented a work-from-home program on an as-needed basis in line with Taiwan's COVID-19 prevention guidelines and provided three-day paid leave to employees who were vaccinated. NC Taiwan also supported employees to pay for their PCR testing and offered self-test kits. NC Vietnam Visual Studio provided a certain allowance to employees on workfrom-home arrangements to help pay their electricity bills, along with participating in and sponsoring online activities to support COVID-19 patients.

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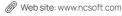
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NC Case: Respect for Diversity and Inclusion

Diversity and Inclusion Governance

NC West Holdings and its subsidiaries operate the Diversity, Equity, and Inclusion (DEI) Committee which consists of employees from HR, game development and other varying functions. The DEI Committee is chaired by the Chief People Officer (CPO) and joined by DEI program managers and HR Business Partners. The Committee meets monthly to review DEI performance and resolve relevant issues.

Employee Resource Groups (ERGs)

NCW created Employee Resource Groups (ERGs) managed by the DEI organization. ERGs enable employees from diverse backgrounds in terms of gender, disability, race, and orientation to engage in learning and mutual interaction. Currently, a total of four ERGs are under operation.

Female gamers

Employees with physical or psychological disabilities

Employees of color

LGBTQ+ employees

Advisory Councils

NCW operates Advisory Councils that attended by employees from diverse backgrounds to better address the issues of diverse and inclusive culture and ethics and to promote employee engagement.

Speak Up Survey / Slido

NCW conducts Speak Up surveys on a range of organizational issues including DEI as part of its efforts to continue with freeflowing communication and resolve DEI issues. The company also operates the Slido platform for employees to anonymously share ideas with management in the areas of DEI and career among others.

Planning Content in Celebration of International Women's Day

In commemoration of International Women's Day on March 8 of each year, our official blog posted series content designed for this meaningful day for two months between March and April 2022. This provided our female employees, who contribute to our game development and the creation of a corporate culture all while respecting diversity, with a chance to introduce their philosophy and work methods.

(Huen Pham Nya),

Lead 3D artist. Character Team NC Vietnam Visual

Studio

visuals." "As a lead artist, my top priority is always to ensure other artists freely share their different viewpoints. We will remain focused on character visuals and organizational culture that respect diversity."

"Catering to a wide array of tastes and preferences

of players definitely requires diversity in character

Hyomi Lim, Director of **Laughing Peanut** (NC's in-house daycare center)

"One of our goals at Laughing Peanut is to pave the way for our children to grow up to respect diversity. We are confident that children raised in such a culture will successfully grow to maturity while respecting the value of diversity and play a leading role in creating a discrimination-free and flourishing

The Originality Interview Series

For the past three years, our 'The Originality' series served to introduce our own employees recognized for their unrivaled excellence and enthusiasm. In 2021, we presented the stories of NC employees under the topic of 'diversity of experience' who are fully unleashing their potential on the strength of their own different talent and experience. This series featured the interviews made with employees working at NCW and NCVVS to help our employees understand diversity from the global viewpoint.

Trumph (Đăng Lê Minh Trung). Lead 3D artist. Character Team

NC Vietnam Visual Studio

NC West, Localization, Kieran Brewer

"Game localization is a sort of art in itself. We cross the boundaries of different regions, age groups, classes, gender, culture and sexual perceptions to move and inspire people. A game well localized is able to genuinely reach out to players coming from different cultural backgrounds. This is more than connecting all of us and serves as a window of communication to enable us to understand and appreciate ourselves just the way we are and how different we are."

"Differences breed excellence. When all team

members share one another's strengths rather than

working alone, this generates better outcomes. In

the end, anything that can't be done by myself can

be done only when I respect and trust other team

members for their strength."

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Governance

Governance Principles

Under the principle of transparent governance, we protect the rights and interests of wide-ranging shareholders and fulfill our social responsibility to create a wholesome growth system.

Stock and Capital Structure

NC's Articles of Incorporation stipulate that the number of authorized shares be 100,000,000 shares. As of the end of December 2021, the number of outstanding shares amounted to 21,954,022 common shares. Those shares issued by NC are all common stocks, and each share equally carries voting rights under the One Share One Vote rule. We provide sufficient corporate information in a timely and fair manner to protect the rights of all our shareholders. To make it easier for shareholders to exercise their rights at the Annual General Meeting of Shareholders, we have introduced and are operating an electronic voting system.

Composition of Shareholders

*As of Dec. 31, 2021

Shareholder	No. of Shares Owned	Ownership
Kim Taek-jin, CEO	2,628,000	12.0%
Treasury shares	1,646,583	7.5%
Netmarble Co., Ltd.	1,950,000	8.9%
National Pension Service	1,852,215	8.4%
Domestic investors	4,060,013	18.5%
Foreign investors	9,817,211	44.7%
Total	21,954,022	100.0%

Shareholder Return

While retaining a set amount of funds to finance new businesses and ensure the stability of our financial structure with an aim to improve long-term shareholder value, NC also implement a shareholder return policy with a focus on cash dividends to respect the shareholders' right to collect dividends. Our dividend payout ratio has remained in the 30% range since 2014. Aside from dividends, we have also repurchased our shares whenever deemed appropriate. In 2021, the combined sum of dividend payments and share buyback amounted to nearly KRW 300 billion.

To make our shareholder return more predictable and transparent, we announced our dividend policy for the next three years (allocating 30% of consolidated net income to cash dividend each year between 2022 and 2024 within the boundary allowed pursuant to the Commercial Law) under the fair disclosure system in February 2022.



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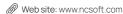
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*As of May. 2022

Governance

Operation of the BOD

Our Board of Directors (BOD) serves as the highest decisionmaking body to decide on and oversee major business issues to maximize our long-term growth and corporate value. Our BOD consists of a majority of outside directors to ensure functional independence and objectivity from senior management, and is provided with various types of access to information to effectively perform its function in making business decisions and overseeing our business operations. NC demands that all directors, including auditors, faithfully fulfill their mandate as a member of the BOD. In 2021, the average BOD attendance was 98%.

Independence and Efficiency of the BOD

The Board of Directors consists of a majority of outside directors to perform independently of top management. Directors bring their extensive expert knowledge and experience, and are provided with various types of support to make fair and reasonable decisions. We identify necessary improvements to help bolster the function of the BOD in its operations, and continuously make such improvements.

As of May 2022, there are a total of five outside directors, and two of them are women. Auditors and other outside directors are required to faithfully perform their work as members of the BOD, and they can only assume a position at one other company aside from NC.

Expertise and Diversity of the BOD

Our BOD is composed of experts in diverse fields - business administration, law, accounting/finance, HR, M&A, and industrial technology among others. Notably, Hwang Chan-hyun, an outside director, is a renowned expert on legal risk management, having served as the Chief President Judge of the Seoul High Court, the President of the Daejeon District Court, and the Chairman of the Board of Audit and Inspection. Chung Kyohwa, an outside director appointed this year, brings her far-reaching expertise in legal risk management spanning cross-border legal reviews and field experience in the tech industry. Baek Sang-hoon, another outside director, is recognized for his accounting/tax/financial expertise, having served as an advisory at domestic and global accounting and law firms for over two decades. We do not discriminate director candidates on the grounds of gender, race, religion, politics, and culture in their appointment process, and ensure equal representation across diverse professions. As of May 2022, our BOD consisted of seven directors, and the number of independent directors amounts to five (71% of total), and to six when one non-executive director is counted (86% of total). Out of five outside directors, two are females, and we preemptively act to improve the diversity and transparency of our highest decision-making body.

Committees under the BOD

*As of Mar. 2022

Committee	Responsibility	Members
Audit Committee	Oversee the work of directors and management perform audits on overall business operations including financial status	Chair: Outside director Member: 2 outside directors
Outside Director Recommendation Committee	Verify the qualifications of outside director candidates and set appointment principles. Nominate outside director candidates to the Annual General Meeting of Shareholders based on their expertise and independence	Chair: Outside director Member: 2 outside directors
Compensation Committee	Deliberate on and approve the limit of compensation for directors to be proposed to the Annual General Meeting of Shareholders. Review and approve the appropriateness of employee compensation	Chair: Non- executive director Member: 2 outside directors

Composition of the BOD

Category	Name	Gender	Expertise	Also Serving as	Participation in Board Committees	Term Expiration Date
Executive Director	Taek-Jin Kim	Male	General management	CEO & President, NCSOFT	Chairperson of the BOD	Mar. 30, 2021 ~ Mar. 29, 2024
Other Non- executive Director	Byeong- Mu Park	Male	M&A, Investment	President, VIG Partners	Chair of the Compensation Committee	Mar. 30, 2022 ~ Mar. 29, 2025
Outside Director	Guk-Hyun Cho	Male	Organization, HR	Professor, College of Business, Hawaii Pacific University	Member of the Audit Committee	Mar. 25, 2020 ~ Mar. 24, 2023
	Young-Ju Choie	Female	Industrial technology	Professor, Department of Mathematics, POSTECH	Member of the Outside Director Recommendation Committee, Member of the Compensation Committee	Mar. 25, 2020 ~ Mar. 24, 2023
	Chan- Hyun Hwang	Male	Law, Risk management	Co-CEO, Lawfirm Class	Chair of the Audit Committee, Chair of the Outside Director Recommendation Committee	Mar. 30, 2021 ~ Mar. 29, 2024
	Sang-Hoon Baek	Male	Accounting, Tax, Finance	CEO, BnH Tax	Member of the Audit Committee, Member of the Compensation Committee	Mar. 30, 2022~Mar. 29, 2025
	Kyo-Hwa Chung	Female	Law, Risk management	Director, Legal at Netflix (Korea General Counsel)	Member of the Outside Director Recommendation Committee	Mar. 30, 2022~Mar. 29, 2025

^{*} In the Republic of Korea, it is prohibited pursuant to Article 34 of the Enforcement Ordinance of the Commercial Law that outside directors serve as a director, an auditor or an executive at two or more other companies outside the concerned listed company. As of May 2022, all our outside directors are compliant with this provision.

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Remuneration of Directors

The remuneration limit of directors is set within the boundary approved by the Annual General Meeting of Shareholders in consideration of sales, operating profit and other objective performance indicators in line with our 'high-performance, highcompensation' principle. The Compensation Committee decides on the operational standards and the level of remuneration.

Remuneration for Directors in 2021

(unit: No. of persons, KRW million)

Director	No. of Persons	Total Remuneration	Average Remuneration per Person
Registered directors (excluding outside directors and member of the Audit Committee)	2	11,086	5,543
Outside directors (excluding members of the Audit Committee)	2	169	84
Members of the Audit Committee	3	252	84

Outside Director

Appointment Process

The Outside Director Recommendation Committee solely composed of outside directors independently nominates outside director candidates following in-depth verifications. Agenda items concerning the appointment of outside directors are proposed individually by candidate, and their appointment is finalized through the decisions made at the Annual General Meeting of Shareholders.

Outside Director Candidate Nomination Criteria

Criteria	Description			
Legality	Satisfy qualification set by applicable regulations			
Independence	Make decisions independent of the Company and related parties			
Expertise	Possess expertise to contribute to the Company and add to the competency of other BOD members			
Sincerity	Invest sufficient time and effort in performing one's work			
Objectivity	Represent the rights and interests of all stakeholders in ar impartial manner			
Ethical Demonstrate an exemplary and responsible work ethic responsibility				
Diversity	Consider the diversity of all BOD members in terms of gender age and/or nationality			

Support for BOD Operations

Our BOD support organization provides outside directors with the information and resources necessary to fully understand and review the agenda items to be addressed at BOD and committee meetings, and conduct briefings on major agenda items along with capacity building training. Furthermore, it is stipulated that related employees and/or outside affiliates may attend BOD meetings to provide their feedback on specific agenda items when deemed necessary pursuant to the BOD regulations.

Training Provided in 2021

Training	Target	Purpose	Time	
Internal accounting control system	Employees working in relation to the internal accounting control system - Global CEO - Members of the Audit - CFO, etc.	Provide employees with training on 'the internal accounting control system and its legal requirements, and new accounting standards' in line with the amended External Audit Act and best practices on the internal accounting control system	Nov.10, 2021	
Understanding ESG and BOD oversight	Outside directors	Provide the information and resources necessary for outside directors to perform their job in accordance with corproate governance reports and KCGS G30 guides	Nov. 19, 2021 ~ Dec 18, 2021	

Director Activity Assessment

Our outside directors nearing the end of their tenure are comprehensively assessed for their attendance at BOD meetings, their contributions made to discussing BOD agenda items through reviews and highly effective suggestions, their offering of appropriate advice to making major business decisions as an expert in their own field, and other contributions. Relevant regulations and evaluation procedures for outside directors are currently in preparation and we plan to implement them after thorough analysis, including advantages and disadvantages, and the usability.

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Ethical Management

NC's Code of Ethics

NC ensures that its employees comply with the Code of Ethics as a guide to help navigate their professionalism in conduct and in the making of value judgements. In June 2021, the Code was amended to include more stringent provisions to discourage hateful, deriding or demeaning expressions made on the grounds of nationality, gender, race, religion or place of origin as well as to prevent workplace harassment.

NC's Co	stablished Feb. 4, 2009				
		Amended Dec. 31, 2014			
		Amended Jun. 14, 2021			
Article 1	Purpose				
Article 2	Article 2 Protection of customers and others				
Article 3	Article 3 Compliance with laws and internal regulations				
Article 4 Sharing of corporate values and safeguarding the value of dignity					
Article 5	Work ethics				
Article 6	Mutual trust and cooperation among employees				
Article 7	Confidentiality and information security				
Article 8	Protection of corporate assets				
Article 9 Transparent management of finances and expenses					
Article 10	e 10 Upholding integrity and professionalism in business conduct				
Article 11	Prevention of conflicts of interest				
Article 12	Public relations for media and others				

In preventing bribery and corruption, Article 10 of the Code stipulates provisions that prohibit any and all corruptive practices that undermine fairness and integrity by accepting, requesting or providing unjustified gains including money & valuables, gifts or entertainment. To commit ourselves to abiding by and practicing the Code of Ethics, all our employees sign the ethics pledge each year. In the first half of 2022, we received on-line ethics pledge consent from all our employees and are planning to enact and disclose a new Code of Ethics in the future.

Compliance and Ethical Management Organization

NC newly appointed the Chief Legal Officer (CLO) and placed the Ethics & Compliance Division and the Legal Division under the CLO to consistently bolster our ethics and compliance management on the strength of our legal expertise.

The Ethics & Compliance Division is operated to systematically advance ethics management. The Division consists of the Ethics & Compliance 1 Team and the Ethics & Compliance 2 Team responsible for performing internal audits on overall business operations and on information security, game services, and other IT operations respectively as well as the Compliance Team in charge of compliance control and support in general. The Division regularly reports compliance support activities to the BOD each year, and reports to the Audit Committee quarterly on major audit plans and the progress made on audit work. Non-compliance with the Code of Ethics is reported to the Audit Committee on a guarterly basis. Reports submitted to the Committee outline the issues discovered as a result of audits and action plans to remedy such issues.

In August 2021, compliance support activities were reported concerning compliance review, IT compliance, and legal due diligence for subsidiaries to improve the overall ethics-related process. Upon being briefed, directors requested that improvement measures be taken

At NCW, the Compliance & Ethics Review Committee (CERC) serves to manage and review ethical management and corruption issues. The CERC consists of three high-level executives in Senior Vice President (SVP) positions, including its Chief of Staff and General Council. Its mandate is to perform internal audits on non-compliance with the company's anti-bribery and anti-corruption policy as stipulated as 'unethical practices' within Emloyee which stipulates the code of Ethics guidelines for NCW employees as well as with the principles of 'fair business conduct' of the Ethical Partnership Statement of Principles.

BOD Report in August 2021

- 1 Create the Compliance Team under the Ethics & Compliance Division as a dedicated compliance support organization to bolster ESG and compliance operations
- 2 Amend the Code of Ethics and add new provisions
- Maintain operational neutrality to actively respond to emerging social issues and changing external/internal conditions
- Prohibit demeaning or conflict-triggering expressions made on the grounds of nationality, gender, race, religion or place of origin
- Prohibit any unjustified discrimination against other employees and other unreasonable measures
- 3 Provide internal ethics training on the amended Code of Ethics: 6 times per year for new hires, quarterly for newly-appointed team leaders

Ethics and Anti-Corruption Audits



· Purpose: Verify compliance with processes and internal regulations and audit the appropriateness of

: Non-compliance with the Code of Ethics and overall internal regulations and general work processes

Yearround audits

- · Purpose : Monitor non-compliance with major regulations
- Target : Data breaches, corruptive procurement practices, wrongful use of company credit cards, etc.

Ad-hoc audits

- Purpose : Audit regulatory non-compliance issues brought to our attention through whistleblowing, identification or requests for investigation
- : Non-compliance with the Code of Ethics and any other internal regulations

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Ethical Management

Improving Employees' Ethics Awareness

Training on Code of Ethics

In November 2021, we conducted ethics training to provide an overview of our Code of Ethics for all employees (including contract workers, dispatched workers and interns). Also, newly-appointed authorized and responsible team leaders are provided with tailormade Code of Ethics training befitting their position on a quarterly basis. New recruits are trained on the Code of Ethics compulsory to their position.

In June 2022, we conducted ethics training in workplace bullying, prohibition on insider trading, and prohibition on dual office-holding for all employees (including contract workers, dispatched workers and interns).

Company-wide Compliance Training

We provide all employees with compulsory training on the prevention of sexual harassment and the improvement of perceptions on disability on online platforms on a regular annual basis. This comes in tandem with our internal compliance training including ethical training which addresses the prevention of workplace harassment and other issues, information security training, and open source license training. Specifically, we are expanding training for leaders to help them set an example in embedding compliance into our day-today work.

Training Provided

Target	Major content	Cycle	
New Hire	Internal ethics regulations fundamentally critical for new hires (with a focus on cases)	6 times per year (separate annual training for employees hired through oper recruitment)	
Newly-appointed Team Leader	Internal ethics regulations fundamentally important to new leaders	Quarterly	

Legally Mandatory Training Provided

Program	Target	Completion
Prevention of sexual harassment	Allemployees	Annual
Improvement of perceptions on disability		
Data privacy	Employees handling personal data	

NC Ethics Training Participants in 2021

Target	Ethics Training Participants (unit: No. of persons)		
Executives	75		
Full-time employees	4,367		
Contract workers	252		
Dispatched workers	4		
Total	4,698		

Internal Training Provided

Program	Target	Completion
Prevention of workplace harassment	All employees	Annual
Information security		
Use of open source licenses	Employees in relevant job categories/positions	Biennial
Ethics	All employees	Annual

Disseminating Our Ethics/Anti-Corruption Policy across the Supply Chain

Partner Selection and Management

To build sustainability into our supply chain, we make it mandatory for all our partners to submit their integrity pledge in selecting partners. Our service contract includes provisions on 'compliance with contractual integrity' to prohibit any provision of or request for bribes, and specifies that non-compliance with such provisions may result in contract termination and/or other disadvantages.

We have developed competitive contract operational standards to elaborate on relevant details to select and manage partners in conformity with fair procedures, and make them available on our internal website to raise employees' awareness and guide their compliance with the set procedures.

To ensure more systemic partner management, we plan to establish an assessment system for major partners and develop management plans to build win-win partnerships. In the second half of 2022, we aim to amend our guidelines for the anti-graft law and create guidelines to follow when receiving gifts from partners.

NCW 'Ethical Partnership Statement of Principles'

NC West Holdings has established the Ethical Partnership Statement of Principles which specifies that the company ensures safe working conditions, fair business practices, diversity & inclusion, environmental responsibility, respect for customers, and positivity on the part of potential partners in initiating new partnerships to extend the scope of its ethics policy to business partners and investee companies, while circulating these principles among its own and subsidiary employees.

In signing a contract with business partners, the company also request that these partners provide their consent to the NCW Integrity Pledge based on the Ethical Partnership Principles. NC West Holdings conducts Ethical Partnership Due Diligence Surveys in acquiring or investing in companies to assess their ethical management performance.

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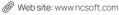


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Internal/External Whistleblowing Policy and Whistleblower Protection

We operate whistleblowing channels to report any unethical or unfair practices on the part of our employees. These channels are open to external stakeholders including partner employees as well as our own employees, and whistleblowers can choose to remain anonymous. To protect whistleblowers, the personal data of whistleblowers and their reports are encrypted when submitted to the Clean Report Center. We also protect the confidentiality of whistleblowers and offer rewards in conformity with the Whistleblower Protection Act and relevant ordinances. The identity of whistleblowers and their reports remain confidential in accordance with relevant laws and internal regulations, and whistleblowers are eligible for protection as stipulated by the Act and other related regulations. We also ensure that whistleblowers do not suffer any disadvantage for their reports or the act of whistleblowing. All such whistleblower protection measures and principles are specified on our NC Tong and Clean Report Center websites.

In 2021, a total of 87 reports were submitted through these channels (15 on regulatory non-compliance and 72 on other grievances), and necessary measures were taken on all of these reports.



External: Clean Report Center

External stakeholders are able to submit whistleblowing reports on non-compliance with laws or internal regulations and corruptive practices on the part of NC employees. Sanctions, process improvements and other necessary measures are taken following the investigations into such matters.



Internal: NC Tong

This internal channel collects reports on corruptive practices, grievances, and institutional improvement ideas from our employees. Grievances or complaints are communicated to relevant departments, which are then provide their feedback while reports on corruptive practices are addressed through investigations, followed by sanctions and/or process improvements.

NC Tong Process1)





Case Submission

- · Collect corruptive practices, grievances or policy proposals through nano NC Tong (PC/mobile)
- When investigations through official reporting are not feasible, only simple counseling is
- · Immediately start investigations upon receiving reports (given consent from the whistleblower)



Counseling

- · Identify an outline of the event and the needs of the whistleblower
- · When the case concerns gender issues such as sexual harassment, make sure at least one female investigator is involved



Investigation

Grievances, policy proposals

- · Verify factual grounds by the responsible body (grievance handling committee members, relevant departments, etc.)
- · Review proposals for their feasibility and the need for improvement

Corruption

- · Investigate the victim, the perpetrator and
- · When objective evidence (recordings, e-mails or messages that illustrate specific damages) is present, investigation could be expedited
- · When the victim needs protection, take appropriate measures including relocation and paid leave according to applicable laws



Action

· Notify handling outcomes

If corruption is substantiated

- · Take action pursuant to applicable laws including disciplinary actions against the perpetrator and
- · When the victim requests, take appropriate measures including relocation, transfer, and paid leave according to applicable laws



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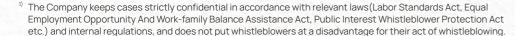
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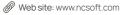
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Materiality Assessment

GRI Standards index

Independent Assurance Statement

Greenhouse Gas Verification Report



Materiality Assessment

Materiality Assessment Process

Step. 1 Issue Pool Creation for 2021

Analyze internal/external environments including global sustainability management standards, major industry topics and pending internal management issues in order to create a pool of 18 issues in total in the ESG area

Internal environmental analysis

- Vision and strategy analysis : Major items on I&M REPORT
- Major internal issues : Materials shared through internal media
- Stakeholder survey: Materiality assessments performed on NC employees for respective issues (Apr. 20. 2022 - Apr. 26. 2022)

External environmental analysis

- Media research: Analysis of 477 news articles generated by major domestic media outlets in relation to NC in 2021
- Industry benchmark: Analysis of issues reported by 6 industry peers who are ESG leaders
- Global standards: Review of ESG standards and initiatives (MSCI, SASB, KCGS, etc.)

Step. 2 Issue Analysis and Materiality Assessment

Perform materiality assessments on impact on NC's sustainability management and its business relevance on the basis of 360-degree analysis results

Evidence of 'Social Concern'

Stakeholders and social impact & pressure

Evidence of 'Financial'

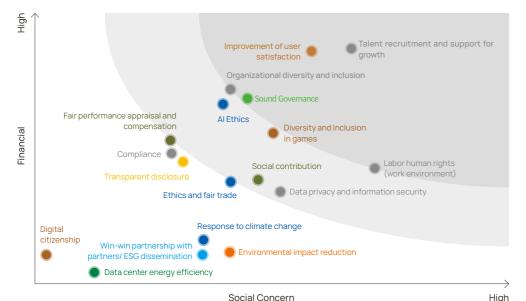
Business impact and strategic priorities

Prioritization



Generate results from materiality assessments

Materiality Matrix



High The is

Materiality Mapping

Ran	king (YoY) Material Issue		(YoY) Material Issue GRI Standards SASB 2)		Stakeholder
1	↑(4)	Talent recruitment and support for growth	401: Employment 404: Training and Education	Non-SASB	Employees
2	↑(8)	Improvement of user satisfaction	Non-GRI	Non-SASB	Users
3	↓(2) ¹)	, , , , , , , , , , , , , , , , , , , ,		Recruiting & Managing a Global, Diverse & Skilled Workforce	Employees
4	↑(7)	Sound governance	102-18: Governance	Non-SASB	All stakeholders, employees
5	↓(1)	Labor human rights (work environment)	5		Employees, partners
6	↑ (13)	Al Ethics	Non-GRI	Non-SASB	All stakeholders
7	↓(2) ¹)	Diversity and inclusion in games	Non-GRI	Non-SASB	Users
8	↑(9)	Data privacy and information security	418: Customer Privacy	Data Privacy & Freedom of Expression, Data Security	Users, governments
9	↓(5)	CSR	R 413: Local Communities Non-SASB		All stakeholders
10	↓(3)	Fair performance appraisal 405: Diversity and Equal Opportuni and compensation		Non-SASB	Employees
11	↓(5)	Ethics and fair trade	102: Ethics and Integrate 205: Anti-Corruption	Intellectual Property Protection & Competitive Behavior	Employees, partners

¹⁾ The issue of diversity & inclusion of 2020 was further segmented into the organizational and game categories.



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²⁾ TECHNOLOGY & COMMUNICATIONS SECTOR, SOFTWARE & IT SERVICES

ESG-Related Policies

Human Rights Management Declaration

Overview

NCSOFT dreams of a bright future where we are all connected by joy. We ceaselessly push the boundary and continue with technology innovation to create a brighter future. We believe that technology should be used in a way to benefit all and improve that technology forms an inseparable part of our life today, NCSOFT endeavors to minimize factors that may arise in its business conduct to cause human rights infringements.

Goal

We respect the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, and the ILO (International Labor Organization) Declaration that are universally applied across the global community, and will comply with them in protecting the human rights of our employees, partners, users and local communities.

Boundary

NCSOFT's human rights management declaration covers employees at the headquarter and its subsidiaries. We further recommend that our partners also abide by the principles set within this declaration to disseminate the value of respecting human rights.

Principles

NCSOFT fully prevents any incident of human rights infringements for its employees, users, partners and members of local communities, and takes prompt action in the event of any issue.

1. Respect for the Human Rights of Employees

- We do not tolerate discrimination in any way, shape or form. We provide a work environment that does not discriminate on the grounds of gender, age, birthplace, academic background, religion, marital status, sexual identity, faith or disability, etc.
- We ban forced labor performed against one's own free will, and prohibit child labor.
- We provide reasonable compensation in accordance with fair procedures, and endeavor to create a safe and pleasant work environment

2. Respect for the Human Rights of Users

- We work to create a safe and joyful service environment for our
- We ban discriminate against any user on the grounds of gender, age, birthplace, academic background, religion, marital status, sexual identity, faith or disability.
- We fully comply with personal data regulations, and archive and store such data as required by applicable laws. We also thoroughly manage personal data we collect to prevent any leaks.

3. Respect for the Human Rights of Partners

- We do not exercise unjustified influence by leveraging our position of dominance in our relationship with our partners, and strive to establish fair transaction relationships.
- We fully assist partners in practicing and working together on human rights management.
- We promptly identify human rights infringements, should such issues occur in our relationship with partners, and work together to find solutions.

4. Respect for the Human Rights of Communities

- We ensure that the human rights of community members are protected in the course of our business conduct.
- We will engage in diverse CSR activities to support the underprivileged and future generations to pursue wholesome growth with local communities.

Human Rights Management Processes

NCSOFT will assist the swift resolution of grievances through relevant departments, should any such grievances be raised in relation to human rights, and protect the identity of whistleblowers.

We will revise this declaration whenever deemed necessary in line with shifting conditions in the internal and external environment.



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ESG-Related Policies

Our Policies on the Acceptance of Bribes and/ or Involvement in Corruptive Practices

Code of Ethics for Employees (amended on Jun. 14, 2021)

Article 10

(Upholding integrity and professionalism in business conduct) Paragraph $\ensuremath{\mathfrak{D}}$ and $\ensuremath{\mathfrak{3}}$

NC employees do not accept, request, or provide bribes, gifts, entertainment and/or any other unjustified gains or make any promises to do so for themselves or third-parties in the course of performing their work, and do not engage in any other corruptive practices that impact their ability to unjustified gains are provided or received without knowledge on the part of NC employees, such incidents are immediately reported to the head of the associated department or the audit department for further details.

Our Policies in Relation to Diversity & Inclusion

Code of Ethics for Employees (amended on Jun. 14, 2021)

Article 4

(Sharing of corporate values and safeguarding the value dignity)
Paragraph ②

NC employees take an impartial approach to handling their work and do so without prejudice towards specific interest groups, social issues or invoke a conflict on the grounds of nationality, gender, race, religion or birthplace.

Article 6

(Mutual trust and cooperation among employees)

Paragraph (1)

NC employees do not discriminate or take any action that would disadvantage their colleagues without reason on the grounds of gender, marital status, pregnancy or giving birth.

Our Policies in Relation to Fair Trade Principles

Code of Ethics for Employees (amended on Jun. 14, 2021)

Article 3

(Compliance with laws and internal regulations)

Paragraph 1

NC employees comply with general laws and regulations in the countries and regions where the Company conducts business and respect the market principle of fair and free competition.

Article 10

(Upholding integrity and professionalism in business conduct) Paragraph $\ensuremath{\mathfrak{I}}$

NC employees ensure that the Company engages in fair competition under sound market economy principles, and do not exercise undue influence by exploiting the advantage of the Company's dominant position.

Our Health and Safety Management Guidelines

We place health and safety management above all else, and do our utmost to provide a wholesome and safe work environment to all employees and establish a health and safety management system.

- We place health and safety management above all else in business operations to pursue continuous improvement and enhancement with a goal of establishing a health and safety management system.
- We faithfully comply with occupational health and safety laws and regulations as well as other safety-related regulations to strengthen our health and safety capabilities.
- We proactively identify hazards and risk factors, and take action to reduce risks to sincerely place prevention at the center of our occupational health and safety management.
- 4. We assign necessary roles and responsibilities to respective actors for systemic and efficient health and safety management, and practice self-directed safety on the basis of proactive engagement and cooperation or all employee.



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ESG-Related Policies

Environmental Management Policy

Chapter 1

Business Overview

NCSOFT (NC hereinafter), as a global IT company developing and delivering online and mobile game software, provides customers with digital entertainment services, including game content, software, and sports content. NC is committed to meeting the demands of customers, employees and the global community in resolving environmental challenges by leveraging its information technology.

Chapter 2

Overview of the Environmental Management Policy

NC is aware of the importance of the environment and the ethical responsibility it bears as a business, and has established a responsible and sincere environmental management policy as part of its long-term commitment.

Chapter 3

Implementation Principles for Environmental Management

 NC recognizes its environmental impact, develops response measures, and engages in on-going management and monitoring.

Category	Cause behind Environmental Impact	Our Response
Respond to Climate change	GHG emissions generated from electricity and other energy consumption	Increase the use of clean energy and switch to energy efficient facilities in operating buildings and offices Encourage employees to reduce energy consumption and arrange conducive daily facilities
Conserve clean water resources	Water discharged from employee consumption, including in the office	Comply with laws and regulations concerning water treatment Install a gray water system to reuse such water after the self-treatment of domestic sewage Switch to water-saving facilities
Recycle Natural resources	Waste discharged including end-of-life IT assets and waste generated from the office	Manage waste discharge through registered recycling companies

- 2. NC considers the environment in developing technology and delivering services.
- NC complies with the environmental laws and regulations in the countries where its offices and data centers are located.
- 4. NC provides employees with environmental training and information, and encourages them to participate in environmental protection.
- 5. NC transparently discloses its environmental performance through sustainability reports and other corporate media.

Chapter 4

Environmental Management System

The ESG Steering Committee, attended by NC's top management, is mandated to manage, oversee and make decisions on the environmental management policy. The ESG Management Division is exclusively responsible for the working-level implementation and operation of environmental management.

Chapter 5

Purpose and Scope of the Environmental Management Policy

NC's environmental management policy aims to present action principles for its environment-friendly management and to transparently disclose its management system for policy implementation to the general public.

This environmental management policy applies to NC's entire business operations, from product R&D and launching to customer support, and may apply to NC's supply chains and business partners in general within the same scope.



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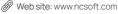
• ESG-Related Policies

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Universal Standards (GRI 100)

Standard	Disclosure		Description					
GRI 102:	102-1	Name of the organization	NCSOFT Corporation (referred to as N	NC within the report as the name o	f the organization)			
General Disclosures 2016 Organizational profile	102-2	Activities, brands, products, and services	Introduction on Lineage and other IP and content on p.5					
	102-3	Location of headquarters	12, Daewangpangyo-ro 644-geon gil, Bundang-gu, Seongnam City, Gyeonggi Province, Korea, 13494 (zip code) Korea, North America, Europe (UK), Japan and Taiwan					
	102-4	Location of operations						
	102-5	Ownership and legal form	Legal form: Limited company					
			Shareholders with 5% or more owner - Taek-Jin Kim: 2,628,000 shares, 11 - Public Investment Fund ¹⁾ : 2,032,41 - Netmarble: 1,950,000 shares, 8.99 - National Pension Service: 1,852,21 1) Data on Public Investment Fund is a	.9% 1 shares, 9.3% % 5 shares, 8.4%	0, 2022			
	102-6	Markets served	Geographical locations where products and services are provided: More than 60 countries across the globe, including Korea, North America, Europe, Japan and Taiwan, on p.227 of the 25th Period Annual Report					
			Industry: Online and mobile game sof Type of customers and beneficiaries:					
	102-7	92-7 Scale of the organization	(unit: KRW 100 million)	2019	2020	2021		
			Sales	17,012	24,162	23,088		
			Net income	3,592	5,866	3,957		
			Assets	33,464	40,812	45,819		
			Liabilities	8,342	9,365	14,307		
			Equity	25,122	31,447	31,512		
			*Based on consolidated financial statements	3				





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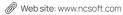
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Universal Standards (GRI 100)

Standard	Disclosure		Description						
GRI 102:	102-8	Information on employees and other workers	Item (unit: No	Item (unit: No. of persons) 20			2019	2020	2021
General Disclosures 2016				Total 1)			3,762	4,231	4,627
Organizational profile	-	By gender	Male			2,566	2,866	3,084	
			Female			1,196	1,365	1,543	
			By contract	Regular	Total		3,646	4,094	4,462
			type		Male		2,523	2,803	3,002
					Female		1,123	1,291	1,460
				Non-regular	Total		116	137	165
					Male		43	63	82
					Female		73	74	83
					Contract	Total			161
						Male			81
						Female			80
				Dispatched	Total			4	
					Male			1	
		1) -			Female	-	-	3	
	100.0		¹⁾ Based on the headquarters						
	102-9	Supply chain	Product: H/W, S/W, supplies, consumables, event items, etc.						
			Service: Manufacturing, development, advertising, construction, maintenance, events, etc. None						
	102-10	Significant changes to the organization and its supply chain							
	102-11	Precautionary principle or approach	NC respects	the value of	nature and life	e in advancing e	environmental management.	We voluntarily measu	red our energy
			consumption and GHG emissions and disclosed the data through this report, independent of the government's GHG						
			$regulations ^{1)}, and \textit{ will move beyond such disclosures to set our own target and proactively work to reduce our emissions}. \\$						
			We fully concur with the Precautionary Principle to consider our potential environmental impact, and work is underway						
			to ensure that our new office building to be completed by 2026 is a green building by embracing renewable energy even from the design phase.						
			¹⁾ of the end of 2021, NC is not subject to the Korean government's GHG emissions trading system nor GHG/energy target management system						
	102-12	External initiatives	None						,
	102-13	Membership of associations	Our member	ship at game	associations o	n p.42			
GRI 102:	102-14	Statement from senior decision-maker				ommittee on p.8	8		
General Disclosures 2016			,	J	3 -				
Strategy									





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Universal Standards (GRI 100)

Standard	Disclosure		Description			
GRI 102: General Disclosures 2016 Ethics and integrity	102-16	Values, principles, standards, and norms of behavior	Core value on p.9, Corporate governance principles on p.53, Code of Ethics on p.56, ESG-related policies on p.6			
•	102-17	Mechanisms for advice and concerns about ethics	Internal/external whistleblowing policy and whistleblower protection on p.58			
GRI 102: General Disclosures 2016	102-18	Governance structure	ESG Steering Committee or	n p.9, BOD operation on p.54		
Governance	102-20	Executive-level responsibility for economic, environmental, and social topics	Chairperson's Message- ESG Steering Committee on p.8, ESG Steering Committee on p.9			
	102-22	Composition of the highest governance body and its committees	Committees under the BOD on p.54			
	102-23	Chair of the highest governance body	BOD operation on p.54			
	102-24	Nominating and selecting the highest governance body	Director appointment process on p.55			
GRI 102: General Disclosures 2016	102-40	List of stakeholder groups	Shareholders & investors, users, employees, partners, central & local governments, communities, etc.			
Stakeholder engagement	102-41	Collective bargaining agreements	None			
	102-42	Identifying and selecting stakeholders	NC classifies any and all who directly/indirectly interact with the Company as stakeholders.			
	102-43	Approach to stakeholder engagement	Stakeholder	Communication channel		
			Shareholders & investors	Official website / Annual General Meeting of Shareholders / Quarterly earnings releases Conference calls / NDR (Non-Deal Roadshow) / One-on-one meetings / Disclosures		
			Users	Official website / One-on-one inquiries through the customer center Official blog and social network channels (Facebook Youtube, Instagram) Customer counseling via e-mails/phone communications Disclosures		
			Employees	• In-house portal • Null • nanowiki • NC Tong counseling center • I&M REPORT (Townhall meetings)		
			Partners	Integrated procurement system • Clean Report Center • Disclosures		
			Central & local governments	Official website • Disclosures • Public service support activities		





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Universal Standards (GRI 100)

Standard	Disclosure		Description
GRI 102: General Disclosures 2016 Stakeholder Engagement	102-44	Key topics and concerns raised	In December 2021, the Korea Association of Game Industry implemented the <amendment a="" create="" culture="" doctrine="" game="" regulatory="" the="" to="" voluntary="" wholesome=""> with key provisions on the extension of scope of probability disclosures for stochastic items. The amendment was created based on the needs of game users and the suggestions made by the voluntary regulation evaluation committee, and primarily demands that the scope of applications be expanded and strengthened and the display of probability information be diversified. In preemptively responding to this, NC has consecutively applied the amendment to all its games from Q3 of 2021. In January 2022, we received the voluntary regulatory certification audits performed by the Game Self-Governance Organization of Korea on probability disclosures for in-game stochastic items to evaluate a total of 12 games for their compliance across seven audit categories, including probability disclosures on capsule, reinforcement and synthesis type content, and were successfully certified. We will do our utmost to create a wholesome game culture and gain greater trust from game users.</amendment>
GRI 102: General Disclosures 2016	102-45	Entities included in the consolidated financial statements	p.303~304 of the 25th Period Annual Report
Reporting Practice	102-46	Defining report content and topic boundaries	Financial performance is presented on a consolidated basis, and sustainability performance (on society and the environment) focuses on NC. For a portion of the social and environmental performance, the scope extends to subsidiaries in Korea and overseas. *The quantitative social and environmental data outlined in this report concern the activities and achievements of NC's main worksites - the Pangyo R&D Center, Alpharium Tower 1, Alpharium Tower 2, and the data centers leased by NC - and fully align with the reporting scope on a non-consolidated, NC-only basis.
	102-47	List of material topics	Labor human rights (work environment), diversity & inclusion, fair performance appraisal and compensation, talent recruitment and support for growth, CSR activity, data privacy and information security, Al ethics, etc.
	102-48	Restatements of information	Energy consumption and GHG emissions (reason: extended scope of management)
	102-49	Changes in reporting	N/A
	102-50	Reporting period	Jan. 1, 2021 ~ Dec. 31, 2021, including performance for H1 2022 for a portion of the data
	102-51	Date of most recent report	First publication in 2021
	102-52	Reporting cycle	Annual
	102-53	Contact point for questions regarding the report	ESG Management Division at the Brand Strategy Center (E-mail: esg@ncsoft.com)
	102-54	Claims of reporting in accordance with the GRI Standards	GRI Standards 'Core Option'
	102-55	GRI Content Index	GRI Index on pp. 64~76
	102-56	External assurance	Independent Assurance Statement on p.78 Greenhouse Gas Verification Report on p.79
GRI 103:	103-1	Explanation of the material topic and its boundary	NC's Diversity & Inclusion framework on p.12, Information security and data privacy management system on p.22, NC's Al
Management Approach 2016	103-2	The management approach and its components	ethics framework on p.28, NC Cultural Foundation on p.39~40, Care for employees on p.46~52, Materiality assessment
	103-3	Evaluation of the management approach	on p.60, ESG-related policies on p. 61~63



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Topic-specific Standards (GRI 200)

Standard	Disclosure		Description							
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	Category (unit: KRW million)	Stakeholder	Item	2019	2020	2021		
Economic Ferromaneo 2010			Value created	Customers (users and others)	Operating profit	1,701,185	2,416,184	2,308,817		
			Value distributed	Partners	Payment feeds, advertisement expenses and other expenses paid to partners from operating expenses	516,140	726,375	889,269		
				Employees	Wages paid, training expenses	573,558	737,109	880,509		
				Shareholders & investors	Total dividends paid, interest expenses	115,990	185,172	132,174		
				Central & local governments	Income tax expenses, and utility charges, water, power, gas, and fuel expenses	153,469	240,011	120,663		
				Communities	Donations made	15,775	19,086	7,160		
	201-2	Financial implications and other risks and opportunities due to climate change	*Based on consolidated financial statements As our main source of profits lies in selling games and content provided on online and mobile platforms, our energy sity (Scope 1 & 2 energy consumption against sales) in the product/service development and manufacturing phase atively low compared to that of other industries. In addition, climate-induced physical risks or transition risks do not a critical impact on the use of games and/or content. It is noted, however, that global energy demand continues and efforts made on the national and international levels to deliver on the commitment to respond to climate of including Net Zero declarations, may incur energy production costs and eventually result in increases in electricical and indirect energy costs along the value chain.							
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	No wage disparitie	s for new hires or	n the grounds of gender					
	202-2	Proportion of senior management hired from the local community	15.9% ¹⁾ 17 Reporting scope: NC West Holdings, NC Japan KK, NC Taiwan Co., Ltd., and NC Vietnam Visual Studio Co., Ltd							
GRI 203: Indirect Economic Impacts	203-1	Infrastructure investments and services supported	Projectory and MIT capacity-building,	•	Program on p.39, AAC on p.40, Support SSR on p.42	for community pu	blic interest acti	ivists with		
2016	203-2	Significant indirect economic impacts			on p.32, Contribution to community-lev e, CSR donations made on p.42	el diversity and inc	clusion on p.44, S	Sponsorship		



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Topic-specific Standards (GRI 200)

Standard	Disclosure		Description						
GRI 205:	205-1	Operations assessed for risks related to corruption	Assessments ma	ade on all worksites					
Anti-corruption 2016	205-2	Communication and training about anti-corruption	Category (unit: No	o. of persons)	2019	2020	2021		
		policies and procedures	Employees who att	rended Code of Ethics ¹⁾ training	1,066	1,277	4,6982)		
				includes provisions on employees' obligation to conduct business fair agement training was expanded to all employees	ly while maintaining integr	rity, and prevent co	onflicts of interes		
	205-3	Confirmed incidents of corruption and actions taken	Category (unit: No	o. of cases)	2019	2020	2021		
			Type of reports	Regulatory non-compliance	25	11	15		
				Grievances and others	24	44	72		
			Type of non- compliance 1)	Non-compliance with expense-related regulations (malpractice, breach of trust, embezzlement, etc.)	3	5	5		
				Unauthorized possession of a second job	5	7	2		
				Other violations within the Code of Ethics	19	11	20		
			¹⁾ Cases investigated for regulatory violations through whistleblowing or identification						
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti- trust, and monopoly practices	N/A						
GRI 207:	207-1	Approach to tax	NC complies wit	h the tax laws and relevant regulations in the countrie	es where it operates	, and faithfully	performs its		
Tax 2019	207-2	Tax governance, control, and risk management	tax-paying and t	ax cooperation obligations. We fully cooperate with th	ne tax authorities wh	en requested	to do so, and		
	207-3	Stakeholder engagement and management of	faithfully engage in tax investigations. We monitor the appropriateness of transactions made between the headquarte						
		concerns related to tax		bsidiaries to abide by the implementation plans of the C					
			the resulting amendments to country-specific tax principles, while submitting annual integrated reports on cross-border						
			transactions to tax authorities. We preemptively respond to tax laws enacted and revised, nurture internal tax experts						
			to prevent tax-related risks, and actively seek out external advice. In addition, our internal accounting control system includes provisions on tax-related controls, and we perform regular reviews on our management and reporting system.						
	207-4	Country-by-country reporting					<u> </u>		
	207 4	Country by Country reporting	Category (unit: KF		2019	2020	2021		
			Income tax expenses	VS Korea	(-)699	213,724 512	94,165		
				Japan	4,273	1,682	325		
				Taiwan	2,832	1,752	377		
				Others	242	(-)1,026	298		
			Income before income taxes 496,154 803,257						
			Statutory taxes 136,999 216,644 95,						
			Effective tax rate 27.6% 27.0%						
			Taxes paid			173,598	187,306		
			Tax rate		26.3%	21.6%	38.1%		







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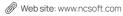
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Topic-specific Standards (GRI 300)

Standard	Disclosure		Description						
	•		Category (unit: TJ,	TJ/KRW million)	2019 1) 2)	2020 1) 2)	20213)		
GRI 302 :	302-1	Energy consumption with the organization	Energy	Total	251.2	259.6	489.4		
Energy 2016			consumption 3)	Direct energy consumption	9.1	9.0	10.9		
	302-2	Energy consumption outside of the organization		Indirect energy consumption	242.1	250.6	437.1		
			_	Other indirect energy consumption (4)		-	41.4		
	302-3	Energy intensity	Intensity of direct/ii	ndirect energy consumption(non-consolidated sales)	1.7	1.2	2.1		
			²⁾ Previous year's data ³⁾ Concerning the Pan stated on a non-con *Reasons for increas spaces initiated thei	ne Pangyo R&D Center and the data centers leased by NC were restated due to corrections made on the errors caused durir ngyo R&D Center, Alpharium Tower 1, Alpharium Tower 2, and NC's asolidated basis ses in intensity: Alpharium Tower 1, Alpharium Tower 2, and one or full-scale operation in 2021 er 1, a leased building owned by NC, and corresponding to Categor	data centers (leased	ch are used as emp			
	302-4	Reduction of energy consumption	Environmental investment planning and implementation, GHG emission activity management on pp.35~36						
	302-5	Reduction in energy requirements of products and services	None						
GRI 303: Water and Effluents 2018	303-2	Management of water discharge-related impacts	Reduction of water	er consumption on p.36					
Water and Emacine 2010	707.7	Water withdrawal	Category (unit: ton, ton/KRW10 billion)		20191)	2020 1)	20212)		
	303-3	water withdrawai	Water withdrawal		142,829	154,801	176,051		
			Water withdrawal in	itensity (non-consolidated sales)	936	690	827		
			* Concerning the Pangyo R&D Center, Alpharium Tower 1, and Alpharium Tower 2, and corresponding to non-consolidated financial statement standards (data centers were excluded as their water withdrawl is not significant) 10 Solely concerning the Pangyo R&D Center 21 Solely concerning the Pangyo R&D Center, Alpharium Tower 1 and Alpharium Tower 2						
	303-4	Water discharge	All used water, as	ide from reused gray water, is discharged to the sewage	treatment facility				
	303-5	Water consumption	Category (unit: to	n)	2019	2020	2021		
	505 5	mater consumption	Water Reused 1)		7,278	3,229	6,723		
			* Concerning the Pangyo R&D Center, Alpharium Tower 1, Alpharium Tower 2 and corresponding to non-consolidated financial statements at and ards (data centers were excluded as their water consumption is not significant) 1) Solely concerning the domestic sewage reused through the gray water system installed within the Pangyo R&D Center						





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Topic-specific Standards (GRI 300)

Standard	Disclosure		Description							
GRI 305 : Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Category (unit: tCO ₂ eq, tCO ₂ eq	/KRW 10 billion)	2019 1) 2)	2020 1) 2)	2021 3)			
			Concerning the Pangyo R&D Center and the data centers leased by NC	12,216.7	23,054.5					
			Direct GHG emissions		535.1	530.9	598.0			
	705.0	Form indicate (Occasion) OUO anticipat	Indirect GHG emissions	;	11,247.6	11,685.9	20,466.3			
	305-2	Energy Indirect (Scope 2) GHG emissions	Other indirect GHG emi	ssions ⁴⁾	-	-	1,990.2			
			Intensity of direct/indirect	ect GHG emissions (non-consolidated sales)	77.2	54.5	98.9			
	305-4	GHG emissions intensity	²⁾ Previous year's data were ³⁾ Concerning the Pangyo I financial statement stanc * Reasons for increases in i their full-scale operation i ⁴⁾ Concerning NC Tower I, a	restated due to corrections made to the errors that R&D Center, Alpharium Tower 1, Alpharium Tower 2 dards ntensity: Alpharium Tower 1, Alpharium Tower 2, and n 2021 leased building owned by NC, and corresponding to	and (leased) NC data center ione new data center which are Category 13 of Scope 3 emission	s, and corresponding to e used as employees' off ons	ice spaces initiated			
	305-5	Reduction of GHG emissions	Reducing Carbon Em	nissions on p.36						
	305-7		first and second half respectively, which were below the 60ppm threshold stipulated by the government. The emissions from the boiler No.2 amounted to 24.5ppm and 30.8ppm in the first and second half respectively, which were also below							
GRI 306: Waste 2020	306-1	ů ů		•	0 1	o .				
	306-2	Management of significant waste-related impacts		es generate significant impact from waste gnificant impact generated from waste.	e given the inherent char	acteristics of its bu	siness, and NC			
	306-3	Waste generated	Category (unit: ton)		2019 1)	2020 1)	20212)			
			General waste generate	ed	70.5	65.1	385			
			Treatment method	Incinerations, etc.		-	242			
				Recycling			143			
			¹⁾ Solely concerning the waste generated from the cafeterias at the Pangyo R&D Center ²⁾ Concerning the general waste generated from the Pangyo R&D Center							
GRI 307 : Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	No regulatory non-compliance							





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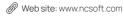
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Topic-specific Standards (GRI 400)

Standard	Disclosure		Description	1						
CDI / 01-	401-1	New employee bires and employee turneyer	Category (ur	nit: No. of pe	rsons)	2019	2020	2021		
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Recruitment	1)	Total	604	708	778		
p.o/o					Male	405	459	484		
					Female	199	249	294		
			1) Based on exec	cutives, regul	ar employees and contract	workers (excluding contract wo	rkers whose contract term is	6 months or shorter)		
			Category (ur	nit: No. of pe	rsons)	2019	2020	2021		
			Turnover ¹⁾	Total		263	188	353		
				By type	Voluntary turnover ²⁾	262	186	353		
					Non-voluntary turnover ³⁾		2	-		
					Relocation to affiliates	1	-	-		
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	In-house da	In-house daycare center Laughing Peanut on p.38, Welfare and benefits on p.50						
	401.7	Powerfullers	Category (U	nit: No. of pe	rsons, %)	2019	2020	2021		
	401-3	Parental leave	Employees el	igible for pare	ental Male	998	1,032	1,125		
			leave		Female	230	230	249		
			Employees w	ho took parer	ntal leave Male		18	13		
					Female	46	42	47		
			Employees w after parenta		o work Male	100	100	100		
			arter parenta	i leave	Female	100	100	100		
			Employees w after parenta			72	53	54		
			to work ²⁾	i leave al lu co	Female	91	87	89		
			reporting peri	od)*100 vho continue	d to work for 12 months af	ve during the reporting period er parental leave) / (employee				





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Topic-specific Standards (GRI 400)

Standard	Disclosure		Description							
GRI 403 :	403-1	Occupational health and safety management system	Occupational health and safety management	system development and Occupation	onal Health an	d Safety Comr	mittee			
Occupational Health			operation on p.51							
and Safety 2018	403-2	Hazard identification, risk assessment, and incident	Workplace safety improvement on p.51							
		investigation								
	403-3	Occupational health services	Improved safety of the work environment and	safe in-house facilities on p.51						
	403-4	Worker participation, consultation, and communication on	Occupational Health and Safety Committee of	peration on p.51						
		occupational health and safety								
	403-5	Worker training on occupational health and safety	Not provided							
	403-6	Promotion of worker health	NC operates the Calm Program for the psyc	hological well-being of employees	to help emplo	yees manage	their stress			
			factors both on organizational and individua	l levels and provide mental care sol	lutions. In May	/ 2021, we ope	ned fitness			
			facilities to run personal training and other he	ealth management programs.						
	403-7	Prevention and mitigation of occupational health and safety	ty Improved safety of the work environment and safe in-house facilities on p.51							
		impacts directly linked by business relationships								
	403-8	Workers covered by an occupational health and safety management system	Category (unit: No. of persons, %)		2020	2021				
			No. of employees subject to the health and safety m	anagement system ¹⁾		4,618	5,047			
			Scope of coverage out of total employees 100 10							
			1) Sum of NC employees and subcontractor employees on the basis of subcontractor employees operating a							
	403-9	Work-related injuries	Category	Unit	2019	2020	2021			
			Total hours worked	hour	7,524,000	8,462,000	9,254,000			
			Injury rate ¹⁾	Ratio of employees who sustained injuries per every 100 employees(%)	0.08%	0.05%	0.02%			
			LTIFR(Lost Time Injury Frequency Rate) 2)	No. of cases of lost work per every 1 million hours worked	0.40	0.24	0.11			
			Fatalities	number of people	-	-	-			
			Employees who sustained occupational injuries	number of people	3	2	1			
			No. of employees who sustained lost-time injuries	number of people	3	2	1			
			*Based on regular employees, and the occurrence of o (No. of employees who suffered occupational injuries (No. of employees who sustained lost-time injuries)	s) / (Total No. of employees)*100	ed to 0% among	subcontractor e	mployees			



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Topic-specific Standards (GRI 400)

Standard	Disclosure		Description						
GRI 404 :	404-1	Average hours of training per year per employee	Category (unit: No. o	of hours, No. of hours/No. of persons)	2019	2020	2021		
Training and			Total employee trainir	ng hours	90,061	78,265	101,850 ¹⁾		
Education 2016			Average training hour	s Total	24.6	19.4	22.9		
			per person	Male	23.8	18.4	21.7		
				Female	26.5	21.5	25.4		
				Regular	24.7	19.3	22.6		
				Non-regular	23.6	21.3	31.4 2)		
	404-2	Programs for upgrading employee skills and transition	possible to train a large 2) Reasons for increases temporary workers tak	creased against 2020 due to increases in total workfor e number of employees) in training hours for temporary workers compared to the e more courses through external training and e-learning without on p. 40.	ose for regular employees in	2021: Compared to	regular employees,		
	404-2	assistance programs	NC University and o	others on p.49					
		assistance programs	Category (unit: %, KR	W1,000)	2019	2020	2021		
			Ratio of employees who received annual training		100	100	100		
			Training and exercise	expenses 1)	1,039,696	922,502	1,058,419		
			expenses were include Detailed training da		and exercise that could be	considered as ord	mary development		
	404-3	Percentage of employees receiving regular	Individual performance appraisals are made on regular employees and contract employees who worked 6 months or						
		performance and career development reviews	longer during the performance year						
GRI 405:	405-1	Diversity of governance bodies and employees	Category (unit: No. o	of persons, %)	2019	2020	2021		
Diversity and Equal		, , , , , , , , , , , , , , , , , , ,	By age	Under 30	601	653	707		
Opportunity 2016				30~50	3,130	3,541	3,857		
				Over 50	31	37	63		
			By gender	Ratio of all female employees	31.8	32.3	33.3		
				Ratio of female team leaders and executives (registered/non-registered executives)	17.8	20.0	20.5		
				Ratio of female executives	9.6	12.5	14.9		
				Ratio of female team leaders		20.6	21.0		
			Total No. of foreign na	27	37	34			
			Total No. of employees with disabilities 15 14				23		
			1) Defined as positions to	o make basic decisions and manage department memb	pers for the responsible fund	tion			





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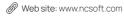
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Topic-specific Standards (GRI 400)

Standard	Disclosure		Description						
GRI 405 :	405-2	Ratio of basic salary and remuneration of women to	Category (unit: KRW 1,000)	2020		2021			
Diversity and Equal		men	Average pay per person for male employees 1)	118,101		118,289			
Opportunity 2016			Average pay per person for female employees 1)	79,064		82,038			
			$^{\rm 1)}$ No discrepancies in base pay between male and female ε	employees who worked for the same period and in t	ne same job position				
GRI 406 : Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	None						
GRI 412 : Human Rights	412-1	Operations that have been subject to human rights reviews or impact assessments	As technology forms an inseparable part of our human rights violation in the course of its busine	,	, 0				
Assessment 2016	412-2	Employee training on human rights policies or procedures	UN Guiding Principles on Business and Human Rights, and the ILO Declaration which are universally applied across the global community, and have established the human rights management guidelines in 2021 to protect the human rights of our employees, partners, users and communities. We will also provide training to employees on relevant policies and						
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	procedures, and consider these guidelines for our important investment and contractual process. NC West Holdings has established the Ethical Partnership Statement of Principles which focuses on safe working conditions, fair business practices, diversity & inclusion, environmental responsibility, respect for customers, positivity, and connectivity, and use these principles as the basis to conduct Ethical Partnership Due Diligence Surveys in acquiring or investing in companies to assess their ethical management performance.						
GRI 413 : Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	NC engages in CSR activities where the Compa duct on communities. Given the inherent charactial negative impact on their surrounding commu	teristics of the industry, none of our worksi					
GRI 417 : Marketing and Labeling 2016	417-3	Incidents of non-compliance concerning marketing communications	No regulatory non-compliance						
GRI 418 :	418-1	Substantiated complaints concerning breaches of	Category (unit: No. of cases, KRW million, No. of pers	ons) 2019	2020	2021			
Customer Privacy 2016		customer privacy and losses of customer data	No. of information security breaches	0	0	2			
			Financial losses that incurred from such breaches		0	3			
			No. of uses affected due to such breaches	0	0	6 1)			
			¹⁾ Non-compliance concerning B2 advertising information (spam) – advertising texts were sent to users who refused to receive such texts: person, a customer center employee photographed customer data with the mobile phone and sent the data to acquaintances, leading to personal data breaches (Dec. 13, 2021): 5 persons						
GRI 419 : Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	No regulatory non-compliance						



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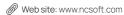
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Topic-Specific Standards (GRI 400): 404-2 Detailed Training Data

Category		Unit	2019	2020	2021
Employees who attended onboarding training	Introductory training for employees hired through open recruitment	No. of persons	70	77	81
	Onboarding training for new hires with previous work experience	No. of persons	1,486	1,943	2,256
	re:boot program (for employees who worked 10 or more years)	No. of persons	-	90	103
Employees who attended leadership training	Onboarding for new team leaders	No. of persons	103	353	310
	Leadership/management	No. of persons	769	1,210	2,355
Employees who attended organizational development/corporate culture programs	Team program ¹⁾	No. of persons	494	204	423
Employees who attended job training	Al/Data Intelligence	No. of persons	689	1,744	1,691
	Game Art & Sound	No. of persons	1,008	383	897
	Game Design	No. of persons	1,622	840	1,735
	Project Management	No. of persons	152	410	208
	Programming	No. of persons	242	868	1,134
	Global/Diversity	No. of persons	-	418	697
	Technology Trend	No. of persons	-	-	855
Employees who attended special lectures	NC Culture Class (including the NC Calm Program)	No. of persons	980	862	975
	NC Hakdang/special lectures (to develop leaders' insights)	No. of persons	650	187	692
	NC Dev.Class (special lectures/seminars led by external experts)	No. of persons	184	334	1,602
Employees who attended legally-mandatory training	Training to prevent sexual harassment	No. of persons	3,812	4,312	4,849
	Training to improve perceptions on disability	No. of persons	3,812	4,312	4,882
	Data privacy training	No. of persons	587	772	984
	Information security training	No. of persons	3,219	3,876	4,488
	Ethics training	No. of persons	1,066	1,277	4,698
	Training to prevent workplace harassment	No. of persons	-	-	896
	Open source license training	No. of persons	-	1,198	251
Employees who attended MOOC courses	Global learning platform	No. of persons	-	390	911
Employees who attended e-learning courses	NC e-Learning Center	No. of persons	1,984	1,772	659
Employees who attended external training	Attendance at/support for external training ²⁾	No. of persons	1,059	245	250
Employees who received support to obtain licenses	Support for the attainment of licenses	No. of persons	67	39	18
					

¹⁾ An organization-unit program to build a team culture which enables connected and shared growth, change work methods for sustainable growth, and generate performance





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Additional information about NCSOFT can be found on the website.



Web site: www.ncsoft.com

²⁾ Support employee's participation in external trainings, seminars, conferences and forums to help promote job competency and growth (participation declined significantly amid COVID-19 in 2020)

SASB Index

Technology & Communication Sector - Software & IT Services Industry

*Based on NCSOFT non-consolidated financial statements

Topic	Code	Accounting Metric	Status at NC
Environmental	TC-SI-130a.1	(1) Total energy consumed	Energy consumption within the organization on p.70
Footprint of Hardware		(2) Percentage grid electricity	89.2%
Infrastructure		(3) Percentage renewable	None
	TC-SI-130a.2	(1) Total water withdrawn	Water withdrawal on p.70
		(2) Total water consumed	Water consumption on p.70
		(3) Percentage of each in regions with High of Extremely High Baseline Water Stress	None
	TC-SI-130a.3	Discussion of the integration of environmental considerations into strategic planning for data center needs	Environmental management on p.36
Data Privacy & Freedom of	TC-SI-220a.1	Description of policies and practices relating to behavioral advertising and user privacy	https://www.plaync.com/policcy/privacy (personal data handling guidelines), behavioral advertising not practiced
Expression	TC-SI-220a.2	Number of users whose information is used for secondary purposes	NC values customers' personal data, and abides by the Personal Information Protection Act and other applicable data privacy laws and regulations. https://www.plaync.com/policy/privacy (data privacy policy)
	TC-SI-220a.3	Total amount of monetary losses as a result of legal proceedings associated with user privacy	None
	TC-SI-220a.4	(1) Number of law enforcement requests for user information	NC is not requested by governmental/law enforcement agencies to provide personal data or restrict/delete content
		(2) Number of users whose information was requested	None
		(3) Percentage resulting in disclosure	None
	TC-SI-220a.5	List of countries where core products or services are subject to government-required monitoring, blocking, content filtering, or censoring	None
Data Security	TC-SI-230a.1	(1) Number of data breaches	None(27p, 75p- Subsidiaries NCSOFT Service 2 cases)
		(2) Percentage involving personally identifiable information(PII)	None
		(3) Number of users affected	None
	TC-SI-230a.2	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	Establishing an Information Security System in Accordance with Global Standards on p.22
Recruiting &	TC-SI-330a.1	Percentage of employees that are (1) foreign nationals and (2) located offshore	Diversity of the BOD and its members (numbers disclosed) on p.74
Managing a Global,	TC-SI-330a.2	Employee engagement as a percentage	Not performed
Diverse & Skilled	TC-SI-330a.3	(1) Percentage of gender and racial/ethnic group representation for management	Diversity of the BOD and its members on p.74
Workforce		(2) Percentage of gender and racial/ethnic group representation for technical staff	R&D workforce: 72% males (2,334 persons), 28% females (917 persons)
		(3) Percentage of gender and racial/ethnic group representation for all other employees	Diversity of the BOD and its members on p.74
Intellectual Property Protection & Competitive Behavior	TC-SI-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive regulations	None
Managing	TC-SI-550a.1	(1) Number of performance issues	None
Systemic Risks		(2) Number of service disruptions	None
from Technology		(3) Number of total customer downtime	None
Disruptions	TC-SI-550a.2	Description of business continuity risks related to disruptions of operations	None



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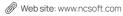
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Independent Assurance Statement

To readers of NCSOFT ESG PLAYBOOK 2021

Introduction

Korea Management Registrar (KMR) was commissioned by NCSOFT to conduct an independent assurance of its ESG PLAYBOOK 2021 (the "Report"). The data and its presentation in the Report is the sole responsibility of the management of NCSOFT. KMR's responsibility is to perform an assurance engagement as agreed upon in our agreement with NCSOFT and issue an assurance statement.

Scope and Standards

NCSOFT described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR's assurance standard SRV1000. We are providing a Type 2, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgement of our Assurance Team.

Confirmation that the Report was prepared in accordance with the Core Options of the GRI standards was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process.

- GRI Standards Reporting Standards
- Universal Standards
- Topic Specific Standards
- Management approach of Topic Specific Standards
- GRI 401: Employment
- GRI 403: Occupational Health and Safety
- GRI 404: Training and Education
- GRI 405: Diversity and Equal Opportunity
- GRI 406: Non-Discrimination
- GRI 412: Human Rights Assessment
- GRI 413: Local Communities
- GRI 418: Customer Privacy

As for the reporting boundary, the engagement excludes the data and information of NCSOFT's partners, suppliers and any third parties.

KMR's Approach

To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the engagement:

- reviewed the overall Report;
- reviewed materiality assessment methodology and the assessment report;
- evaluated sustainability strategies, performance data management system, and processes;
- interviewed people in charge of preparing the Report;
- reviewed the reliability of the Report's performance data and conducted data sampling;
- assessed the reliability of information using independent external sources such as Financial Supervisory Service's DART and public databases.

Limitations and Recommendations

KMR's assurance engagement is based on the assumption that the data and information provided by NCSOFT to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.

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Independent Assurance Statement

Conclusion and Opinion

Based on the document reviews and interviews, we had several discussions with NCSOFT on the revision of the Report. We reviewed the Report's final version in order to make sure that our recommendations for improvement and revision have been reflected. Based on the work performed, it is our opinion that the Report applied the Core Option of the GRI Standards. Nothing comes to our attention to suggest that the Report was not prepared in accordance with the AA1000AP (2018) principles.

Inclusivity

NCSOFT has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

Materiality

NCSOFT has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

Responsiveness

NCSOFT prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of NCSOFT's actions.

Impact

NCSOFT identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

Reliability of Specific Sustainability Performance Information

In addition to the adherence to AA1000AP (2018) principles, we have assessed the reliability of economic, environmental, and social performance data related to sustainability performance. We interviewed the in-charge persons and reviewed information on a sampling basis and supporting documents as well as external sources and public databases to confirm that the disclosed data is reliable. Any intentional error or misstatement is not noted from the data and information disclosed in the Report.

Competence and Independence

KMR maintains a comprehensive system of quality control including documented policies and procedures in accordance with ISO/IEC 17021-2015 - Requirements for bodies providing audit and certification of management systems. This engagement was carried out by an independent team of sustainability assurance professionals. KMR has no other contract with NCSOFT and did not provide any services to NCSOFT that could compromise the independence of our work.

June 2022 Seoul, Korea







CEO E. J Havay

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Greenhouse Gas Verification Report





Unit: tCO₂ea

Greenhouse Gas Verification Report

Introduction

Korea Management Registrar has been requested by NC Soft Co., Ltd to verify its greenhouse gas emissions and energy consumption in 2021. The verification was conducted on the organization and operation boundary, and the results are as specified as below. This verification statement is valid from the day of publication.

Scope

Organization and operation boundary:

 ✓ Greenhouse gas emissions : Emission facilities in 6 Sites under NC Soft CO., Ltd operational control.

✓ Energy usage : Emission facilities in 6 Sites under NC Soft CO., Ltd operational control

: 01/01/2021 ~ 31/12/2021 Verification period Types of Greenhouse Gases: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆

 Verification scope : Scope 1 (Direct emissions), Scope 2 (Indirect emissions),

Scope 3 (other Indirect emissions)

✓ Scope 3 emissions are limited to emissions from Downstream Leased Assets.

· Performed verification work:

- ✓ Interviewing with the site manager responsible for calculating data of greenhouse gas emissions
- ✓ Reviewing the MRV system and process for gathering method for greenhouse gas emission and energy consumption
- ✓ Examination on raw data including information system, bills and payment statements related to verification scope
- ✓ Due diligence on a part of emission factors in 1 sites (R&D Center)
- ✓ Comparative examination through on-desk review, risk analysis, observation and inspection, etc.
- · Level of assurance: Limited Assurance

Standard & Guidance

ISO 14064-1 Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (2018), ISO 14064-3 Greenhouse gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions (2018), WRI/WBCSD GHG Protocol (2004) Verification guidelines for operation of GHG ETS, guidelines for operation of greenhouse gas and energy target management scheme, Guidelines on Emission Reporting and Certification of GHG ETS, IPCC Guidelines for National Greenhouse Gas Inventories (2006), International Standard on Assurance Engagements 3000 (Revised) - 'Assurance Engagements other than Audits or Reviews of Historical Financial Information'

Results

1. Greehouse Gas Emissions

Year	Object site	SCOPE1		SCOPE 2	SCOPE 3	Total
		stationary Combustion	Mobile Combustion	Electricity +Steam	Donwnstream Leased Assets	Emissions
2021	Total	428	170	20,466	1,990	23,054
2021	NCSOFT R&D Center	255.5	170.1	9,413.8	0	9,809
2021	Alpharium Tower 1	75.2	0	1,392.4	0	1,468
2021	Alpharium Tower 2	126.9	0	4,691.2	0	4,818
2021	Kt cloud gangnam IDC	0.3	0	4,429.7	0	4,430
2021	LGU+ Pyeongchon Mega Center	0	0	539.1	0	539
2021	NC TowerI	0	0	0	1,990.3	1,990

2. Energy Consumption

Unit: TJ

Year	Object site		SCOPE 1	SCOPE 2	SCOPE 3	Total
		stationary Combustion	Mobile Combustion	Electricity +Steam	Donwnstream Leased Assets	Emissions
2021	Total	8.4	2.5	437.1	41.4	489.4
2021	NCSOFT R&D Center	4.4	2.5	204.1	0	211.0
2021	Alpharium Tower 1	1.5	0	29.5	0	31.0
2021	Alpharium Tower 2	2.5	0	99.7	0	102.2
2021	Kt cloud gangnam IDC	0.0	0	92.6	0	92.6
2021	LGU+ Pyeongchon Mega Center	0	0	11.3	0	11.3
2021	NC TowerI	0	0	0	41.4	41.4

Conclusion

KMR verified the greenhouse gas emissions and energy consumption of NC Soft Co., Ltd in 2021. Based on the procedures performed, nothing has been found in all material respects not to meet standard in accordance with the verification purpose and the applicable criteria.



June, 2022 Korea Management Registrar E. J Hway President Hwang Eun Ju

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