

**2020  
Kakao's  
Commitment and  
Responsibility**

## About this Report

### Report Overview

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We at Kakao present this ESG report to illustrate the commitments we've made and responsibilities we've assumed to make a better world. This report serves to transparently disclose our performance concerning the environment, society and our governance while we reach out to our stakeholders in so doing.

### Reporting Standards

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This report was prepared in accordance with the international sustainability reporting framework of the GRI (Global Reporting Initiative) standards: Core option, and with the Internet Media & Services Industry Standard of the Sustainability Accounting Standards Board of the U.S. The financial performance outlined within the report was presented in conformity with K-IFRS, unless otherwise stated.

### Reporting Period

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This report spans the period between January 1, 2020 and December 31, 2020. Information prior to 2020 or in the 1st half of 2021 was partially included and such information was separately marked within the Report. For quantitative performance, data over the recent three years (2018 ~ 2020) was provided to allow for year-over-year trend analyses.

### Reporting Scope

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Financial performance was reported on a consolidated basis, and non-financial performance focused mainly on our headquarters in Korea. A portion of the environmental and social performance data concerns the performance of major affiliated companies.

### Assurance

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Third-party assurance was performed on this Report by Lloyd's Register, an independent assurance provider, to establish the reliability of the reporting process and the information disclosed. The assurance engagement was conducted in accordance with AA1000AS Moderate Level, Type2.

### Inquiries on the Report

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If you have any inquiries about this report, please contact us as below:

ESG TF, Kakao  
E-mail: [esg@kakaocorp.com](mailto:esg@kakaocorp.com)

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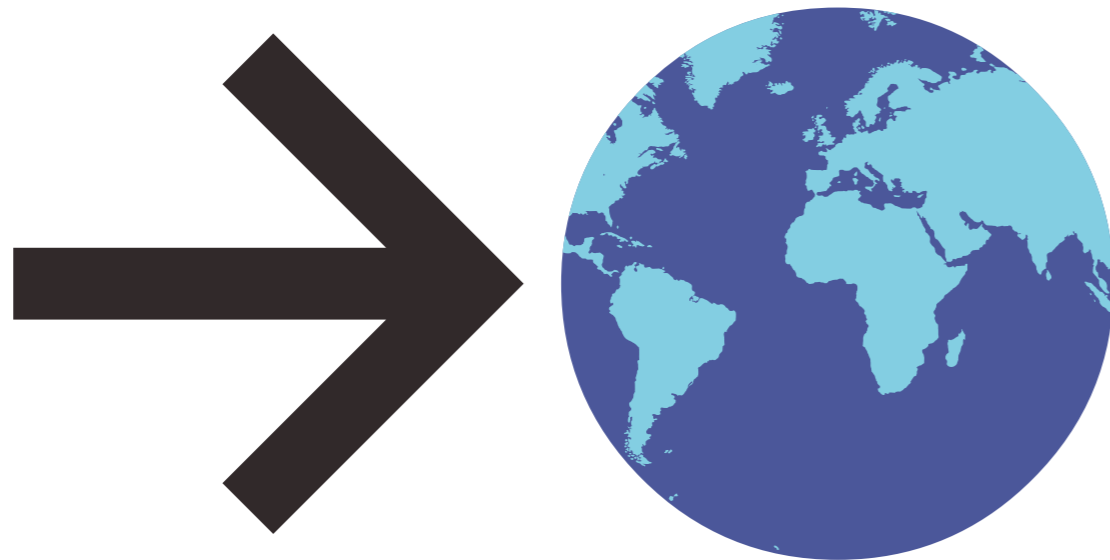
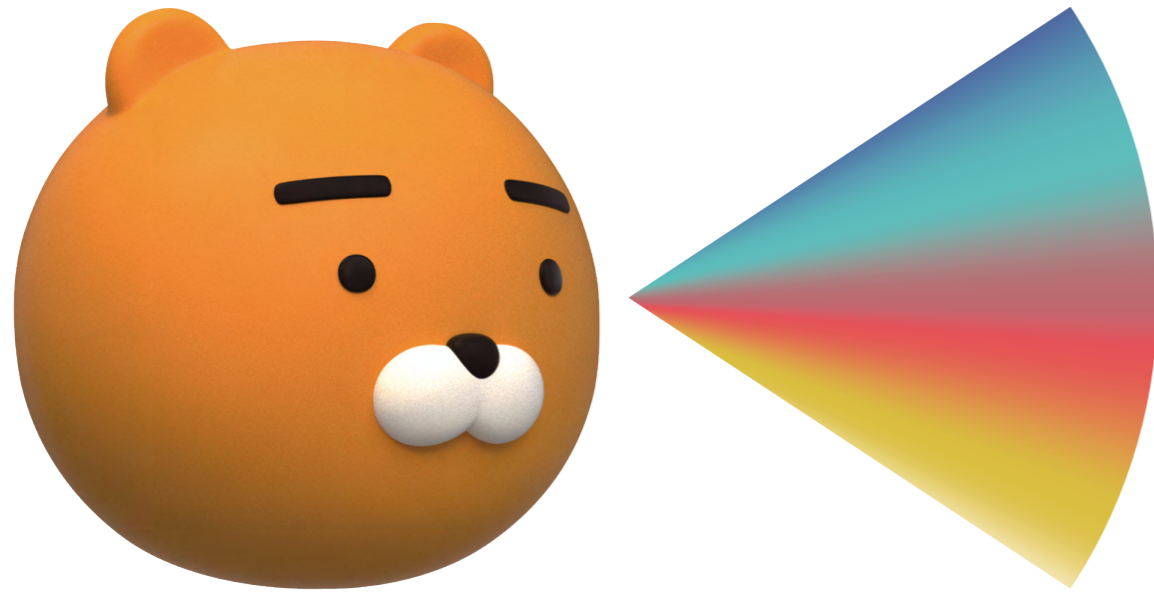
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# Part. I



## Introduction

- Our Mission and the Kakao's Style
- A message from the BOD Chairman
- A message from the CEOs
- Kakao at a Glance
- Business Portfolio
- 2020-2021 Highlights



Mission

One Kakao

**Making a better world with people and technology**

Kakao

**Building meaningful relationship beyond the connection**

Kakao's Style

**Willing to Venture**

**Back to Basics**

**Trust to Trust**

**Act for Yourself**

**Tech for Good**

**A Message  
from the BOD  
Chairman**



Dear Stakeholders,

My name is Beom-su(Brian) Kim, and it has been my great honor and privilege to serve as the Chairman of the Board of Directors and of the ESG Committee at Kakao.

I would like to extend my heartfelt gratitude to our shareholders, investors and users for their interest in and support for the journey Kakao has taken to create a better world with people and technology. At this time, I'd like to also extend my deepest gratitude to our partners and our Krew who have committed themselves to this extraordinary journey we have embarked upon together. It has been my firm belief over the past decade that businesses are the organization that is most efficiently able to bring sustained change to the world. In fact, Kakao has redefined what communication, mobility and finance mean to the daily lives of us all by ironing out the little inconveniences we had once simply accepted as reality. Kakao also presented new platforms as part of its solid pledge to create an ecosystem that pursues shared growth with the whole of society. The creation of such platforms lent itself to the addition of entirely new professional titles and enabled our partners to generate stable profits.

We at Kakao will follow our way - the 'Kakao Style', to take on a stronger agent role to help resolve social issues and create new value. We announced the Corporate Governance Charter as the foundation of our sustainability management. As stipulated in the Charter, management at Kakao, under the supervision of the professional and independent BOD, will conduct business responsibly and do its utmost to establish sound governance. This is demonstrated through our earnest and measurable actions. Firstly, we ensure the BOD Chairman and the Company CEOs remain independent of one another to bolster the integrity and transparency of our BOD, and the Audit Committee is solely composed of independent directors. To promote diversity and expertise within the BOD, we increased the ratio of female independent directors and promote the balanced representation of independent directors with diverse backgrounds.

We created the ESG Committee under the BOD: the ESG Committee is required to review the strategic direction of our sustainability management and manage and oversee relevant achievements

and issues, fulfilling its role to bring ESG more front and center within our business operations. With the ESG Committee playing a pivotal role, we will continue to implement our sustainability management strategies and associated tasks, and regularly review the progress we've made accordingly to help drive our commitment and responsibility to create a better world. Furthermore, we will annually publish the Kakao's Commitment and Responsibility Report to transparently disclose our endeavors and accomplishments made in the areas of the environment, society and governance. This will surely help to elevate the level of trust and confidence our stakeholders place in Kakao while disseminating a culture of sound governance.

We believe that our stakeholders take interest in Kakao as they have hopes and expectations that we could better the course of the future. Just as we have stood strong and put in the work to create a better world over the past ten years, we will embrace the coming decade with just as much vigor: We will wholeheartedly commit ourselves to find the work that we can best do to resolve the most pressing social issues and generate new value. Without hesitation, we choose to go big, to blaze a new trail and do everything in our power to thrive and better this world that we so cherish. We look forward to your unwavering interest in and encouragement for this journey that will undoubtedly test our limits and make us all the better for it. Thank you.

Chairman of the Kakao  
Board of Directors  
Beom-su(Brian) Kim

## A Message from the CEOs



Dear Stakeholders,

As Co-CEOs of Kakao, we would like to extend our greetings to our shareholders on the occasion of publishing the Kakao's Commitment and Responsibility Report as our ESG report. This report outlines Kakao's commitment and responsibility to create a better world with people and technology, and documents our endeavors and activities geared towards the shared growth for all — shareholders, investors, users, partners, local communities and our Krew members.

The trials and tribulations of COVID-19 that plagued the entire world in 2020, deprived us all of any kind of 'normalcy' in our daily lives. Kakao saw the need to restore this sense of normality and responded aptly with its technology and services to bring much required solace and relief to all. Kakao Talk enabled users to continue communicating online and access a range of digital content. We actively joined in the social efforts to weather the COVID-19 pandemic and provided the 'QR code check-in service for electronic entry log documentation' for those entering public facilities to contribute to curbing the spread of infections. Kakao Map also enabled users to easily locate public face mask retailers and screening centers, and our donation platform 'Kakao Together' drove donation campaigns to extend assistance to those suffering amid the COVID-19 outbreak.

Turning to our business, Kakao operated a management system to preemptively prepare for risk factors and ensure its stable business conduct while the protracted COVID-19 pandemic resulted in contraction in real economies and mounting uncertainties across the business landscape. In 2020, our sales rose approximately by 35% and our operating profits surged by nearly 120% from the previous year, which is largely attributable to the solid performance of the existing business and the sales growth in new business. Our platform business posted over a 50% increase in sales as rising demand for Talk Biz led to its sales growth and our mobility, finance and payment services further expanded. Our content business also recorded a 23% y-o-y growth in line with increasing global transaction values in paid content, growth spurred by the launching of new games and their global popularity, and the rising sales of video content in the IP business.

In 2021, Kakao plans to establish the competitiveness of its platform business and further stabilize its new businesses. We will upgrade the functionalities of our Talk Biz platform to cater to market needs and focus on the diversity of our content business to solidify our dominance in the market while scaling up our business

across the global market. Kakao has been engaged in a host of activities to faithfully fulfill its social responsibility in addition to generating financial performance. We have been actively implementing our Corporate Digital Responsibility (CDR) activities and added provisions that stipulate our commitment to resolving issues affecting children and teens to the Algorithm Ethics in July 2020. We moved on to declare our 'Principle to Counter Hate Speech' in January 2021 to protect the human rights of users and create a safer digital environment. This came in tandem with the announcement of the Kakao Business and Human Rights Statement to pursue shared growth with mutual respect on the basis of our philosophy that puts people first, and the establishment of the Supplier Code of Conduct for our suppliers to follow in fulfilling their responsibility and role in the areas of human rights, safety & health, the environment, personal data and IPR, and ethics.

Looking ahead, Kakao is willing to do whatever it can to create a better world with people and technology. We would like to extend our heartfelt gratitude to our shareholders, investors, users, partners, local communities and Krew members for their continued interest in and support for us in our journey towards reaching this goal. We look very much forward to your continued encouragement for our pursuit of sustainable growth. Thank you.

Co-CEOs of the Kakao  
Minsoo(Mason) Yeo and  
Suyong(Sean) Joh

*Minsoo Yeo, Mason*  
*Suyong Joh, Sean*

## Kakao at a Glance

We define Kakao as a ‘mobile life platform’ that delivers innovative life services in the global mobile and internet market on the strength of our professional workforce, technological prowess, competitive content, and large mobile traffic. Guided by our mission of ‘Making a better world with people and technology’, we are fully committed to enable all that surrounds our lives to connect in order to create an environment that supports real-time interactive communication.

### Company Overview

As of Dec. 31, 2020

Name of Company

**kakao**

Kakao Corp.

Year of Establishment

Feb. 16, 1995  
(Merger with Kakao Corporation:  
Oct. 1, 2014)

CEO

Minsoo(Mason) Yeo, Suyong(Sean) Joh

Headquarters

242, Cheomdan-ro, Jeju-si, Jeju-do, Korea

Employees

2,837 persons

### Kakao Community<sup>1)</sup> Overview

As of Dec. 31, 2020

**kakao**commerce

**kakao**<sup>2)</sup>  
ENTERTAINMENT

**kakao**games

**kakao**pay

**kakao**bank

**kakao**investment

**kakao**mobility

**kakao** Japan

**kakao**enterprise

**kakao**ventures

**GROUND X**

**kakao**brain

KnWorks

**dk**techin

Linkage Lab

### Financial Performance

As of Dec. 31, 2020, consolidated figures

Sales

KRW 4.2 trillion

Operating profit

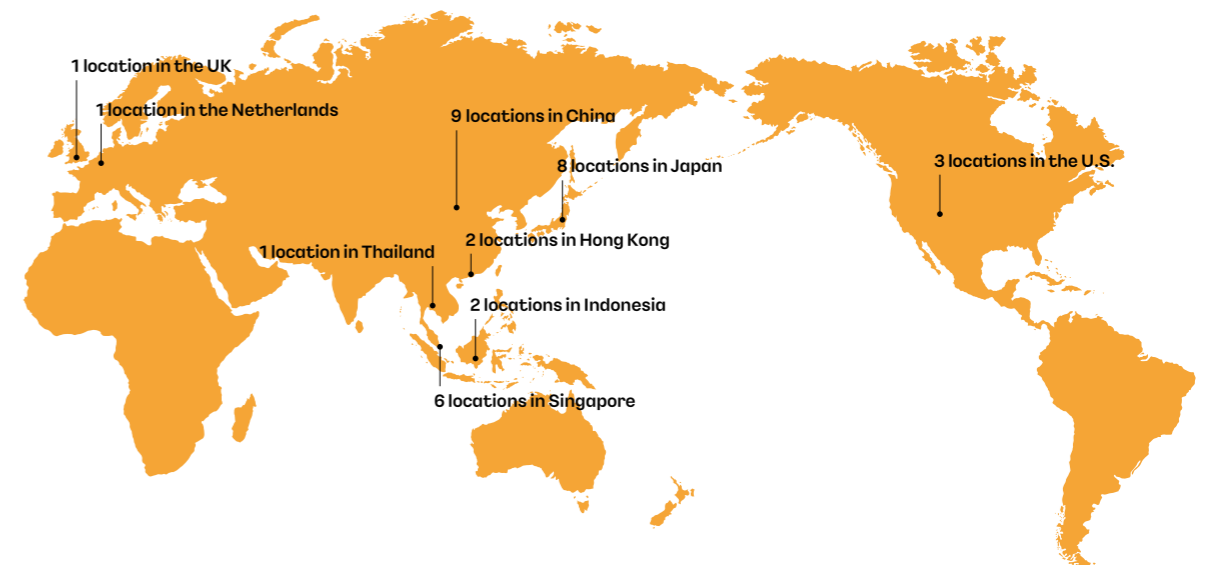
KRW 455.9 billion

Credit rating

AA-  
Korea Ratings Corporation  
(Rating outlook: Positive)

### Global Network<sup>3)</sup>

As of Dec. 31, 2020



<sup>1)</sup> Kakao Community refers to Kakao Group’s affiliated companies. For further details on each member of the Community, please see page 104~106 of this report.

<sup>2)</sup> On Mar. 2, 2021 following the reporting period of this report, Kakao M and Kakao Page merged to create Kakao Entertainment. Their performance prior to the date of the merger and during the reporting period is reported separately as that of two independent affiliated companies.

<sup>3)</sup> As of Dec. 31, 2020, Kakao operates a global network of 33 affiliates in 9 regions across the globe.

## Business Portfolio

Kakao's service offerings span a broad array of sectors: we provide a communication platform that sets the trend in emerging communication methods, a content platform that delivers great variety, a game platform based on social network channels, a life platform that realizes the value of connectivity within our everyday lives, and a search platform that makes desired information easily accessible.

### Platform Business






As of Dec. 31, 2020

Talk Biz	Portal Biz
<p>Kakao Talk, as Korea's No. 1 messaging service, provides a wide spectrum of mobile services. Synergy is generated among diverse businesses within the mobile ecosystem centered around Kakao Talk.</p>	<p>We deliver search, e-mail, community and other varied internet-enabled services with our portal website Daum. On the strength of the extensive content available within the Kakao ecosystem, we deploy highly-advanced search technology to provide users with a positive and satisfying experience.</p>
<div></div> <p><b>Kakao Talk</b> A life platform offering diverse services atop of messenger functionality that helps build new relationships and make everyday life more convenient. Supports chats, voice talk, face talk, open chat, emoticon, e-mail, calendar, network drive, content, sharp(#) search, TV, wallet application and other diverse services</p> <p><b>MAU (Monthly Active User)</b> 45.98 million in Korea 52.22 million across the globe</p>	<div></div> <p><b>Kakao Talk Gift</b> Mobile messenger-based commerce platform business that enables users to give and receive gifts just as easily like sending messages to Kakao Talk Friends, offering a specialized experience of 'gift-giving' in consideration of its meaning and purpose on the basis of high accessibility and user convenience</p> <p><b>MAU (Monthly Active User)</b> 21.73 million</p>
<div><h3>Kakao Bizboard</h3></div> <p><b>Kakao Bizboard</b> Targeted, performance-based display advertising that promotes users to purchase and/or book products or services through varying Talk Biz solutions — ad views, chats, and #tap searches — and premium landing pages, starting from the discoveries made within Talk, on the basis of Kakao Talk's chatting tabs and the traffic generated by the major services of Kakao Community</p>	<div></div> <p><b>Kakao Talk Store</b> Differentiated shopping brokerage platform business that enables any seller to "open a store" and do business within the Kakao Talk app, while aligning with other Kakao Talk business solutions to encourage customers to voluntarily share feedback and make purchases</p>
<div></div> <p><b>Talk Channel</b> Message-based advertising business that offers content — information, brand news, promotions, and notices — through Kakao Talk messages</p>	<div></div> <p><b>Kakao Makers</b> Service designed to help domestic manufacturers resolve challenges by way of group buying to preemptively identify demand and make-to-order to minimize inventory</p>
<div></div> <p><b>Daum</b> Korea's leading internet portal that serves as a platform to deliver search, e-mail, community and other internet-enabled services</p>	<div></div> <p><b>Brunch</b> Content publishing platform operated under the vision 'Where writing becomes a work of art' to provide pre-reviewed, high-quality content</p>
<div></div> <p><b>Kakao Story</b> Service designed to share precious life moments with Kakao Talk Friends through an extensive pool of photos, videos and texts</p>	

Mobility	Techfin & Finance	
<p>We put mobility services to work through each of life's moments and stages all while meeting the transport needs of our users. In so doing, we deliver optimized mobility for people, products, and services and render a more seamless and convenient user experience.</p>	<p>Kakao Pay is creating never-before-possible financial services through technology that can be applied to every aspect of our daily life, and is extending its scope of business from money-transfer and payment services available on Kakao Talk to investment and insurance. Kakao Bank is a leading internet-only bank that leverages user-centric innovative technology. Kakao Bank serves to truly create a new chapter in the history of banking.</p>	
<div></div> <p><b>Kakao T</b> MaaS (Mobility-as-a-Service) platform that delivers taxis, parking, navigation, chauffeurs, e-bikes, trains, buses and other varied mobility services</p> <p><b>Accumulated number of subscribers</b> Over 28 million <b>Number of users who registered their credit card (automatic payment)</b> 13.64 million</p>	<div></div> <p><b>Kakao Pay</b> Financial service platform that launched as Korea's 1st mobile easy payment service to remove the inconvenience experienced with existing financial activities, including money-transfer, membership, billing, and authentication</p> <p><b>Accumulated number of subscribers</b> Over 35 million <b>Total payment volume</b> KRW 67 trillion</p>	<div></div> <p><b>Kakao Bank</b> Internet-only bank that delivers a new financial platform to bring innovation to conventional financial services through innovative technology and customer-centric ideology</p> <p><b>Deposits &amp; loans</b> KRW 23.5 trillion in deposits KRW 20.3 trillion in loans <b>Number of customers</b> 15.44 million</p>
<div></div> <p><b>Kakao Navi</b> One-stop platform for car owners that provides 'Service for Car Owner' services including visits for maintenance, car washing, used car trading as well as 24/7 traffic flow analysis powered by extensive mobility data and rapid and accurate navigation services updated every minute</p>		



**Content Business**

Gaming	Music & Entertainment	Paid Content
<p>We provide game services for users to enjoy with friends to enrich their experience and increase their interest and participation in such gaming activities. In launching a number of highly successful and popular games, we set the trend in the gaming market.</p>	<p>We deliver differentiated services powered by information technology to amuse users in a never-before-possible way, bringing their entertainment experience to a whole new level.</p>	<p>We deliver seamless content services across webtoons and web novels based on our ownership of Korea's most extensive IP pool of stories.</p>
 <p><b>Kakao Games</b> Developing and servicing games and content within a wide array of genres both in Korea and abroad across mobile, online PC and VR platforms.</p> <p><b>MAU (Monthly Active User)</b> Over 20 million</p>	 <p><b>Melon</b> Korea's leading music platform that has established market leadership through differentiated services that combine music and information technology since its launching in 2004.</p> <p><b>Paid subscribers</b> 5.13 million</p>	 <p><b>Kakao Page</b> Korea's leading story entertainment service that provides the nation's largest premium online literary platform</p> <p><b>Combined transactions made on Kakao Page</b> KRW 528.5 billion</p>
		 <p><b>Daum Webtoon</b> IP content service that created a whole new worldwide genre of 'webtoons' and has since released a number of masterworks to date</p>
		 <p><b>Piccoma</b> Manga subscription platform operated by KAKAO JAPAN, Kakao's Japanese subsidiary</p> <p>Global No. 1 manga subscription app</p>

**High-tech**

As of Dec. 31, 2020

IP Business	B2B & AI	
<p>We deliver cross-genre content that blends music, drama, cinema and performances with musicians and actors/actresses through our global platform network that brings the aesthetic experience of the user to a whole new level.</p>	<p>We leverage AI technology applicable to both one's home and office life, to build a more convenient and flourishing world. Kakao's AI technology and service operation knowledge are further evolving through innovative business services.</p>	
 <p><b>Kakao Entertainment</b></p> <ul style="list-style-type: none"> <li>• Music content Securing an unrivaled market share in the domestic music distribution market and expanding the global distribution network through the music planning, production and distribution business</li> <li>• Video content Accelerating the original video content business across mobile, TV and cinema platforms with top-notch creators and talent</li> <li>• Management business Professional management of celebrities that are at the core of video content IP</li> </ul>	 <p><b>Kakao Work</b> Creating new employees' working experience with AI-based messenger centric end-to-end work platform</p>	 <p><b>Kakao Brain</b> Developing platforms and AI technologies — cloud, voice, meta-learning, natural language processing, and video processing — that help create a virtuous cycle within Korea's AI ecosystem to build next-generation growth drivers</p>
	 <p><b>Kakao i Cloud</b> Enterprise cloud service delivered through Kakao's extensive expertise</p>	 <p><b>Klaytn</b> Public blockchain platform that supports an intuitive and easy-to-use development environment and exceptional performance while improving the UX limitations found in existing blockchain platforms with the intent to mainstream blockchain technology</p>
 <p><b>Kakao Friends</b> Offering a differentiated brand experience to consumers with a variety of lifestyle products that have added a spark of joyful creativity since its inception as a provider of emoticons for the mobile messenger Kakao Talk</p>		

# 2020-2021 Highlights

## Strengthening ESG management

- We defined ESG (Environmental, Social, and Governance) management as **'our commitment and responsibility to a better world'**, and set our commitments, responsibilities and actions across four distinctive areas.

<Our Commitment and Responsibility to a Better World>



- We established **the Corporate Governance Charter** as the foundation of our ESG management, and realigned regulations for respective committees under the Board of Directors (BOD).
- **The ESG Committee was created under the BOD** to set the direction of Kakao's ESG management and enable swift decision-making on ESG management.



## Advancing shareholder-friendly management

- We were honored with **the Excellence Award in the securities market category at the 2020 Korea IR Awards** hosted by the Korea Investor Relations Service in recognition of our efforts to facilitate communication with shareholders and investors and transparently disclose business information through the proactive participation of senior management.

Received the Excellence Award in the securities market category at the Korea IR Awards



- We also received the **Overall Grand Prize at the 18th Money Today IR Awards** hosted by the business news media Money Today, and were identified as a **top performer in creating English disclosures by the Korea Exchange**.

Received the Overall Grand Prize at the Money Today IR Awards



Designated as a top performer in creating English disclosures by the Korea Exchange

## Building green data centers

- Our Ansan Data Center, to be completed in 2023, was specifically designed to become a green data center with a **1st grade energy efficiency** and top-tier green building certification.
- **Our top priority is the eco-friendly operation** of data centers by way of using green energy, installing high-efficiency cooling systems, and establishing water recycling infrastructure.

Pursued 1st grade energy efficiency and top-tier green building certification



Placed top priority on eco-friendly operations

## Promoting the diversity of our BOD

- We appointed two of our four independent directors as females in 2020, which surely helps **promote the diversity of our Board of Directors (BOD)**.
- Kakao's pool of independent directors **consists of experts from such diverse backgrounds** as robotics, finance & accounting, media advertising, and AI security, which aids in Kakao's business and management decision-making.



Appointed 2 female directors



Pursued diversity in considering the backgrounds in appointing independent directors

## Countering hate speech

- We are the first-ever private sector business in Korea to **establish the 'hate speech principle'** to create a sound digital environment.
- Our Kakao Talk #tap news comments service and operation policy was revised to include the **updated reporting items of 'discrimination and hate'** in addition to abusive or slang words.
- Furthermore, we added new functions to allow users to **hide comments or block specific individuals posting comments** in order to protect user rights concerning our comments service.



Established the hate speech principle

Created new reporting items of 'discrimination and hate'

## Creating a gender-equal culture that brings flexibility to all

- Kakao's job application form does not require applicants to specify their gender or post their photo and this helps provide an equal opportunity to all in the recruitment process.
- Our family care leave, leave of absence and reduced work hours are made available to the whole Krew regardless of their gender.
- We achieved the **'Family-friendly Business Certification'** granted by the Korean Ministry of Gender Equality and Family in 2020 in recognition for our efforts to operate exemplary family-friendly programs. We also won the Asia Business Daily CEO Award in the organizational culture category at the **5th Asia Women Index Awards**.



Achieved the Family-friendly Business Certification granted by the Ministry of Gender Equality and Family



Received the Asia Business Daily CEO Award in the organizational culture category at the Asian Women's Index Awards

## Overcoming COVID-19 with Kakao Together

- Our ongoing donation campaign launched to help **overcome the COVID-19 pandemic** was joined by more than a million people to raise over KRW 5 billion.



1 million

Joined by more than 1 million participants

5 billion

Raised over KRW 5 billion

- The donation campaign was widely publicized through Kakao's varying services and platforms, and **convenient mobile donation options** were provided to encourage user participation.



Created convenient mobile donation options

## Protecting children and teens from sexual exploitation

- We became the first Korean business to establish **principles for the protection of children and teens against sexual exploitation**. These principles were reflected in our Operational Policy and Algorithm Ethics to provide a safe digital environment for children and teens.
- We apply the **zero-tolerance principle to any and all sexual crimes against children and teens** and adopt broader definitions concerning sexually inappropriate content, conspiracy to commit sexual crimes, excessive sexual objectification, and sexual grooming.



Established principles for the protection of children and teens against sexual exploitation and reflected these principles in our operational policy

Provided a safe digital environment for children and teens

## Establishing the Kakao Business and Human Rights Statement

- We established **the Kakao Business and Human Rights Statement** to outline our obligation to protect the human rights of our Krew and business partners, promote users' data privacy and guarantee their freedom of speech as well as our digital responsibility and green principles.



Established the Kakao Business and Human Rights Statement

## Providing company-wide Algorithm Ethics training

- In 2018, we announced our Algorithm Ethics as the 1st Korean business to do so.
- **Algorithm Ethics training were added to our in-house ethics management training curriculum** as a way to earnestly act on Algorithm Ethics, and these courses were provided to all our Krew members.



Became Korea's first to announce the Algorithm Ethics



Provided Algorithm Ethics training to all employees

# Part. II

## Our Commitments to a Better World

- **Commitment and Responsibility to a Better World**

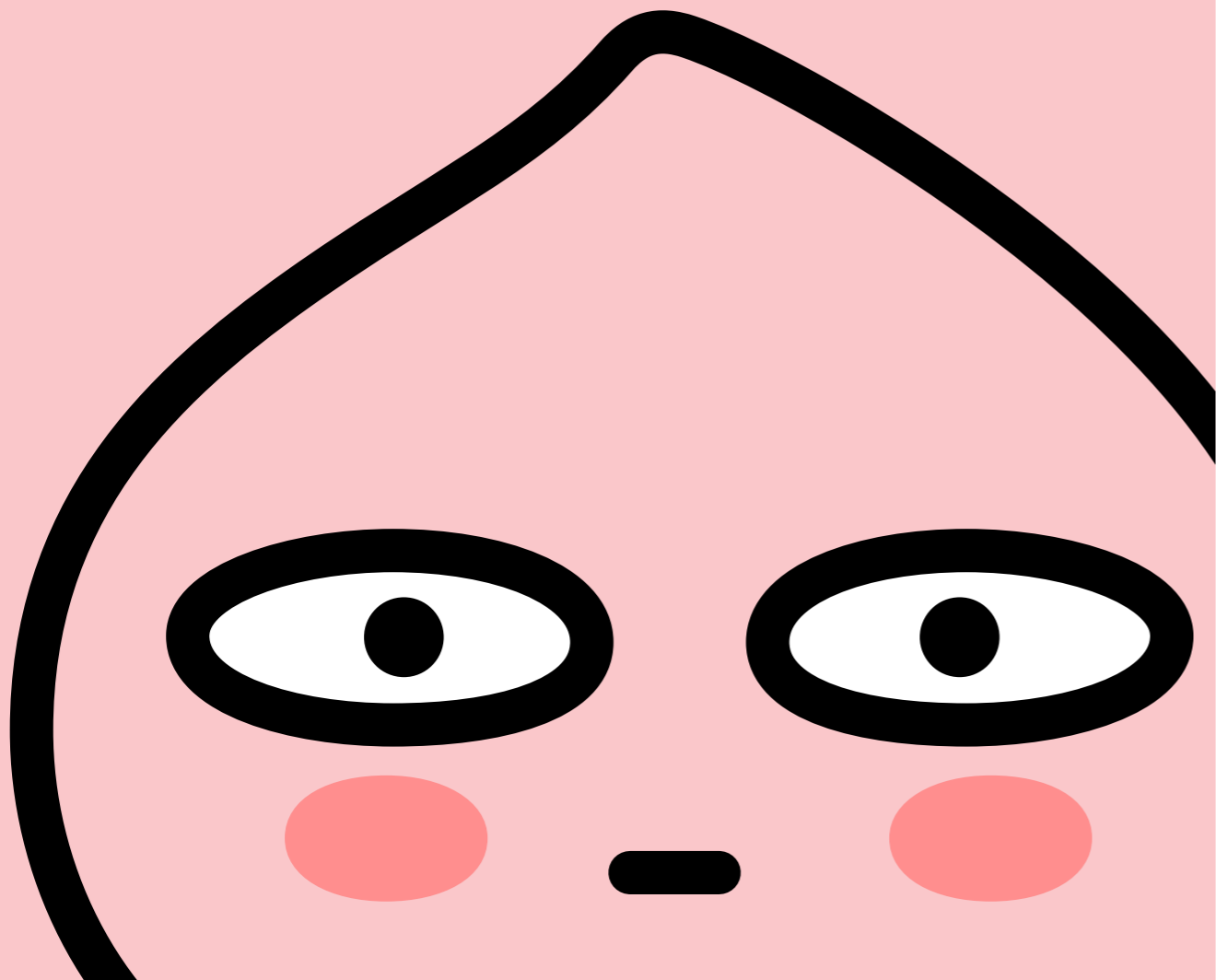
- Resolution of Social Issues

- Shared Growth

- Digital Responsibility

- Environmental Sustainability

- **Platform in the COVID-19 Era**



# KAKAO'S COMMITMENT AND RESPONSIBILITY TO A BETTER WORLD

Kakao has achieved remarkable progress over the past 10 years. Kakao Talk has become a household name used by virtually all Koreans, and our Kakao Community of affiliated companies has also grown significantly. Looking back, we take pride in our contribution to creating a world that is just more convenient all while pursuing growth as a company.

Over the years, our priority has always been to enable people to freely communicate, and to eliminate any inconvenience people could face in using our mobile solutions. As we initiate our journey into the decade ahead and open a second chapter in our history, we strongly understand the need to think about the bigger role we should assume in striving to improve the world.

When a company's operations are based on a good faith, it can surely bring about positive change in the world and serve as an agent of change to help resolve social issues.

At Kakao, we began questioning what we could do better and what we should do and then moved on to define the actions we could take across a variety of areas. We wish to disclose our commitments and responsibilities we've assumed to make a truly positive change in the world.

## **Kakao's Commitment and Responsibility to a Better World**

### **Kakao takes its distinctive Kakao Style approach to 'resolving social issues'.**

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We employ our distinctive innovative thought process to help resolve social issues through our business activities.

### **Kakao pursues 'shared growth with its stakeholders'.**

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We conduct business in a way that pursues shared growth with our partners, Krew and members of the IT ecosystem who are essentially our stakeholders and who accompany us in our journey to create excellent services.

### **Kakao fulfills its 'responsibility in the digital society'.**

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We fulfill our corporate social responsibility as a digital platform business in addressing any adverse impacts that stem from our services and/or technologies.

### **Kakao takes the lead in 'protecting the environment'.**

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We fully respond to climate change and other global environmental challenges, and endeavor to mitigate any negative environmental impacts that our worksites could ever potentially cause.

# OUR COMMITMENT AND RESPONSIBILITY TO RESOLVE SOCIAL ISSUES

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## Resolving Social Issues through Service and Technology

We take the Kakao Style approach to resolve social issues. The organization that can bring sustained change to society in the most efficient way is a business, and it is businesses that are also responsible for creating a healthy ecosystem. In this regard, Kakao does its utmost to bring meaningful change to society and this intent is behind each and every service that we provide. Our efforts to act on this philosophy include: offering traffic guidance to mobility-disadvantaged individuals, allowing ease of notification on the details of sexual offenders, and delivering services that promote wasteless production and ethical consumerism. All of these represent our wholehearted commitment to resolving social issues.

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## Creating Social Impact

Making the world a better place is easy when done together. Kakao leverages its technology and resources to bring change across our entire system. We engage innovative partners and users in undertaking impactful social contribution activities with the ultimate aim of pursuing positive social change. Kakao unites with its users to pursue social change that creates lasting value.

# OUR COMMITMENT AND RESPONSIBILITY TO PURSUE SHARED GROWTH

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## Pursuing Shared Growth with our Partners

It is our sincere and earnest desire that Kakao's technology and assets will serve as a solid steppingstone and a level playing field that leads our partners to a place of elevated freedom in all they go on to do. As a platform business that bridges partners with its users, Kakao explores ways forward to seek shared growth with all its stakeholders based on diversity and fairness. In 2010 when we had just surpassed the 2 million mark in Kakao Talk users, there were only four emoticon creators. This number surged to 2,400 in just ten years and prompted the term 'emoticon creators' to the vocabulary of professional titles. When our partners succeed, our users, customers and viewers also find success in the fact they can access more high-quality content and services, and this in turn, allows us to discover other values as a result. It is with this belief that we can build such a virtuous cycle that we focus on establishing Kakao's unique ecosystem.

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## Increasing Value for our Krew

Recruiting top-notch talent makes the whole Krew take pride in working with competent colleagues and motivates them to continuously build their competence and career, which lie at the core of Kakao's goal in increasing value for its Krew. We recruit 'outstanding talent' as the very first step in providing better service to our users. Our recruitment process has shifted its focus from the mere scope of recruiting only direct applicants to proactively recruiting exceptional talent by directly identifying and reaching out to talented individuals who are the perfect fit for our work approach and required job descriptions. We are also committed to establishing policies and a work environment that enables our Krew to reach their potential so that their work experience at Kakao itself directly contributes to their individual growth and career development.

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## Creating a Sound IT Ecosystem

We not only openly share our technology and expertise, but also drive the stable growth of the entire industry in the areas of human rights improvement of the IT ecosystem, fair trade and anti-corruption. A company's growth depends on the overall health of the industry in which it operates. As such, Kakao hosts if Kakao conferences to seek win-win partnerships with developers while advancing human rights and ethics management to promote the healthy growth of wide-ranging stakeholders impacted by our business operations.

# OUR COMMITMENT AND RESPONSIBILITY TO THE DIGITAL SOCIETY

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## Improving Digital Accessibility and Literacy

**We support all to benefit from digital technology and to aptly use information and technology.** Kakao works under the basic belief that services should be widely accessible to all in their everyday life. As a 'contactless' culture spreads and has taken hold in the wake of COVID-19, we launch services that look out for the underprivileged with improved accessibility to increase their ability to use digital technology, creating a diverse and inclusive culture in so doing.

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## Establishing Algorithm Ethics

Kakao's AI connects virtually anything and anyone together to create a better world, and will surely serve as a key driver to increase the value of connectivity. However, our vision for AI is never confined to a mere technological evolution. **Kakao's use of AI technology strictly follows ethical standards to contribute to the benefit of and contentment of all.** To this end, Kakao does its utmost with respect to algorithms within the ethics boundary recognized by our society, which led us to announce the 'Kakao Algorithm Ethics' that outlines the overarching principle of pursuing benefit and satisfaction for all. We stand united against discrimination and deliver truly inclusive technology and services. We also specify that our algorithms will reflect specific intended purposes so as not to undermine their independence. We sincerely explain our algorithms to gain credibility to the extent it does not compromise our corporate competitiveness.

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## Protecting our Users

**We ensure that any possible inconvenience is minimized in the service use process.** Kakao's growth is fueled by the trust that our users place in us. We proactively reach out to our users to render the digital world safer and more convenient. We consider the impact our services have on society from the planning and development phases so that our services can be safely used even by children.

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## Promoting Personal Data Privacy and Information Security

**We strictly comply with domestic/international regulations in processing personal information, and endeavor to prevent security breaches from ever occurring.** Kakao's business areas primarily span across the digital environment. As we inherently handle user information, personal data privacy and data security constitute an essential component of our sustained growth. At Kakao, we fulfill our responsibility as an IT business through the legally-appropriate processing and safe management of information.

# OUR COMMITMENT AND RESPONSIBILITY FOR ENVIRONMENTAL SUSTAINABILITY

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## Responding to Climate Change

Kakao is keenly aware of the severity of environmental issues from climate change to energy depletion induced by GHG emissions, and we deeply understand the responsibility we must shoulder as a business. This drives us to explore the actions we must take on behalf of our precious earth and step up to the plate so we can help resolve these environmental challenges. We aim to reduce carbon emissions to zero across all our workspaces, taking into account the ongoing climate change and its consequences. Our data center to be built in Ansan, Korea, will be designed with integrative green solutions to make the best use of the given natural conditions and deploy a range of energy-reducing technologies with an aim to improve its operational efficiency while contributing to the transition into a low-carbon economy.

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## Conserving Resources and Protecting the Environment

We set the stage for our Krew to practice green habits in their daily life. We believe that the transparent disclosure of our current energy consumption is the very starting point in taking necessary actions. This is why we disclose reliable data through this Kakao's Commitment and Responsibility Report and introduce our stakeholders to our plans to offset the effect of our resource consumption and further reduce it. We will also take action in conjunction with our Krew to encourage eco-friendly behaviors on their part.

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## Delivering Green Digital Services

Kakao pursues Green Digital to render all its services, technology and policies eco-friendly. We believe that ESG should be fully integrated in our entire business operations to promote the sustainability of society at large. When the simple act of naturally conducting business lends itself to making our world a greener place - without the need to advance a separate additional agenda, it surely maximizes our commitment to preserving the planet. This holds true for digital businesses as well and eco-consciousness should be embedded into the digital nature of their business. In this journey to create a better world through digital technology, we at Kakao vow to be there every step of the way in making our society more sustainable.



## Our Platform in the COVID-19 Era

COVID-19 has exerted a tremendous impact on the lives of virtually every individual as well as the global economy and community, serving as a major driving force in the rapid acceleration of the digital transition. Amid this unprecedented turning point, Kakao harnessed its technology and services during the course of 2020 to help society continue to thrive and to fulfill its responsibility as a corporate citizen. Our technology and platform are relentlessly advancing to ensure that greater convenience and safety is delivered to the daily lives of users even in the upcoming post COVID-19 era.

### How Our Life Changed After COVID-19: Seen through the Lens of Kakao Data

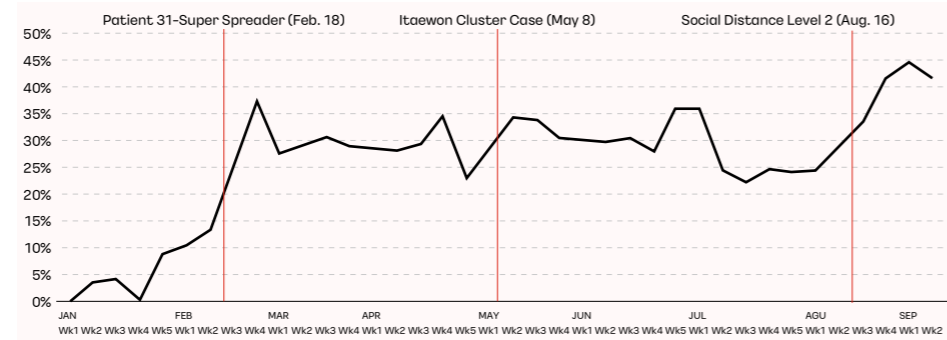
The influence and change COVID-19 brought upon our everyday lives was very sudden. Still yet, our society wisely leveraged what 'digital' had to offer in the face of this crisis to keep our daily lives from collapsing. Notably, 'no-contact' has become the new normal and this has brought about a dramatic transformation in the way people communicate, both with each other and with society at large. As it became virtually impossible for people to physically meet one another, more and more of us turned to digital communication. Such a transition is evident in how we communicate, and is cementing a new paradigm in how we go about our daily lives. We released the 'Kakao COVID-19 Report' by analyzing how our life has changed following the outbreak of this global pandemic on the basis of the data gathered through our services, and this generated statistically-significant outcomes as follows. The full version of the report is available in the 'Kakao Policy and Industry Research' section of our Brunch platform.

[Link to the Kakao COVID-19 Report](#)

#### #Increase in Digital Communication

<Kakao Talk Message Exchange> (Jan. 1, 2020 ~ Sep. 13, 2020)

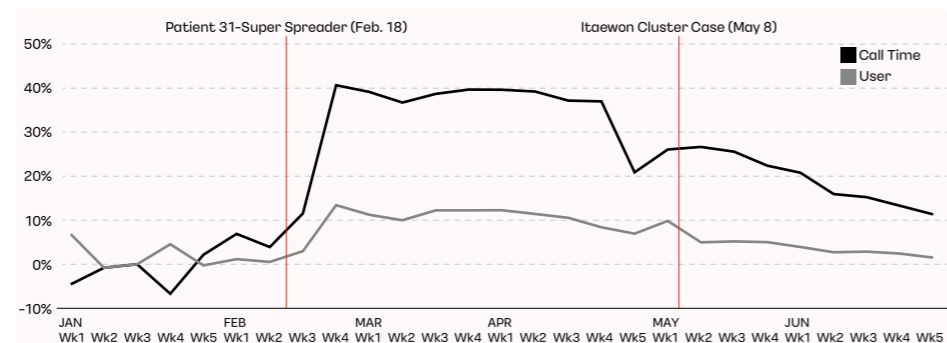
- 30% increase in messages sent and received as of the end of June from the beginning of 2020
- Drastic increase in messages sent and received recorded when social distancing rules tightened



#### #Increase in Multimedia Communication

<Kakao Talk Voice Call Time and Users> (Jan. 1, 2020 ~ Jun. 30, 2020)

- Nearly 40% increase in use hours after February<sup>1)</sup> against early 2020



1) Super spreaders were identified in Feb. 2020.

### Overcoming COVID-19 through Technology and Service

We cooperate with government agencies to put our technology and services to use in protecting the safety and health of the general public amid the COVID-19 pandemic. We openly share our technology and collaborate with a wide variety of organizations within the industry ecosystem to take the lead in making our society even safer.

#### Streamlining Entry Log Documentation with #QR Codes

In July 2020, we added the QR Check-in feature to use QR codes to create electronic entry logs to the COVID-19 information section of our #tab to help facilitate COVID-19 epidemiological investigations. Compared to the conventional paper-based entry log, this approach greatly improved the accuracy of information and user ease while reducing the risk of any personal data leaks. This also helps promptly feed necessary information into epidemiological investigations. Since March 2021, Personal Safety Numbers have been also made available as part of the QR Check-in feature so that users can provide these numbers instead of disclosing their mobile phone number in creating their paper-based entry log to prevent any personal data leaks from occurring.

#### Q. Is Kakao Talk's COVID-19 QR Check-in safe from concerns over #privacy infringements?

Kakao complies with highly stringent procedures ranging from data collection to disposal to ensure that no privacy infringement within the general public occurs. Personal data stored in a distributed manner at Kakao and the Korea Social Security Information Service (SSIS) are placed together for an intended use only when the need arises for epidemiological investigations. Kakao cannot access any data showing which facilities its users have visited, and the Korea Disease Control and Prevention Agency (KDCA) can only inquire about the data of individuals with a confirmed case and the users who visited the same facilities where confirmed individuals had gone. All data, unless otherwise needed, is automatically disposed of after a predetermined period of time. In August 2020, reviews were conducted from a third-party perspective on any possible privacy infringement risks regarding our QR Check-in service in conjunction with the Kakao Privacy Policy Advisory Committee, which revealed no such infringement risks were present.

Collection	Storage	Use	Disposal
Collect the minimum amount of data required for disease prevention through encryption	Store data in a distributed manner Kakao SSIS QR code generation record Facility information	Identify users by KDCA through the combination of two sets of data only when epidemiological investigation is needed	Automatically dispose data after 4 weeks, which is twice the incubation period of COVID-19

#### Participating in the Joint Development of #AI to Overcome the Global Pandemic

Kakao Brain formed an AI R&D consultation body with Samsung Electronics and SK Telecom, and is engaged in its first-ever joint project to develop 'SafeCaster' as a service designed to help overcome the global pandemic. AI predicts and analyzes high-risk areas and user behaviors to generate automatic social distancing recommendations or offer bypass routes to avoid such high-risk areas.

#### **Launching #Location Information Service in Relation to COVID-19**

Users of Kakao Map and Kakao Navi are able to easily check location information related to COVID-19. In collaboration with government ministries and private-sector businesses, we consecutively launched relevant services that enable users to locate pharmacies that sell public face masks and check the stock of these masks in real time. It also enables users to search for the location information of screening centers and dedicated COVID-19 hospitals as well as businesses where government-sponsored emergency relief grants can be used. We also make our open APIs of Kakao Map and other services available to small-scale developers and other private-sector players developing and distributing services associated with COVID-19. Offering our open APIs free-of-charge, we assist the general public in accessing highly useful information during the pandemic. Kakao Mobility serves as a case in point that demonstrates such endeavors: it was introduced at the OECD International Transport Forum (OECD-ITF) as a best practice example for the joint efforts it made in weathering the COVID-19 crisis.

#### **Delivering Safe #Mobility Experiences**

Kakao T provides users with services customized to the 'non-contact' era. Users can type in their departure locations and destinations through the app to call a taxi and then use its automatic payment service to minimize any conversation or contact with the driver. To further improve the safety of this feature, Kakao T Blue taxi drivers are provided with face masks and hand sanitizer on the job as well as online training to ensure their vehicles stay clean. In partnership with Cesco, a professional Korean hygiene service provider, we took our disease prevention measures to the industrial standard and disinfected all Kakao T Blue taxi interiors. Furthermore, we launched mask-wearing campaigns for chauffeur drivers and helped purchase their masks. As for bikes, their handles, seats, brakes and other high contact areas are regularly disinfected.

#### **Offering #Vaccination Booking and Alert Services**

Under the business agreement signed with the Korean Ministry of Public Administration and Security, Kakao supports the vaccine booking system of the Korea Disease Control and Prevention Agency on the Kakao Talk platform. Kakao Talk enables the authentication process for users to book their COVID-19 vaccination and to receive booking alerts.

#### **Responsible Actions Taken by Kakao and Kakao Community**

Kakao leverages services that best manifest the characteristics of each Community member in extending a helping hand across the whole society.

#### **COVID-19 #Kakao Together**

We hosted donation campaigns to help people weather the COVID-19 challenge through Kakao Together, Kakao's social contribution platform launched in 2007. Under the theme of COVID-19, more than 120 donation projects were opened and joined by over 1 million people to raise approximately KRW 5.39 billion. Donations went towards such causes as providing emergency relief kits containing face masks, hand sanitizers, daily necessities and meal boxes, helping the less-fortunate pay their living expenses, raising funds to support healthcare professionals and firefighters, supporting floriculturists and micro enterprises, and helping those in need of psychological support due to COVID-19 blues.

#### **Initiating a #Virtual Asset Donation Program**

Ground X initiated a convenient donation program that leverages the cryptocurrency KLAY contained in the virtual asset wallet Klip. The donations go towards the charity organization Good Neighbors to provide face masks and drinking water to children in Zambia who are especially vulnerable to falling ill from COVID-19. Compared to conventional donation collection methods, this program is convenient and transparent. During the campaign period, 1,880 Klip users joined to raise a total of 83,309 KLAY, or roughly KRW 62 million.

#### **Providing #Meal Boxes to the Underprivileged and People with Disabilities**

As COVID-19 restrained access to social welfare facilities, Kakao Bank donated KRW 130 million to the Community Chest of Korea to help provide meals to the elderly and to mentally/physically-challenged individuals. The funds raised was used to donate 20,000 meal boxes and home replacement meals to those who find it difficult to enjoy decent meals during the pandemic.

#### **Joining Donation Campaigns through #Kakao Talk Gift-Giving**

Kakao Commerce launched a campaign by way of its Kakao Talk Gift-giving service to support healthcare professionals and the underprivileged. During the campaign period, a donation page opened as part of the service for users to offer hygiene items and daily necessities as gifts to Hope Bridge, a disaster relief organization, with messages of encouragement. Furthermore, Kakao Commerce donated more than 120,000 bottles of hand sanitizer valued at KRW 500 million.

#### **Offering Operational Support to #Namsan Bakery in Daegu**

Kakao Commerce donated the proceeds generated through the sale of 'social distancing T-shirts' manufactured by Kakao Makers to Namsan Bakery in Daegu, Korea. Namsan Bakery is a bakery book cafe that employs people with developmental disabilities. The proceeds were donated to help operate the bakery and the bread baked was donated to healthcare professionals, paramedics, public servants and to facilities for people with severe disabilities.

#### **Producing and Donating #Healing Sound Content**

Kakao Enterprise teamed up with Kakao Together and BH Entertainment to produce 'healing' sound content that helps people regain their psychological stability and console their anxiety during the gloomy and uncertain times of COVID-19. Korea's well-known actors and actresses were engaged in reading comforting words to produce the content, which was then made available through our AI services of Kakao Mini and the Hey Kakao app as well as Kakao Together. Funds are raised in proportion to the number of downloads made, and Kakao donates a specific amount of funds whenever a user decides to join the campaign. Donations made as such all go to fund psychological support projects associated with COVID-19.

#### **Waiving #Franchise Fees on Kakao Pay Members**

Kakao Pay provided full fee waivers to offline franchise members regardless of the size of their sales for nearly three months from March 2020 to help them cope with the repercussions of COVID-19. Furthermore, QR kits containing QR code stickers and instructions were offered to SOHO franchise members who are relatively small in size in addition to fee waivers as a way to promote continued win-win partnerships.

#### **Providing Loan Support to #Business Owners**

Kakao Pay assisted business owners facing difficulties due to COVID-19 in receiving loans in partnership with Standard Chartered Bank Korea, Welcome Bank, SBI Savings Bank and People Fund. For nearly two months from March 2020, Kakao Pay's 'loan comparison' service allowed business owners applying for loans to benefit from prime rates and offered interest subsidies.

#### **Returning Game License Fees to #Internet Cafe Owners**

Kakao Games teamed up with its partner PUPG to fully return game license fees paid by franchise internet cafe owners during the whole month of October in 2020 as a way to relieve some of the burden of these micro-sized businesses amid the spreading and prolonged COVID-19 pandemic. This assisted internet cafe operators in reducing their fixed cost expenses.

#### **Providing Sales and Marketing Support for #Local Specialties**

Kakao Commerce provided online sales and marketing support for agro-fishery products whose sales activities were disrupted due to COVID-19 through Kakao Talk Shopping and the Kakao Farmer Talk channel between September and October of 2020. In the course of 2020, 16 local governments joined in this effort and annual sales amounted to nearly KRW 12.8 billion. At the end of 2020, our contribution to supporting the sales of these local specialty products was recognized as we were honored with the Minister of SMEs and Startups Award and the North Gyeongsang Province Governor Commendation.

#### **Efforts to Keep our Krew Safe and Healthy**

Kakao is fully committed to protecting the safety and health of our entire Krew amid the COVID-19 pandemic.

#### **Promoting #Real-time Information Sharing**

To share information instantly and provide response guidelines in the event of emergencies, we provide relevant information in real time and respond accordingly through our intranet Agit (Let's Overcome COVID-19) and chatbots. In addition, we provide our Krew with 'instructions to follow in the event of symptomatic cases or for those who come in secondary or tertiary contact with confirmed patients' to minimize the possibility of mass infections.

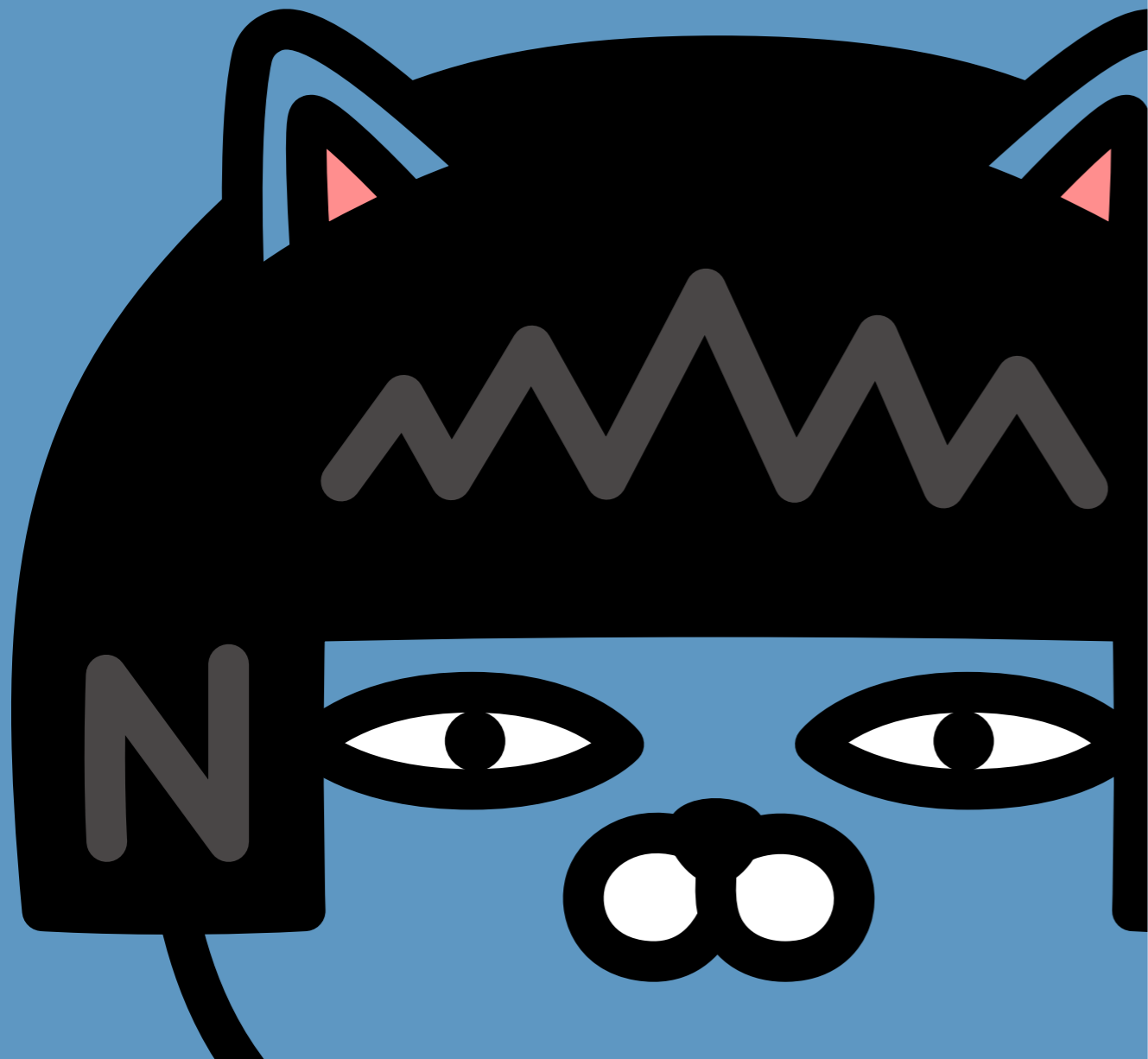
#### **Creating a #Safe Office Environment**

We take a highly stringent approach to office safety rules and disease controls in order to render a safer office environment. AI-enabled thermal imaging CCTVs were installed at the office entrance to constantly pinpoint the entry of any individual with a fever, and office facility operational guides are regularly updated to minimize the occurrence of mass infections. We continuously stock an inventory of face masks, thermometers, sanitizer and other essential expendables and regularly disinfect the entire office space while signing agreements with private-sector healthcare institutions to enable our Krew to receive rapid tests in the event of an emergency.

#### **Supporting the #Remote Work Environment**

We recommend our Krew to work from home to help curb the spread of COVID-19. Our 'Pick and Drop' service delivers personal work devices to the homes of our Krew to help them better adapt to remote work conditions different from those in the office environment. Also, our in-house work platforms Kakao Work and Agit serve to promote communication for collaboration among Krew members and assist them in performing their work in an easy and expedient manner on the mobile platform.

# Part. III



## Sustainable Management

- **Environmental**

- Environmental Management System
- Environmental Impact Mitigation
- Green Data Center
- Green Service

- **Social**

- Kakao Krew
- Partner
- User
- Community

- **Governance**

- Corporate Governance
- Risk Management
- Ethics Management

# Environmental

## **Why This Matters**

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Climate change has given rise to significant changes in the capital market. In line with the global consensus built on the need to respond to climate change, countries are adopting a host of regulations, and investing institutions not only demand businesses to disclose their information concerning climate change, but also urge them to invest responsibly. Korea also declared its goal for achieving carbon neutrality by 2050 and its commitment to the transition into a low carbon society. As global interest surges to understand just how climate change may affect our world, Kakao also recognizes the need to establish its green strategy with a focus on data centers and manage its environmental footprint.

## **Approach**

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To manage and mitigate the environmental impacts of our offices and data centers, we have built a GHG inventory to set reduction targets and are consistently monitoring our performance in this regard. Furthermore, we have launched a range of campaigns to cut down on the amount of resources used in our business operations, and these efforts are predominately attributable to the involvement of our Krew. The sum of such endeavors goes to demonstrate just how much we care about rendering our platforms and the service ecosystem ever greener so that our users naturally contribute to reducing their environmental footprint simply by choosing Kakao.

## **Reporting Contents**

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Environmental Management System  
Environmental Impact Mitigation  
Green Data Center  
Green Service

## Environmental Management System

### Environmental Management Implementation System

We have created a dedicated organization and are establishing an environmental management system to both minimize any potential environmental impact our business conduct could cause and also to ensure the implementation of eco-friendly options within our operations.

#### Environmental Policy

Kakao aims to minimize its environmental footprint in providing services and fulfill its responsibility through its efforts to prevent environmental pollution and protect the environment. In April 2021, we established the environmental policy as the foundation of our environmental management.

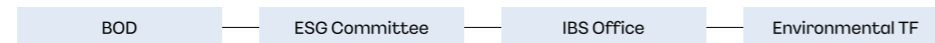
##### <Kakao's Environmental Policy>

<b>Continued improvement of environmental performance</b>	We systematically establish and effectively implement an environmental management system to continuously improve our environmental management performance.
<b>Preventive activity through improvements</b>	We make improvements based on environmental impact assessments to prevent environmental pollution.
<b>Compliance with regulations and other requirements</b>	We periodically assess customer satisfaction to meet the expectations of our customers while regularly evaluating our compliance with requirements and regulations - environmental and otherwise, to consistently improve customer satisfaction and our regulatory compliance.
<b>Waste and energy management</b>	We increase the reuse and recycling of waste to efficiently use energy and natural resources while continuously reducing GHG emissions.
<b>Transparent management</b>	We provide regular training and exercises to all Krew members to help them build competence to improve environmental management performance, and share our environmental policy with the general public to transparently advance environmental management.

#### Dedicated Organization

At Kakao, our Board of Directors (BOD) is required to review and approve our ESG plans and their progress outcomes. In January 2021, the ESG Committee was created under the BOD to improve our agility in responding to environmental issues. The ESG Committee is responsible for periodically managing and supervising our general ESG plans and their implementation, including environmental management, as well as for making deliberations and decisions. IBS Office, under the leadership of the company CEO, serves as the general manager of environmental management. Under the IBS Office, is the Environmental TF, to function as a working-level environmental management organization and a dedicated environmental data manager.

##### <Environmental Management Organizational Structure>



#### Environmental Management System

In April 2021, our Headquarters in Jeju and the Pangyo Office achieved the ISO 14001 environmental management system certification. We leverage our environmental management system to systematically identify, assess, manage and improve the environmental aspect of our organization and to efficiently manage risks associated with the environment.

#### Environmental Investment

We are investing to qualify for the LEED and WELL green building standards for Pangyo Alphadom City, a building that will accommodate members of Kakao Community in 2022. We are also drafting plans for environmental investments in our adaptation of a green design approach to our data center to be built in Ansan, in the Gyeonggi Province of Korea.

#### Environmental Goal

We set our environmental goals to mitigate any environmental impact that could occur as a result of our business operations and to ensure that Kakao services have a positive impact on the environment. These goals include the development of environmental campaigns that our Krew will be engaged in by 2021 and the development of green services by 2022.

## Environmental Impact Mitigation

### Environmental Impact Mitigation Activities

Our activities to mitigate any environmental impact span from campaigns that our Krew members can readily join, to infrastructure improvements for office spaces and commute modalities.

#### Promotion of Green Commuting and Mobility

##### Commuter Bus Support

We have been operating commuter buses since 2017 to help our Krew reduce their use of passenger cars. As of April 2021, these commuter buses have been operating 19 routes that bring our Krew to work and 17 routes that take our Krew to their various residential destinations, and we plan to keep on adding more routes. We also operate shuttle buses that travel between our office and nearby subway stations. By offering commuter buses and public transport support, we encourage our Krew members to reduce their passenger car use and contribute to improving the air quality. Currently, nearly 45% of our full-time employees either take commuter buses or shuttle buses.

##### Promoting a Bike Friendly Culture

We installed bicycle parking spaces within the office facility to promote both the incentive towards cycling as a means of fitness for our Krew and a zero-carbon commute. These bicycle parking lots also support charging facilities for e-scooters and e-wheels to encourage their use. As of April 2021, our Pangyo Office has bicycle parking lots measuring (70m<sup>2</sup>) at six different locations, and it is mandatory that any of our new office contain these facilities.

##### Building an EV Infrastructure

Our Jeju Office is equipped with Tesla Superchargers as well as an EV charging station for general EVs. These facilities are available for Krew members as well as for drivers of company cars. Our Pangyo Office also operates an EV charging station and is considering expanding it. A portion of our company car fleet is composed of EVs to help reduce the use of internal combustion engine vehicles.

#### Environmental Training and Campaign

We provide environmental training to elevate our Krew's awareness concerning ways to become even more eco-conscious. To help reduce the use of disposables, our in-house cafeterias opt for PLA (Polylactic Acid) straws and biodegradable paper cups, and we are planning to gradually taper off our use of disposables. Furthermore, we operate cafes that only serve beverages in reusable mugs to reduce the waste generated at our office. Our in-house cafes clean and sort all the milk cartons they use in exchange for toilet paper through community service centers or recycling companies which are then returned to Krew members as a way to remind them of their contribution to environmental protection. Our amenity facilities including office pantries are equipped with UV cup sterilizers, cleaning supplies and recycling receptacles to encourage our Krew to reuse and recycle.

## Green Data Center

Kakao currently operates four data centers, and is expected to complete its own data center in 2023. We continue to work to maximize the energy efficiency of our existing data centers, and vow to fulfill our environmental responsibility by taking into account environmental considerations - all the way from the design phase - in operating our own data center.

### Energy Efficiency Management of the Data Center

The stable management of any data center requires that the temperature within the server room is maintained within the set range. The cooling system operating for this purpose is one of the major contributors to the energy consumption of data centers. Kakao continuously improves its cooling system and rack structure to mitigate GHG emissions from its data centers, and selects energy-efficient servers for this purpose.

#### Improved Air Conditioning within the Server Room

Improving the energy efficiency of the server room largely depends on the efficient management of the cooling equipment. This prompted us to pursue a range of improvements to separate the high temperature heat generated by the servers from the cold air supplied by the cooling equipment.

#### Rack Structure Improvement

The racks that we have used in the past were mainly installed to mount our servers, and thus were rather lacking in properly addressing the potential issues caused by the gaps that exist between racks. We recognized the need to address the problem of cold air flowing through these gaps and the equally ineffective issue of hot air flowing backwards through these gaps. This prompted us to directly participate in the rack design phase and improve the rack structure to minimize the interference between cold and hot air.

#### <Improvements Made on the Rack Structure>

Maintain the minimum space needed for cabling	→	Eliminate unnecessary free space
Independently manufacture blanking panels of various sizes for diverse purposes	→	Eliminate unnecessary aisle space for air
Introduce steel-bases racks capable of withstanding upwards of 1 ton of weight	→	Improve the use of space

#### Active Introduction of Containment Air-conditioning

As power consumption per rack continues to increase, it is critical to make improvements on high-density equipment installation. As such, we adopted cold aisle containment in 2012 and have even opted for hot aisle containment which is operationally more efficient and allows for more time to respond to disruptions. While temperature differences by rack height and distance spanned from 5~6 °C to up to nearly 10°C before improving our server room air conditioning environment, the improvement of the rack structure and the introduction of containment air-conditioning helped close this gap to maintain a mere 1~2°C differential, thereby making our data centers operate at their highest-ever efficiency.

#### Use of High Energy Efficiency Servers and Units

To manage the energy efficiency of servers and power supply units, we are selecting only servers certified under diverse energy efficiency standards.

#### <Energy Efficiency Certifications Awarded to Our Servers and Power Supply Units>

- ENERGY STAR®
- Power Supply Titanium Level Certified
- Power Supply Platinum Level Certified

### Development and Operation of the Smart Temperature Management System

Our server rooms are equipped with temperature and humidity sensors installed close together so that we can quickly and easily understand their operational status. Within data centers, temperature measurements are generally performed in the cold zone at a single location, which is 1.5 meters up from the floor. This limits the ability to perform detailed temperature measurements in large areas. To eliminate this limitation, we dramatically improved the installation method for temperature/humidity sensors within our server rooms, and have established a real-time monitoring system to maintain accurate temperatures within our server rooms.

#### <Reinforcement of the Server Room Temperature Management System>

Reinforce the installation of temperature / humidity sensors	Install three or more sensors from the bottom to the top of the rack
	Install sensors for at least every two racks
Establish a monitoring system	Check temperatures fluctuations in real time through the monitoring page
	Configure the functionality to support Kakao Talk-based checks and controls

**Building a Green Data Center**

We have been embracing green choices for our data center to be completed in Ansan in 2023, ever since its design phase. Kakao will proactively invest in improving the power efficiency of its data centers to minimize its environmental footprint.

**Green Certification**

Our data center to be constructed in Ansan will achieve the highest grade in G-SEED (Green Standard for Energy & Environment Design) and 1st grade in the energy efficiency rating based on its eco-conscious design.

**Eco-conscious Design**

Our future data center in Ansan will have a renewable energy infrastructure and install equipment to improve the efficiency of cooling power. Such an eco-conscious design approach will enable it to reduce nearly 14% in carbon emissions and save approximately KRW 3.1 billion per year in energy costs. The data center will be managed so that it can keep its PUE at 1.3 or under.

<Green Considerations for our Ansan Data Center>

Adopt an energy use monitoring (DCIM) design	Install 1,000kW-capacity photovoltaic panels	Use 50kW-capacity green fuel cells	Secure more than 35% in ecological area ratio
Embrace a pre-cooling chiller system	Adopt a waste heat recovery system	Adopt a rainwater and gray water recycling system	Introduce a hot aisle containment system

<Aerial View of the Ansan Data Center (CG)<sup>1)</sup>>



1) This aerial view rendering may differ from the actual data center to be completed.

**Green Service**

**Delivering Green Digital Services**

The services we provide at Kakao embody our commitment to bringing meaningful change to society. As the reckless use of resources has already given rise to a host of social and environmental issues, we develop a wide array of services to solve these issues and encourage users to engage in this process.

**e-Bike Sharing Service**

In 2019, Kakao Mobility launched T Bike as an e-bike sharing service. An increased use of bicycles improves the equal distribution of differing transport modes, and as a result, contributes to mitigating CO<sub>2</sub> emissions. Furthermore, electric motors add torque to bike pedals and deliver greater user convenience than that of regular bicycles. This service initiated a pilot run with 1,000 bikes in Sengnam, Gyeonggi Province and in Yeonsu, Incheon Metropolitan City, in March 2019. As of April 2021, nearly 8,000 bikes are under operation across 10 regions in Korea, and this service continues to grow.

**Collaboration to Promote the Distribution of EVs**

In January 2021, Kakao Mobility signed a business agreement with Kia Corporation to promote the distribution of EVs in the domestic mobility industry. This agreement aims to combine the platform of Kakao Mobility with Kia's EV technology and infrastructure to improve the driving comfort and satisfaction of taxi drivers and others in the transport business, along with ordinary drivers, and to improve the overall air quality by reducing GHG emissions. We will first support the taxi industry to quickly distribute and establish the use of EVs. We also operate a pilot program for charging services for EV drivers through the 'Service for Car Owner' service available within Kakao Navi to render the experience of EV users even more convenient.

**Kakao's Own Green Brand 'MAKERS PRIME'**

Kakao Commerce rebranded 'MAKERS PRIME' into a green brand of its own. As a brand operated on the Kakao Makers platform, MAKERS PRIME started with the mission to achieve inventory-free production through the 'made-to-order' approach. Today, MAKERS PRIME, under the slogan 'simple beauty borrowed from the earth', goes further to embed green considerations into its entire product life cycle - from raw materials and production all the way to its use and delivery to consumers. The brand rendered its raw materials and production methods greener in 2020, and its S/S 2021 product line was designed to take such an eco-conscious approach at least in one of the four components of the life cycle of materials — production — delivery — use as a way to make its entire products eco-friendly.

**Kakao Friends Unveiling 'Zero Waste' Products**

In April 2021, Kakao Commerce launched a green product line-up to help replace common disposables as part of Kakao Friends' Zero Waste campaign. These products include cooling bags made of recycled PET bottles and reusable straws and tumblers, and will focus on eco-friendliness by reducing the use of plastic packaging and opting for materials with higher recycling rates across the entire product line-up. In addition, Kakao Friends offline stores provide purchasers with plastic bags made from green-certified biodegradable resin. Since February 2021, these stores have also encouraged providing electronic receipts in place of paper ones to render both their products and store environment greener.

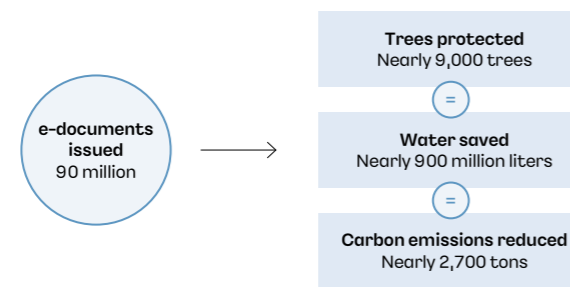


**e-document Service**

Kakao Pay, as the industry's first e-document service provider, is driving the transition into a paperless era. Issuing mobile e-notices helps reduce paper production and usage and eventually contributes to environmental conservation through forest protection and carbon emissions mitigation. Kakao Pay's mobile billing and e-document services posted nearly 90 million in the number of paper documents replaced as of 2020 (40 million bills and 50 million e-documents). This translates into more than KRW 45 billion in cost savings in document production and mailing.

**<Environmental Benefits Generated by e-document Services>**

(as of 2020)



**Investment in an EV Charger Startup**

In December 2019, Kakao Investment invested KRW 5 billion in Daeyoung Chaevi, an EV charger manufacturer. This move was made to preemptively respond to the growing demand for EVs, and is expected to generate synergy with other members of Kakao Community as Kakao Mobility expands its EV-related business. Follow-up investments have been made on an ongoing basis, and we will promote investment and collaboration to pursue ESG business opportunities.

# Social

## **Why This Matters**

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Stakeholder interest in and expectations for IT businesses to fulfill their social responsibility further underscores the need for such companies to preemptively identify diverse stakeholder requirements and reflect them in their business operations. Amid the rapidly-shifting business landscape with increasing uncertainties from the protracted COVID-19 pandemic and convergence led by the IT industry between the manufacturing and services industries, businesses, as members of the local community in which they operate, are able to jointly resolve emerging social challenges and seek shared growth to generate social value and create greater growth opportunities.

## **Approach**

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Kakao pursues growth hand-in-hand with its stakeholders. We support the personal development of all our Krew members, and establish a virtuous cycle within the ecosystem for our partners — content producers, and suppliers — to build their competitive edge. We also strike just the right balance between data connectivity and protection to safeguard users' rights and privacy while fulfilling our digital responsibility. Last but not least, we engage all to take part on our Kakao platforms in contributing to further disseminate the value of public interest within society.

## **Reporting Contents**

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Kakao Krew  
Partner  
User  
Community

## Kakao Krew

Kakao refers to its employees as Krew: this defines the identity of our Krew both as crew members who work together on the ship 'Kakao' and as colleagues who jointly navigate uncharted waters.

### Human Rights Management

Kakao complies with international human rights standards based on its human-centered philosophy, and takes responsibility for respecting human rights in interacting with all its stakeholders.

#### Kakao Business and Human Rights Statement

We endorse international human rights standards set by the United Nations and the International Labor Organization among others, and abide by domestic laws and regulations that reflect these standards. In January 2021, we established the Kakao Business and Human Rights Statement that illustrates our philosophy and principles on human rights management. In conformity with these principles, we will ensure that any stakeholder we interact with does not experience any kind of infringement on human rights.

[Link to Kakao's Business and Human Rights Statement](#)

#### Human Rights Infringement Reporting and Handling Process

We operate channels that report possible human rights infringements to Kakao. Anyone interacting with Kakao is eligible to raise their concern, and their identity remains strictly confidential. The reported issues are communicated to relevant teams depending on the nature of grievance. Meanwhile, solutions are created through internal procedures and handling outcomes are transparently delivered to those who initially rose the issues.

[Link to the Online Grievance Reporting Channel](#)

#### Awareness Improvement Training for our Krew

Company-wide compulsory training is provided to help our Krew improve their awareness concerning human rights issues. This includes compulsory education such as annual sexual harassment prevention education and education to improve awareness of the disabled, as well as education to prevent workplace harassment. In Q1 of 2021, ethics management training (including 30-minute sessions on improving human rights awareness) was offered to all Krew members to address such topics as the need to be more sensitive when it comes to human rights and the ways in which such violations could be prevented.

#### <Company-wide Ethics Management Training>

##### [All Kakao Krew Must Know about Ethics Management]

1. Concept of ethics management, international standards, attitude to embrace ethics management, AI ethics, Kakao Business and Human Rights Statement, etc.
2. Cartel, ban on unfair collaborative acts, unfair transactions, and abuse of power in contract signing
3. Human rights sensitivity, diversity-based anti-discrimination, guarantee of freedom and human rights protection

#### Promoting Diversity

At Kakao, we respect the diverse backgrounds and set of values that each and every Krew member brings to our company, and endeavor to increase our organizational diversity and create a flexible culture. We cherish diversity all the way from the recruitment process, and strictly ban discrimination on the grounds of place of origin, race, nationality, gender, age or disability.

#### Interactive Communication-based Management-Labor Relations

We respect the right to organize, the right to collective bargaining and right to take collective action in accordance with Korea's Constitution and Labor Relations Act as well as the overarching philosophy of the ILO. In 2019, we signed a collective agreement with our labor union through collective bargaining. In conformity with this agreement, Kakao ensures that it maintains and improves labor and living conditions for the Krew. The 'Roundtable' is operated to facilitate communication between labor and management. Consisting of eight members from labor and eight from management, the Roundtable is regularly attended by our CEOs, and the eight labor representatives are directly elected by the Krew to duly represent the voice of all Krew members. The Roundtable serves to engage in in-depth discussions on diverse topics including the way forward for Kakao and its HR and welfare systems, and also helps to build communication-based trustworthy relationships between labor and management.

#### Grievance Handling Mechanism for our Krew

We operate a broad array of channels to collect and handle grievances raised by the Krew. In the future, we plan to expand our communication channels to provide even more diverse options for the Krew to input and share their opinions and viewpoints.

<b>TellMe@Kakao</b>	TellMe@Kakao represents our intranet whistle-blowing system that is exclusively open to our Krew. Any Krew member may use this system to report a behavior that violates our Code of Ethics or receive counseling concerning such cases. Reports can be submitted either anonymously or under one's true name.
<b>Counseling at Labor lab for Krew</b>	Labor lab for Krew represents our research and executive organization that engages the Krew in the creation of the 'Kakao Style of Working' that values autonomy and immersion. The Labor lab for Krew operates counseling channels through e-mails, open chats or in-person meetings. This helps address any questions or suggestions our Krew may have in improving their work approach or systems.
<b>Members Engaged in the Roundtable Grievance Handling Process</b>	The Roundtable, our labor-management consultation body, is attended by three members in charge of grievance handling (2 elected and 1 appointed). They are responsible for communicating grievances raised through Agit or open chats to the Roundtable, swiftly identifying meaningful solutions and delivering or notifying them to the Krew member who raised such grievances.
<b>Time's Up</b>	Time's Up is a taskforce team voluntarily organized by our Krew to prevent sexual harassment in the workplace and minimize the injury that such occurrences cause. Time's Up serves as a consulting group for victims of workplace sexual harassment by understanding and supporting these victims and assisting them in resolving the problem every step of the way.

#### Kakao Organizational Health Check


We run annual health check to pursue sustainable growth on the basis of our accurate understanding of the Krew as the most powerful competitive strength we have. These health check outcomes help reinforce our strengths while identifying factors that may potentially hinder our growth and ways we can evolve and move forward. In 2020, a total of 59 items on 14 variables, including 'drive, flexibility, direction, a positive work experience and disclosure/sharing' were included in the survey questionnaire to measure our health as a company. This led us to verify visible improvements made in the areas of 'awareness of Kakao's way forward' and 'understanding work-related contexts'. Furthermore, we provided training to leaders to set goals and identify methods to improve our organization based on the awareness outcomes identified. Seminars were hosted for organizations at their request, and actions for members to take as agents of change to improve their ability to work as a team were identified through consensus-building.

**Talent Recruitment and Support for Growth**

Kakao supports its Krew members in their journey to willingly immerse themselves in the search for new solutions. As such, we provide them with the optimal conditions and systems to unleash their potential to the fullest-possible extent.

<b>Recruiting Approach</b>	<p>With the belief that ‘recruiting talented individuals is the first step in creating a better world with technology and people’, we are fully committed to recruiting new Krew members who will join in the mission of creating a better world. Our talent recruitment primarily focuses on the competencies required to perform one’s work, and the recruitment process is transparently shared and operated in a fair manner.</p> <p><b>Link to the Careers section on Kakao’s website</b></p>
<b>Internships and Open Recruitment</b>	<p>Our open recruitment for new developers, initiated in 2017 in accordance with the established talent recruitment process, follows procedures designed to verify the actual development competency of applicants rather than simply relying on the qualifications stated in their resumes. Applicants are required to input their basic contact information when submitting their application forms, and later take the coding test without document screening. In 2020, we operated our internship program in alignment with recruitment to hire individuals with multilateral thinking, values and unique rational and emotional qualities that are required in the rapidly shifting and growing big data, AI and blockchain industries.</p>
<b>Kakao Arena</b>	<p>The ‘Kakao Arena’ competition openly shares the issues Kakao is grappling with and high-quality data that help resolve such issues to generate collaborative solutions, and can be joined by anyone who enjoys machine learning and problem-solving. The winners are awarded prize money, and top-performing teams are given a chance to interview with the team responsible for building Kakao’s recommender system. As such, Kakao Arena serves as a channel to discover and recruit exceptional developers in addition to simply solving problems. The 3rd Kakao Arena hosted in 2020 was attended by a total of 786 teams and 1,143 contenders, which increased from the previous event.</p>
<b>Providing Krew Members with Disabilities an Opportunity to Discover Their Potential</b>	<p>With Linkage Lab, a member of Kakao Community and a subsidiary-type standard worksite for the disabled, we strive to deliver greater opportunities through the ‘link’ created between people with and without disabilities. Linkage Lab provides a work environment created through the universal design<sup>1)</sup> to enable its Krew to discover their potential and challenge their limits. These Krew members with disabilities provide internet services within the scope of their abilities including search operations, content production, web design, audio transcription and accessibility testing. ‘Talk Clinic’, a venue for massage therapy for our Krew members, hires visually-impaired individuals with government-certified masseuse/masseur qualifications to provide Health Keeper services while our in-house cafes serve coffee and other beverages with the help of baristas with developmental disabilities.</p>

<sup>1)</sup> Design products, services and facilities to make them accessible to all people regardless of their age, gender, nationality, or disabilities

<b>Supporting the Growth of our Krew</b>	<p>Kakao offers the optimal conditions and systems for our Krew, who are committed to their growth, to truly take the lead in their growth journey. Krew members set their own growth goals and approach, and Kakao supports them by operating a conducive career development system. We also provide wide-ranging training programs to assist our Krew, with their industry-leading expertise, in sharing mutual experiences, skills and knowledge thereby pursuing even more rapid development. All our growth support programs are measured for their effectiveness by gathering feedback from the Krew to explore their future path forward.</p>
<b>Growth Stage System</b>	<p>Kakao’s career development phases are defined as Growth Stages, which are set in accordance with the level of competency, roles and contributions that we expect from our Krew, and these stages serve as the foundation of our HR system and guide the development of our Krew. A total of 3 Growth Stages – Professional, Leader, and Master – are further segmented into six sub-stages. The Leader Stage and the Master Stage are divided into the ‘Maker Track’ for job experts and the ‘Manager Track’ for organizational managers.</p>
	<p><b>&lt;3 Growth Stages: Their Pathway and Definition&gt;</b></p>  <pre> graph LR     P((Professional)) --&gt; L((Leader))     L --&gt; M((Master))     </pre> <p><b>Professional</b> Learn and apply knowledge and skills related to one’s task to build expertise and generate individual outcomes</p> <p><b>Leader</b> Fully establish one’s expertise and share it with colleagues, and drive and support the performance and growth of colleagues</p> <p><b>Master</b> Set the organizational vision and direction with strategic leadership to take responsibility for the organization’s performance and growth</p>
<b>Onboarding Training for Newly-hired Krew</b>	<p>Newly-hired Krew members are provided with onboarding training before and on the very day they join the company. This training continues for a full month. Prior to starting work, we brief our new members on the details of their work assignments and necessary skill sets, and our ‘Onboarding Day’ and ‘Onboarding Monthly’ programs help them quickly understand the scope of Kakao’s business, work approach, performance appraisals and compensation system so that they are fully informed of such matters and can start working with a clear and solid understanding of the work essentials. The onboarding program launched for new developers hired through open recruitment in 2020 provided a two-month training to help them better understand Kakao and receive job skill training.</p>
<b>Leadership Training for Leaders</b>	<p>Our newly-appointed organizational heads also receive onboarding training. In 2020, such training was provided four times to cell leaders, part leaders and TF leaders and five times to team leaders. In addition, programs are designed and operated to help these leaders develop the capacity required for position-specific organizational performance and management. In 2020, ‘Tip&amp;Talk for Cell/Part Leaders’ was hosted as a performance management leadership course, and one-on-one meetings and appraisal interview trainings were arranged for organizational heads seeking out such opportunities.</p>

**Support for Optimal Growth Pathways**

In accordance with the goal to create a learning environment for our Krew members who are committed to pursue continued growth, we support these members so that they can select the most suitable growth path for themselves and receive associated support. We ensure that our Krew members take ownership in identifying areas of improvement and growth and aid in their development through domestic/international conferences, external training, the MOOC, the e-library, and the purchase of work-related books.

**Job Competency Training**

We operate job-specific growth programs, knowledge-sharing programs, and summer internship programs to assist our Krew in building industry-leading knowledge and skills and seeking mutual growth through peer sharing.

**Job Specific Growth Program**

The intent of this program is to discover industry-leading skills and knowledge keywords by job category, and provide optimal training pathways. Our Krew self-assess their own individual needs and their status to voluntarily engage in this program. In 2020, we delivered infrastructure training to our Krew in technology positions at Kakao and at Kakao Community. We also provided data analytics training to our Krew in service positions, and docent training to Krew in design positions to help improve work efficiency in their respective positions and quickly learn the necessary insights.

**Knowledge Sharing Program**

We support the growth of our Krew through diverse knowledge-sharing events: 'WAVE' is a company-wide insight-provoking lecture event that invites lecturers outside Kakao to share their insights, and 'Connecting Krew' allows our Krew members to share their experiences and knowledge to pursue mutual growth in so doing. In 2020, these programs were held on such topics as market and consumption changes stemming from COVID-19, user and data analytics and cloud and development culture to share the invaluable insights and experiences of our Krew at all levels.

**Summer Internship Program**

This internship program allows participants to experience Kakao's work methodology and gauge one's growth potential based on their in-depth comprehensive consideration of services that Kakao offers. Interns are given a chance to immerse themselves in Kakao's work methods and culture through meeting with the Krew in charge of services, team projects and Kakao leader/mentor matching. In 2020, this program was implemented without distinction between planning and design positions for interns to experience a broader perspective for their future growth path beyond the boundary of their majors or job categories.

**<Feedback from Krew>**

A series of processes of establishing my hypothesis, extracting and refining data, and generating outcomes to verify the initial hypothesis would definitely help me in performing my given work.

Participant in data analytics training for krew members in service business positions

It was extremely helpful that the Krew from different areas – software engineering, design and planning – all had different views on a single function and different insights.

Participant in the knowledge sharing program (Connecting Krew)

Having the opportunity to meet with working-level staff in one of the most forward-looking and deeply-rooted organizations served as a big turning point to ignite my desire to grow.

Participant in the 2020 Summer Internship program

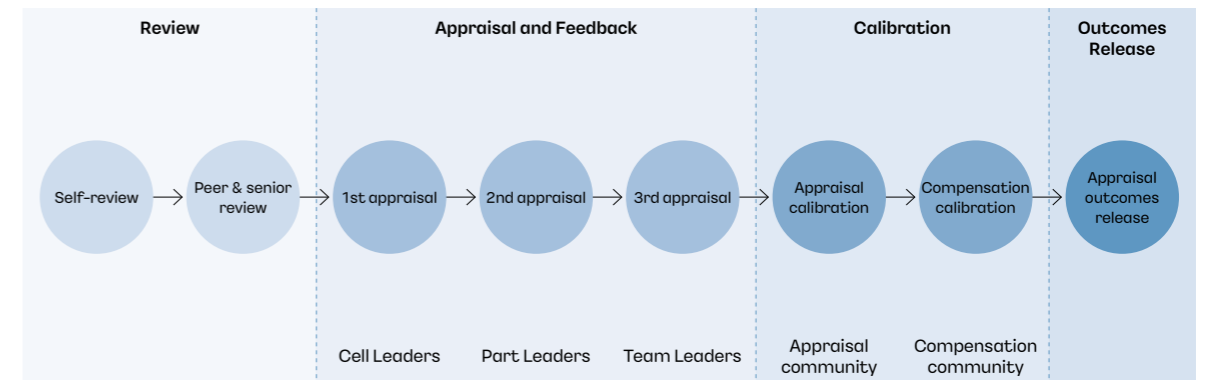
**Appraisal and Compensation Approach**

Kakao seeks to establish a performance management system that facilitates the individual growth of Krew members and close collaboration with colleagues. Every member of our Krew is assessed on their performance and competency under the fair performance management system that we operate, and those who perform their work with creativity surely receive the best treatment within the entire industry.

**Appraisal and Compensation Systems**

Our Krew performance appraisal system consists of 360-degree reviews made by the Krew members themselves as well as from colleagues, bottom-up review, and the assessments and feedback from organizational heads. Organizational heads who take the primary responsibility for Krew appraisals proceed with the appraisal process in accordance with the Growth Stage framework, and achievement assessments are conducted on the Krew's attainment of individual tasks and competency assessments on their work-related knowledge and skills and behavioral patterns. Achievement assessment outcomes are closely linked with the short-term compensation of performance bonus rates, and competency assessment outcomes with the long-term compensation of annual salary increase rates. Such appraisal and compensation results are confirmed through the calibration sessions attended by the appraisal/compensation community composed of the head of office, team leaders and job boards to engage in group discussions to generate standardized results, which are then released to the Krew.

**<Performance Appraisal and Compensation Process>**



**HR Systems Improved through Krew Feedback**

We deeply concur with the need to improve our Krew performance appraisal and compensation systems. We will ensure that not only the HR Division but also Krew's candid feedback plays a leading role in improving our HR systems, putting our Krew at the center of such systems. From defining the most pressing and imminent challenges, to finding solutions through our distinctive methods, we aim to engage our diverse Krew members to share viewpoints and look for viable solutions. It was with this intention that a separate TF was set up in March 2021, and discussions are currently underway.

**<Progress Status and Plans>**



**Innovative Work Way and Well-being for our Krew**

Kakao pursues trust and teamwork-based work methods to motivate our Krew to take the lead and generate synergy through collaboration. We operate welfare benefit programs that strengthen our Krew's full engagement in their work and self-directed initiative as well as flexibility and transparency that serves to aid in the well-being of each Krew member.

**Flexible Work Hours**

As our Krew members fully understand just what it means to uphold their responsibilities and cherish the value of collaboration, we apply the most minimum-possible principles while giving the greatest-possible autonomy. With the enforcement of the 52-hour workweek system in Korea, we also initiated flexible work hours for our Krew so that each member can arrange their own work hours and perform their work with self-initiated immersion within the set work schedule.

**Great Workplace for Parents**

We support a variety of systems and programs for our Krew members with infants and/or toddlers to work while safely caring for their young children. We operate daycare centers - 'Neul Yesol', 'Oh! Little', and 'Space Dot Kids' in the Pangyo Office and the Jeju Office— to help our Krew members along their journey of parenthood. Legally-stipulated leave programs are also available - from maternity/miscarriage/stillbirth leave for both mothers and fathers to parental leave, prenatal check leave, infertility treatment leave, and family care leave. Our achievements in operating such family-friendly programs were recognized as we were honored with the Grand Prize at the Work-Life Balance Business Competition 2019 in the Gyeonggi Province region and achieved the family-friendly business certification granted by the Ministry of Gender Equality and Family in 2020.

**Diverse Welfare Benefits for our Krew**

We operate a wide array of welfare benefit systems for our Krew. These support programs are made available for all Krew members, and are partially<sup>1)</sup> open for dispatched workers, interns, assistants and other fixed-term workers.

**<Welfare Benefits Provided by Kakao>**

Category	Program	Description
Kakao Krew are happy!	Sabbatical leave	• Provide one-month sabbatical leave and KRW 2 million in vacation allowance for every three years of service
	Condominium	• Provide access to resort facilities and varying discount benefits
	In-house club	• Support the payment of monthly in-house club expenses
	Melon subscription	• Support the Melon streaming plus subscription
	Discount benefits	• Provide discounts at Kakao Friends shops and airlines
Kakao Krew are healthy!	Group accident insurance/medical expense support	• Provide fee-for-service insurance plans and disease/accident insurance plans to Krew and their spouses, parents, and children
	Health check-up	• Provide annual health check-ups to Krew members, whose services can be transferred over to family members during the alternate year
	Talk Clinic	• Support massage services twice a month
Kakao Krew are looked after!	Family love support	• Provide insurance payouts in the event of death of Krew
	Family event support	• Provide financial support (supplies) and vacations for weddings, 60th birthdays, funerals and the birth of a child
	Holiday gifts	• Give KRW 300,000 on Lunar New Year's and the Korean Thanksgiving holiday
	Loan support	• Offer loan support of up to KRW 70 million for stable livelihoods
	Workplace daycare center	• Operate daycare centers in the Pangyo and Jeju Offices
	Maternity care	• Provide kits for expectant mothers
Miscellaneous	Commuter bus	• Operate commuter buses for the Pangyo and Jeju Offices
	Work-related reading	• Support work-related literacy with e-books

<sup>1)</sup> Including condominiums, in-house clubs, Melon subscriptions, employee discounts, support for group accident insurance/medical expenses, Talk Clinic, family event support, holiday gifts, support for expectant mothers, and commuter bus support

**Safety and Health for the Krew**

Kakao operates a number of policies and programs to create a safe and pleasant work environment. We keep our Krew safe and help improve their health so as to elevate the quality of life for each and every Krew.

**Occupational Safety and Health Committee**

Kakao operates the Occupational Safety and Health Committee as a consultation channel to ensure our Krew enjoy a safe and sound work environment. With the participation of an equal number of representatives from both labor and management as stipulated in Korea's occupational safety and health regulations and Article 55 of our collective agreement, the Committee meets every quarter to deliberate and decide on issues related to the health and safety of our Krew. In 2020, 'general matters on the operation of the Occupational Safety and Health Committee', the '2019 study on musculoskeletal risk factors and job-related stress: results and future plans', and 'health and safety rules on the prevention of infectious diseases' were discussed among others.

**Prevention of Work-related Ailments**

Every three years, we examine risk factors related to common musculoskeletal ailments occurring among Krew members while performing work. While none of our work performed at Kakao causes a burden on the musculoskeletal system, we continue to create work conditions that help our Krew correct their posture and maintain their health while working. We also conduct job-related stress tests to prevent such stress-induced ailments from occurring, and perform on-site inspections on potential accumulated stress. Such inspection outcomes are fully shared with the Occupational Safety and Health Committee, and necessary measures are developed through discussions and then implemented fully.

**Talk Clinic**

Talk Clinic (Health Keeper) is our massaging program designed to help our Krew members refresh themselves from the problems that can arise due to nature of IT work they perform, which involves sitting in front of a computer for extended periods of time. Five Health Keepers qualified under the government-certified massage therapy program provide Krew members with massage, acupuncture and physiotherapy per session lasting around 30 minutes.

**Talkeuibogam**

Talkeuibogam is our in-house nursing office. The office provides a host of services such as emergency care, wound dressing, over-the-counter medications and healthcare services (for obesity or smoking cessation) to help our Krew thrive in their professional life. Talkeuibogam employs a permanently-stationed professional healthcare manager who provides healthcare support nearly 700 times a month, and supervises and operates separate programs to help Krew members improve their health.

<b>Smoking Cessation Program</b>	We operate a six-month smoking cessation program in partnership with the local public health center in Bundang, Korea. At this program, we provide training and promotion events, and hire professional counselors to provide personalized counseling to assist our Krew members successfully kick the habit for good.
<b>Posture Correction Project</b>	Our Posture Correction Project is led by bodywork experts to help prevent our Krew from the needless suffering brought on by musculoskeletal diseases. The exercise program provides optimal breathing guidance, directives for correct walking and sitting postures and spine and shoulder adjustment advisories that allow Krew members to implement these helpful methods on their own.
<b>Inbody Challenge</b>	This program designs a customized workout program and a challenge goal that allows Krew members to manage for set periods to help them lose weight and infuse healthy habits into their daily routines.

**Talk Terrace**

Talk Terrace serves as a meditation and counseling venue for Krew members to manage any stress brought on by personal relationships, work or career. This is intended to assist them in improving both their mental and physical health.

## Partner

When our partners grow, it enables Kakao to grow, and our growth in return will lead to the success of our partners. Our definition of a partner is broad and spans from Content Providers (CPs) to IT infrastructure suppliers. Our goal is to establish a virtuous cycle within the ecosystem that allows our partners to become even more competitive as they work with us.

### Growing Together with Content Providers

#### 'Emoticon Creators', a New Emerging Profession

Ever since Kakao's emoticons debuted on the Kakao Talk platform in 2011, they have become a favored means of mobile communication among users. In fact, they became so popular as to define a whole new profession of 'emoticon creators', which served as testimony to the growth of Content Providers (CPs) within the ecosystem we created at Kakao and the unlimited potential for their growth in the years ahead.

##### <Emoticon Creators at a Glance in 2020>

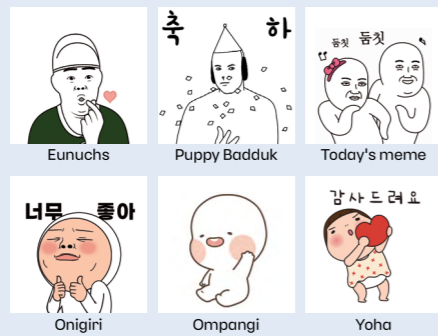
- No. of average monthly users: Nearly 30 million
- Cumulative No. of buyers: Nearly 24 million
- Average monthly No. of emoticons sent and received: 2.4 billion
- Total cumulative No. of emoticons sent and received: 29 billion
- No. of emoticon units that express a distinct emotion : 150,000

##### <Profits Generated from Emoticons in 2020>

- No. of emoticons that surpassed the KRW 100 million in cumulative sales: 1,300
- No. of emoticons that surpassed the KRW 1 billion mark in cumulative sales: 73 (increased from 55 in 2019)
- Ratio of emoticons sent as gifts out of total purchases made: 40% (increased from 34% in 2019)

##### <Popular Emoticons>

###### • Classic favorite emoticons



###### • Emoticons receiving spotlight in 2020



#### Strengthened Copyright Protection for Emoticon Creators

Kakao initiated copyright training in 2020 to help emoticon creators recognize the importance of copyrighting their creations and develop further knowledge on copyright laws. Such training was delivered in live format due to COVID-19, and training videos were uploaded on Kakao TV so they could be accessible to all emoticon creators at any given time. In addition, the 'copyright' category was added to the communication channel used between Kakao and these creators while dedicated staff were assigned to swiftly respond to copyright issues.

#### Mandatory Guidelines on Ethics and Copyrights for Emoticon Creators

Kakao emoticon creators are required to comply with the integrity and ethics guidelines presented by Kakao, and are strictly prohibited from engaging in any action that violates copyrights or trademark rights. This is stipulated in the 'Mandatory Guidelines on Ethics, Business and Copyrights' published on the Kakao Emoticon Studio<sup>1)</sup> for all creators to refer to. If creators ever violate these guidelines or infringe upon any other rights of anyone, they are banned from joining the Studio and suspended from conducting sales even after entering the Studio.

##### <Content Banned under the Integrity and Ethics Guidelines>

- Content that runs counter to public ethical standards for their association with crime, violence or inappropriate sexual expression
- Content that is associated with or that encourages smoking
- Content that includes anti-social elements
- Content that could potentially give rise to social controversy
- Content that belittles or discriminates against people, animals or things
- Content that contains excessively abusive or violent language
- Content that could be interpreted as targeted attacks against specific nationalities, religions, cultures or groups or give rise to animosity and discord among such groups
- Content that describes or is themed on specific religions

1) Website created for emoticon presentation

#### Discovery of Brunch Authors

While Brunch authors do not earn direct profits from their work on our platform, Brunch provides them with a channel to receive offers to publish books, give lectures and engage in collaborations to eventually generate profits. We host annual Brunch book publication projects and diverse open competitions through our collaboration with Millie's Library, Netflix, EBS and others with the intent of discovering and publicizing new authors and faithfully serving our role as a platform for authors in so doing.

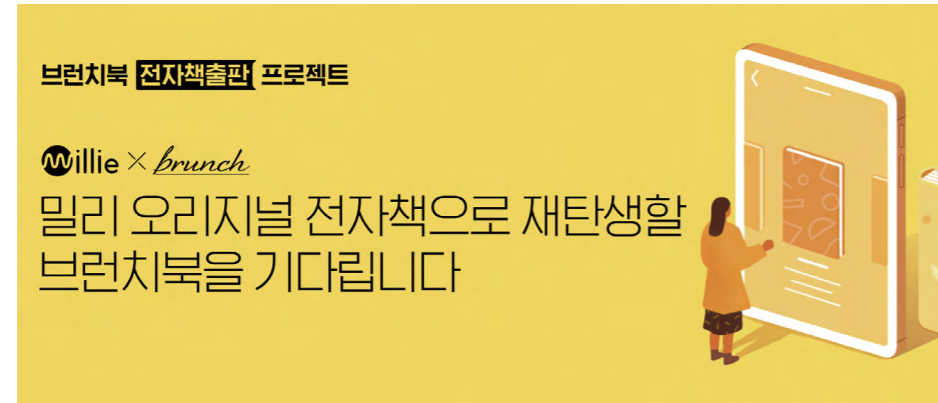
##### <Impacts Generated by Brunch Authors in 2020>

- Cumulative No. of books published: 3,700 (as of Q1 of 2021)

##### <Outcomes of Brunch Book Publishing Projects in 2020>

- Cumulative No. of participating authors: 16,178
- Cumulative No. of writings: 413,186
- Cumulative financial support provided: KRW 315.5 million

<e-Brunch Book Publication Project>



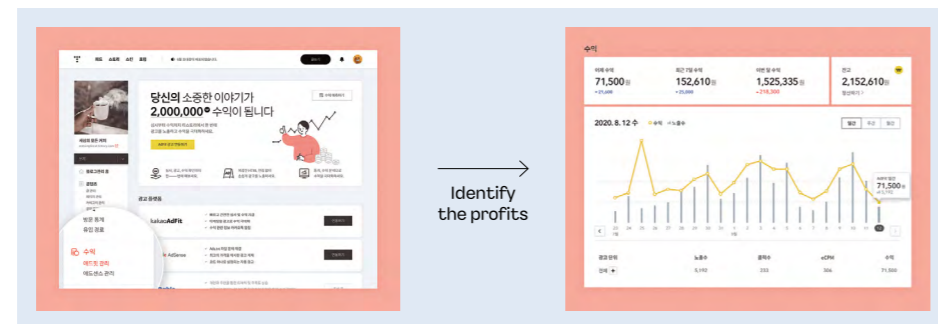
<Popular Publications>



Support for Tistory Bloggers with Profit Generation

Our 'Profit Center' opened in 2020 assists Tistory bloggers in generating profits by launching ads within Tistory posts and sharing the resulting profits. This center offers easy access to bloggers to identify the extent ads are exposed within their posts and the ratio of profits they gain. Following the opening of the Profit Center, both Tistory sales and the profits of bloggers grew simultaneously.

<Tistory Blog Management Page and the Profit Center>



Shared Growth with Webtoon and Web Novel Creators

Kakao Page is operating the two story-based platforms of Kakao Page and Daum Webtoon in addition to its IP business. Partners working with Kakao Page generate profits through their original works and also reinforce their position within the content ecosystem through the creation of visual works based on their IP, pursuing growth along with Kakao.

<Performance Generated with Partners>

- Cumulative No. of IP in 2020: Over 80,000
- Cumulative No. of IP in 2020 that turned into visual content: 64 (approximately 60 for the next 3 years)

Support for Korean Content to Go Global

Kakao Page operates a dedicated organization to assist registered Kakao Page content providers in advancing their creative work to the global market. Our translation system is capable of translating these works into several languages and tailor-editing them to the targeted language with consideration of the nuances of the particular culture. In 2020, Kakao Page's translation system supported 1,000 works in entering the global markets of China, Japan, North America, and Southeast Asia.

Providing Young New Creators an Opportunity to Debut

Kakao Page hosts open competitions in partnership with wide-ranging partners to assist young new creators in starting their careers. In 2020, a total of six such events were held in conjunction with Changbi Publishers, CJ ENM and other partners. Daum Webtoon has single-handedly hosted the Webtoon League for the past 13 consecutive years to help new creators make their mark in the industry.

<Open Competitions Hosted through Collaboration in 2020>

- Seoul Webtoon Contest (Seoul City, Seoul Business Agency)
- 4th Detective, Mystery and Thriller Novel Contest (CJ ENM, Studio Dragon)
- 2nd Mentoring Event for New SF Novelists (Arzak Publication)
- Changbi Young Adult Genre Literary Awards and Open Competition
- Wait or Pay Open Competition (Joara)
- Super Pass industry-academia cooperation project

Open Competition for New Drama Writers

In January 2021, Kakao M hosted the 1st Kakao M Drama Contest to discover exceptional new writers and provide them with a drama production opportunity. Talented writers will be identified and given an opportunity to write drama scenarios, and top-performing works and writers will be chosen to enable them to create mid-form<sup>1)</sup> dramas on the Kakao TV platform.

1) Contents that last between 30-40 minutes per episode



## Growing Together with Wide-ranging Partners

### Partnership to Streamline Public Authentication

In March 2018, Kakao Pay became the first e-document relay service provider in the mobile messenger industry, and has since delivered safer and more credible services. The e-documents relayed by Kakao Pay not only improve user convenience but also produce wide-ranging benefits – from cost savings related to producing and issuing hard copy invoices to the environmental protection made possible through reduced paper manufacturing. In partnership with varying organizations, Kakao Pay expedites the shift from paper-based billings and statements to e-documents to advance both our overall ESG management and the digital transformation.

#### <e-Document Service Partners>

- Korea Transportation Safety Authority: Regular vehicle inspection notice
- Military Manpower Administration: Notice of enlistment
- National Pension Service: Subscription notice
- National Tax Service: Tax arrears notice
- Seoul City: Parking ticket citation
- Korea Highway Corporation: Unpaid toll violation
- Korea Land & Housing Corporation: Rental invoice
- Civil Defense: Drill notice
- Korea Environment Corporation: Emergency emissions reduction measure notice for vehicles rated 5 in emissions performance
- Ministry of Gender Equality and Family: Sex offender registration and notification
- Woori Bank, Industrial Bank of Korea: Loan maturity notice, etc.

### Support for the Efficient Operation of Small Businesses and Franchises

Kakao Pay launched 'Kakao Pay Business' as a store management app for SOHO franchise members. This mobile-based app assists small businesses with sales management, payment and cancellation alerts, store information, and staff management. Its service scope will extend to Kakao Pay non-franchise members and all types of SOHO franchise members, and we will improve the user experience via its customer management and marketing tools to fully support the growth of these microenterprises.

### Consulting Support for Small/Mid-sized Businesses

Kakao Commerce provides on/offline consulting support to small/mid-sized businesses registered as sellers on our Kakao Talk Store platform. In 2020, 1,473 sellers joined this consulting support program on a cumulative basis. Online live lectures and VOD training materials are uploaded for prospective sellers considering registering as well as for registered sellers.

### Sales Support for SMEs

In cooperation with the Ministry of SMEs and Startups, Kakao Commerce supports Brand K<sup>1)</sup> companies and outstanding SMEs who registered on the Kakao Talk Store platform to explore product sales opportunities on a semiannual basis. In December 2020, our group buying service 'Talk Deal' was used to host the online 'Korea Companion Sale' event and support its marketing efforts, which posted nearly KRW 250 million in transaction value on 94 product items.

1) National brand certification granted to qualifying products made by Korean SMEs

### Growth Support through Startup Investments

Kakao Ventures mainly invests in ICT/SW businesses in their nascent stage to support the growth of these startups. Its business model is inherently designed to pursue the 'growth of partners'. Kakao Ventures identifies entrepreneurs who are willing to bring innovation to the world with their exceptional technology and invests in such promising talent to fully support their furthering development in any areas requiring improvement.

#### <Major Investment Destinations>

- Danggeun Market: Online second-hand shopping platform
- TimeTree: Calendar sharing service
- Lunit: Medical AI developer
- Watcha: Online video streaming service business
- Standigm: AI-based new drug developer

### Follow-up Support for Investee Businesses

The companies who receive investments from Kakao Ventures belong to its 'Family'. At least every month, 'Family Day' networking events are hosted to nurture the close relationships among Family businesses. As Kakao Ventures' flagship networking program, Family Day has been celebrated since 2012, although it came to a temporary halt in 2020 due to COVID-19. In addition, 'Kakao Ventures Salon', 'Recruiting Day' and other regular programs are provided for Family businesses to share insights and support their recruitment and follow-up investments. In 2020, these events went online amid the COVID-19 pandemic. Kakao Ventures also creates a climate for Family members to generate synergy and explore M&A opportunities through sector-specific small group matching.

### Contribution to Partners' Digital Transformation

We sign agreements with a wide array of business partners to leverage AI, searches and other technological capabilities of Kakao Enterprise to contribute to the digital transformation of our partner companies.

#### <Key Collaboration Outcomes in 2020>

- KBS: Deliver breaking news regarding disasters by AI newscasters
- Korean Intellectual Property Office: Improve patent work efficiency through AI-enabled translation technology
- Samchully: Build a virtual AI chatbot-enabled communication platform for its city gas business
- COMMAX: Create a 'Smart Place' as a smart living space control system
- Youngdong Express: Launch a 'conversation-based delivery service' that supports the entire delivery process

<b>Participation in the Development of AI-powered Emergency Medical System</b>	Kakao Mobility became the first in the mobility industry to join an emergency medical system development project undertaken by the Ministry of Science and ICT and the National IT Industry Promotion Agency. This system collects real-time data — audio, video and the bio-signals of emergency patients to help provide tailor-made immediate emergency care and uses data to guide optimal routes to the destination hospital. Leveraging the methodology to identify the optimal route for the expedient and safe transport of emergency patients, navigation and dispatch alert services will be developed exclusively for ambulances.
<b>Driver Training for Passenger Safety</b>	Kakao Mobility launched the ‘Safe Service Campaign’ for Kakao T Taxi and T Chauffeur services to highlight user safety as our top priority. This campaign encourages drivers to place safety and customer service as their paramount concerns. Kakao T Blue, Venti and Black drivers are required to complete service training courses and pass the related test.
<b>Collaborating with the Police Agency for Broadcast Messaging</b>	Kakao Mobility contributes to the safety of the general public in partnership with Kakao T Taxi drivers. Since 2017, Kakao Mobility has partnered with the Gyeonggi Nambu Provincial Police Agency to send broadcast messages to Kakao T Taxi drivers whenever a call for help is submitted within the district. This system has aided in the receiving of reports and the arrest of criminals as well as locating seniors with dementia and sending them back to their families safely. This bilateral collaboration earned us the Presidential Award at the ‘Government Innovation Best Practice Competition 2019’. In January 2021, Kakao Mobility signed a memorandum of understanding with the National Police Agency to extend the scope of this collaboration to the entire nation and further contribute to identifying a call for help and arresting the suspects of violent crimes.
<b>Efforts to Improve the Treatment of Drivers</b>	Kakao Mobility launched the franchise taxi service ‘Kakao T Blue’ with the intention to improve work conditions for drivers to better serve users in so doing. In April 2021, Kakao Mobility partnered with Shinhan Bank to provide prime loan rates to drivers working under its directly-controlled taxi companies, and plans to develop financial services exclusively available for Kakao T Blue franchise taxi drivers.

**Shared Growth with Our Suppliers**

We set forth the supplier code of conduct on the basis of our overarching business philosophy to present fundamental standards for all Kakao partners to follow. This code of conduct guides us in selecting and managing suppliers and realigning our system to incentivize top-performing suppliers. We are also strengthening our communication channels to provide real-time solutions to any grievances our suppliers may have.

<b>Definition of Suppliers</b>	‘Suppliers’ refer to those businesses who provide goods or items highly associated with Kakao’s business or engage in the transaction of outsourcing services. Namely, our definition of suppliers includes businesses who will be or are currently in a business relationship with Kakao, and extends to general subcontractors in addition to subcontractors as stipulated in the subcontract law. As of the end of 2020, a total of 210 suppliers have signed a business contract with us.
<b>Kakao’s Supplier Code of Conduct</b>	In April 2021, we established the ‘Supplier Code of Conduct’ as the code of conduct for all our suppliers to follow. This code serves as the basis in selecting and managing suppliers who sincerely uphold their social responsibility. All our suppliers should fulfill their role and responsibility in the five areas of ‘Human Rights Management’, ‘Safety & Health’, ‘Environmental Management’, ‘Personal Data and IPR Protection’ and ‘Ethics Management’ as outlined in the code. We plan to request all our suppliers to submit their consent to comply with the code. <b>Link to Kakao’s ‘Supplier Code of Conduct’</b>
<b>Supplier Selection and Management</b>	Suppliers who are newly registered from the second half of 2021 and onwards will be provided with the ‘Supplier Code of Conduct’ along with the contract form. Existing suppliers will be briefed on the code in renewing their contract, and requested to sign the compliance form. In the first half of 2021, we realigned our assessment criteria used to select new suppliers. In addition to existing assessment factors such as technology competence and pricing, ESG assessment factors were added in the areas of human rights management, safety & health, environmental management, personal data and IPR protection, and ethics management. Following a pilot run, the updated criteria will be fully applied from 2022 onwards. The scope of these assessments will extend to cover all suppliers doing business with us to offer incentives to top-performers.
<b>Supplier Support</b>	We operate a range of support programs to assist suppliers in conducting business and improving their employee welfare benefits. Since 2020, we have provided supplies to our suppliers to help them avoid complications due to COVID-19, and helped some of our suppliers create a remote work environment.
<b>Financial Support</b>	We make full cash payments to suppliers for their stable business operations and liquidity supply. We make such payments ahead of the set due date during national holidays, and are participating in government-sponsored projects with large/mid/small-sized partners. We also provide loan support at below-market-rate interest rates to our suppliers who sign the shared growth win-win partnership agreement.
<b>Support with Annual Check-ups and Funeral Services</b>	We help the employees of our suppliers by offering discounts on comprehensive health check-ups and providing funeral support services.
<b>Training Support</b>	We operate kakao.edu as our free-of-charge online training program for our suppliers. This program offers 122 courses across diverse job categories to the employees of our suppliers. Kakao Class with Partners is also under operation for our Krew members to directly hold lectures as field experts and to share our experience and knowledge.
<b>COVID-19 Support</b>	We have been supporting our key suppliers with goods and infrastructure since 2020 amid the COVID-19 pandemic. Some of our service operation suppliers were supported with infrastructure and VPN access to help create their own remote work environment. We will continue with such assistance well into 2021.

**Supplier Communication Channel**

We receive complaints raised by suppliers through our official blog linked with our official shared growth webpage and the Online Ethics Center. We also hold annual purchasing presentations and Partner's Day events as direct communication channels, and internally operate the Dispute Settlement Committee as one of the diverse channels that we operate to gather supplier feedback. In December 2021, we will create a communication channel within K-pick, our electronic purchasing system, to actively collect supplier feedback and openly share its handling outcomes.

**Selection of Top-Performing Suppliers**

Each year, we select 50 top-performing suppliers and award them with a plaque of appreciation and incentives, such as the waiver of performance bonds, warranty bonds and bonus points granted during the supplier selection process. They are assisted in promoting their business through Kakao's key publicity channels. Going forward, we plan to aid outstanding small/mid-size suppliers in their use of Kakao Talk channels through a free-of-charge messaging service.

**Partner's Day**

Since 2009, we have hosted annual Partner's Day events to invite our top-performing suppliers. They are awarded a plaque of appreciation and briefed on Kakao's wide-ranging shared growth policies. In 2020, this event was held virtually due to COVID-19, and the plaque and gifts of appreciation were delivered to selected suppliers.

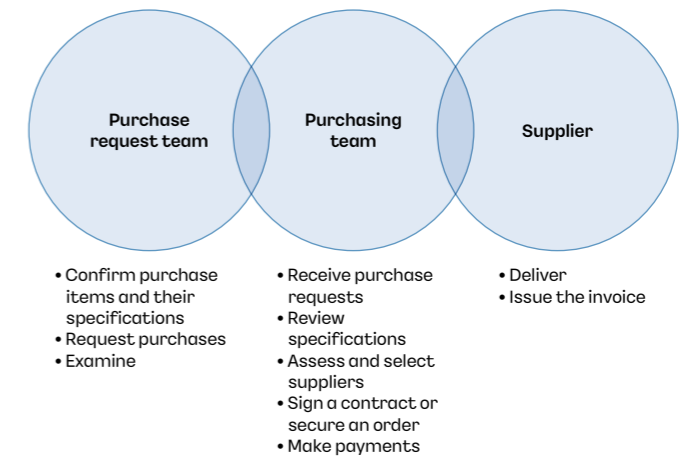
**Compliance with the Fair Trade Principle**

Kakao provides fair trade opportunities to all its business partners to comply with the fair trade principle in business conduct. Fairness and transparency embedded in our business operations help build trust-based relationships with suppliers.

**Fair Trade Principle**

Kakao abides by the '4 action agendas for compliance with subcontract regulations' stipulated by the Fair Trade Commission to promote fair trade and shared growth with its suppliers. The entire transaction process is led by K-pick, our electronic purchasing system, to ensure transparency and fairness in any and all transactions we enter into. We also hold annual purchase briefing sessions to encourage our suppliers to engage in fair trade.

**<Purchasing Process>**



**Procurement Deliberation and Dispute Settlement**

Our Procurement Deliberation Committee meets at least once a month to deliberate on the occurrence of unfair transactions or the violation with the Subcontract Act in doing business with suppliers. Such deliberations are performed through a checklist used before and after the signing of the contract. The Dispute Settlement Committee convenes at least once a month to proceed with settlement procedures for suppliers involved in the issues raised. Since the inception of the Committee in 2018, not a single case of dispute settlement has been recorded.

## User

### Personal Data Protection and Information Security

Kakao does its utmost to strike the right balance between connection through data and user protection. In creating a better world through connectivity, we put users' rights and privacy protection first and foremost.

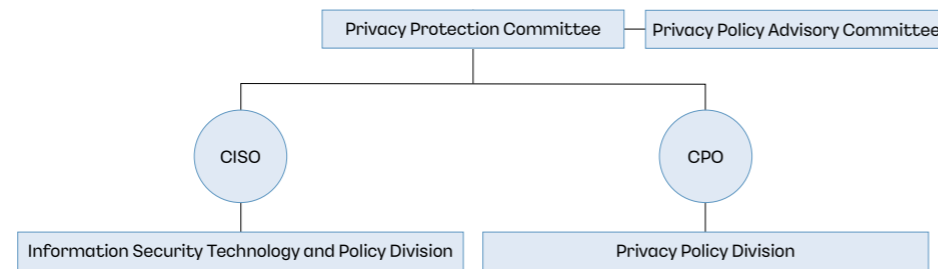
#### User Privacy Protection System

Kakao is committed to increasing the value and protection of data with an aim to deliver better services and rendering our daily lives more convenient through connectivity. We comply with domestic and international regulations associated with personal data protection, develop policies to protect personal data and privacy, and take technical and managerial protection measures, including preventive reviews, personal data impact assessments, technical vulnerability reviews, and 24/7 security monitoring.

#### Privacy Protection Governance

By keeping the CISO (Chief Information Security Officer) as the general manager of information security operations and the CPO (Chief Privacy Officer) as the general manager of personal data protection operations independent of one another, we ensure that these operations are conducted in the most professional and systemic manner possible. We operate the Privacy Security Committee, which consists of the CISO, the CPO, and heads of relevant teams at the executive level, to deliberate and decide on information security issues and manage company-wide information security risks. In January 2021, the ESG Committee was created under the BOD to review information security and other company-wide non-financial risks. The Kakao Privacy Policy Advisory Committee has been operating since 2015. Composed of Korea's top-notch privacy policy experts in the areas of policy-making, security, law, and academia, the Committee holds regular advisory meetings to monitor privacy issues and related regulatory trends in Korea and abroad, and offer advice on Kakao's privacy policy directions.

#### <Privacy Protection Governance>



#### Information Security Certification

Kakao's information security system is certified by domestic/international certification bodies with respect to user data protection. In 2006, we became the first in the industry to achieve the international standard information security certification ISO/IEC 27001 on our infrastructure operations, and have since remained certified by extending its scope into the service development area. We have also obtained the Korean information security and personal data protection management system certification ISMS-P and maintained this certification through annual assessments.

	<ul style="list-style-type: none"> <li>• Certification scope: Internet service operation (Kakao, Daum, Melon)</li> <li>• Validity period: Dec. 26, 2019 ~ Dec. 25, 2022</li> </ul>
	<ul style="list-style-type: none"> <li>• Certification scope: ISMS on total services including Portal, Communication, Contents, Commerce, Game, Fintech, Mobility and Life, Social Impact for a platform in mobile and internet portal using ISO/IEC 27701:2019 in accordance with the statement of applicability version 11.0.</li> <li>• Validity period: Dec. 2, 2019 ~ Jul. 6, 2021</li> </ul>

[Link to Kakao's privacy philosophy](#)  
[Link to Kakao Privacy Policy](#)

#### Personal Data Protection System

Our personal data protection review and management system is up and running to evaluate the appropriateness of activities undertaken to protect users' personal data and privacy. This comes in tandem with personal data impact assessments so that comprehensive analyses and evaluations are made on our compliance with applicable laws and regulations and on our impact when it comes to personal data throughout the entire service life cycle - from service planning to change and termination - in order to preemptively eliminate risk factors. We also operate a system to manage the Krew in charge of handling personal data to ensure the systemic and integrative management of general information on the user personal data processing system as well as the Krew responsible for handling personal data and the status of personal data processing. In so doing, we make doubly sure that personal data is thoroughly protected and that relevant risks are managed. We have a well thought out contingency plan in place for any breach of user data in spite of our rigorous before/after control activities and have established internal procedures to notify users of any data breach and report the occurrence to the authorities in accordance with applicable regulations. We make it a rule to brief users of our reporting to the authorities, take countermeasures and provide users with contact information for counseling. We also guide users through the remedy procedures to minimize any user damage and strive to find the optimal solutions.

#### <Personal Data Impact Assessment>

Service introduction	Service operation	Service termination
Review the personal data life cycle from service planning to launching along with the adequacy of the personal data processing system	Conduct another review on the considerations made in the introduction stage in the event of additions made on personal data collection, use or provision	Consider the disposal of personal data (verify the adequacy of disposal timeframe and safe disposal)

#### Guarantee of User's Right to Informational Self-Determination

Kakao respects its users' 'right to informational self-determination' as a fundamental right. We firmly believe that users, as the owners of their own data, should be fully aware about who is using their data and how it is being managed. Also they should be able to participate in the entire data handling process to directly edit or delete their data as they wish. As such, we enable users to check their own data through a single convenient touchpoint by aligning their data control function at the 'Privacy Center' located within the privacy policy website. This assists users in easily checking and controlling their account information.

#### <User Control over Personal Data Supported through the Privacy Center>

Status of personal data use	<ul style="list-style-type: none"> <li>• Details on the collection and use of one's personal data (collectors, mandatory or optional collection items)</li> <li>• Details of personal data provided to third-parties depending on the user consent given (third parties, provision items, purpose of provision)</li> <li>• Status on the outsourcing of personal data processing (outsourcing companies, details of outsourcing)</li> </ul>
Status of service connectivity	<ul style="list-style-type: none"> <li>• Details of services currently used through the connection established by way of one's Kakao account (including the date of account connections made)</li> <li>• Details of connections among Kakao-affiliated services and external services as well as Kakao services</li> </ul>
Consent settings for personal data use	<ul style="list-style-type: none"> <li>• Status of consent for the collection and use of personal data</li> <li>• Options to withdraw one's consent that has been given on 'additional collection of profile data', 'collection of delivery address information' and 'use of one's data for event and marketing purposes'</li> </ul>

[Link to the Privacy Center](#)

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**Privacy Policy Website under Operation**

Kakao operates a separate privacy policy website to provide information on its privacy policy philosophy, the composition and roles of internal information security organizations, and personal data impact assessments performed for the safe management of users' personal data. The website also illustrates our preventive activities and the data access control principle to maintain our security performance, monitoring conducted through the 24/7 security control center, and responses made in the event of leaks of user data. The Privacy Center page of the website provides information for users to directly check and manage the status of their data use, and the Privacy Policy Brunch serves as a channel to share with stakeholders news on our privacy policy, domestic and international privacy trends and other diverse information.

**Release of the Transparency Report**

In the event of a governmental or judicial agency request, Kakao follows legally-appropriate procedures in conformity with warrant requirements, and discloses related details through its transparency report. In doing so, we boldly uphold the rights of our users, and proudly commit ourselves to thoroughly protecting user data in accordance with due processes. When overseas governmental agencies or private-sector organizations request user data, it is not directly handled by Kakao, and thus we call for cooperation with the government or judicial agencies in Korea when deemed necessary. We do not respond to any request for user data made by domestic organizations or individuals without following the set official procedures. Going forward, we at Kakao will continue to extend privacy protections and openly disclose the status of the situation to our stakeholders.

**Building Awareness on Privacy Protection**

Kakao is engaged in a host of activities to improve awareness for personal data and privacy protection. All Krew members sign the information security pledge, and receive regular information security training, along with information security training to those who handle personal data. In addition to regular training, year-round training is provided on specific topics, including training on data processing policy and protection measures. In 2020, we trained the Krew members in charge of handling personal data, which was completed by a total of 1,231 members. Such training programs also extend to our vendors who process personal data and members of Kakao Community in order to protect users' personal data through consistent policy implementation.

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**Information Security Management System**

Kakao leverages wide-ranging preliminary and follow-up management systems to safely manage corporate information assets. Risk analyses are performed on services and systems covered by the information security management system and follow-up measures are charted on identified risk factors to make necessary improvements. These analyses are conducted by identifying assets in accordance with the predefined risk management guide, analyzing and assessing asset-related risks to calculate their ratings, and selecting risk management measures based on the ratings. Assessment outcomes are used in offering information security management system training to our Krew and to the employees of our vendors. All services delivered by Kakao receive regular annual vulnerability reviews from the planning phase to the termination phase. Vulnerabilities identified through such reviews are handled through appropriate measures, and review outcomes are listed and managed through our internal groupware. In the service development phase, code review procedures are implemented to resolve technical vulnerabilities, and safe security coding is conducted.

We impose stringent access controls on the information processing system so that the system can only be accessed by authorized users in accordance with the set procedures. Access rights are granted when it is clearly evident that access is needed within the given work scope, and it is monitored to prevent unauthorized access attempts. In conjunction with professional security providers, we operate our security control center to support 24/7 monitoring to identify any external attacks or irregular signals.

**Bug Bounty Program**

In addition to our rigorous security management system, we also operate the Bug Bounty Program with the Korea Internet & Security Agency as a compensation program for those outside Kakao to report potential areas of concern. Under this program, any individual who identifies a bug or vulnerability within Kakao's web and/or app services is entitled to a monetary award according to the set criteria for their contribution to identifying security vulnerabilities which allows us to take necessary measures.

**Application of Strengthened Information Security Technology**

Secret chats, one of the functionalities supported by Kakao Talk, deploy End-to-end encryption technology to provide stronger data protection to our users. With this technology, cryptographic keys that are used to decipher encrypted conversations are stored only at individual terminals, and decrypting any conversation is fundamentally prevented unless the terminals used by users who engaged in the conversation are seized and analyzed. Secret chats can be used for both group and one-on-one chats.

**Information Security Technology Enabled by Enterprise Endpoint Encryption**

Kakao Enterprise protects and manages client's data with E3 (Enterprise Endpoint Encryption) data protection system for Kakao Work services. E3 data protection provides powerful protection and privacy, where only the senders and receivers can read messages. Message encryption/decryption keys are created and stored on the device, encrypting all messages sent from the device to the server. E3 data protection prohibits anyone including service providers and any other third-parties from reading and accessing the messages.

**Digital Responsibility**

Kakao protects its users from malefic content, digital crime and all other detrimental influences, and ensures equal service accessibility for every member of society. We also endeavor to establish sustained trustworthy relationships with users on the basis of our transparent technology and service in the digital environment.

**Algorithm Ethics**

In January 2018, we put our ‘Kakao Algorithm Ethics’ into place by conceptualizing the principles and philosophy we have upheld over the years. The Algorithm Ethics stipulates the commitment made on behalf of our all Krew members to making Kakao a company with an exemplary level of AI ethics awareness as our products and services assume a broader role among our entire society – all while illustrating our social responsibility and willingness with respect to algorithm development and operation.

**Link to the Algorithm Ethics**

**Digital for Kids**

Kakao is keenly aware of its primary responsibility in protecting children and teens – our future leaders of society – from any harmful impacts from the internet environment. As such, we have abided by the ‘zero-tolerance principle’ towards sexual crimes committed against children or teens. In the event of related operational policy violations, stringent and immediate sanctions are imposed on the concerned account and its service use regardless of the number of such violations, and proactive measures are taken by aligning with judicial responses made by investigative authorities when deemed necessary.

In July 2020, the 7th Article was added to our Algorithm Ethics to underscore the need to create a wholesome digital environment for children and teens. As demonstrated through these series of actions taken under the name of ‘Digital for Kids’, Kakao is sincerely committed to remain vigilant, aware and to deal responsibly with any issues involving children or teens amid the increasing role digital technology is taking in our society.

Furthermore, our ‘Safebot’ technology enabled by AI detects and prevents illegal data or adult/obscene content from being distributed through openly-available Kakao services. In the case a user reports the circulation of such harmful content even among private communities joined by acquaintances, immediate and around-the-clock measures are taken to identify the damage inflicted upon users and prevent its further spread.

**User Protection Policy**

Kakao works to create an internet platform easily and safely accessible by all. We protect our users from all illegal or malicious data, and take legally-appropriate measures against abusive language used to slander, insult or belittle others, or any language that discriminates or demeans any individual on the grounds of place of origin, disability or gender affiliation. Furthermore, we set annual business plans to safeguard children, teens and other users from harmful content and promote an internet environment that enables them to thrive. We also appoint the chief officer of youth protection as well as youth protection personnel responsible for teen protection to perform our user protection work more systematically.

**Link to Clean Service**

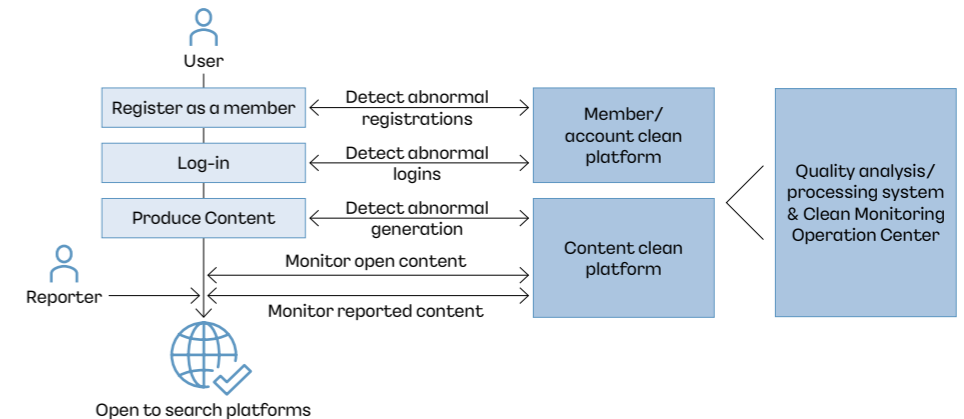
**User Protection Organization**

The User Protection CS Team under the User Business Group responsible for planning and operating the totality of services Kakao provides to its users, is dedicated to user protection. The leader of the User Protection CS Team serves to protect teens, prevent the distribution of illegal photographs and videos, manage customer service operations, and ensure compliance with user protection. We also operate the User Rights Protection Committee as a compliance advisory group for user protection. The Committee serves as an emergency response consultation body to protect user rights when any urgent issue arises concerning user protection. The Committee consists of 10 members, including the User Rights Protection TF leader, the Service Team leader, and other sector-specific officers from the Legal Affairs Team and the Government Relations Team, and is mandated to handle user protection issues in the areas of searches, media, content and service.

**User Protection Management System**

Kakao operates an AI-enabled automatic content quality analysis and processing system to prevent illegal users from creating member registrations, logins and displaying content of a subversive nature and ensures the expedient and accurate handling of all submitted user reports on inappropriate content produced in the private service area. Our Clean Monitoring Operation Center is responsible for AI learning and regulatory processing with respect to any type of harmful emerging data.

**<User Protection Management System>**

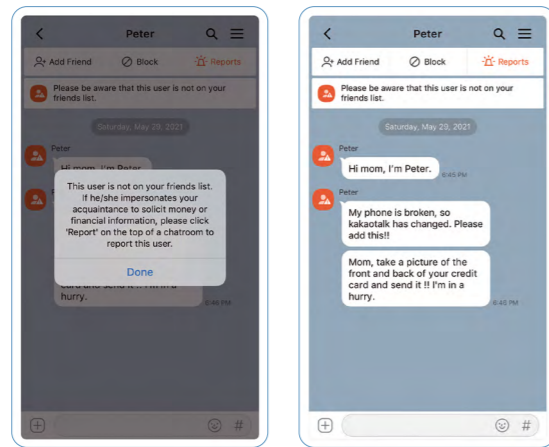


**Termination of the Real-time Most Searched Keywords Search Service**

Kakao recently became aware that its real-time most searched keywords search service no longer fulfills its intended purpose. While it started off as a service to broadcast issues warranting rapid dissemination such as disaster or breaking news and a way to describe areas of interest among broad users and emerging social phenomena, it unfortunately became more a source of phenomena than a platform to reflect real-world outcomes. This prompted us to terminate the service from February 2020 onwards as way to fulfill our social responsibility as a digital business and help create a more harmonious society. In July, we unveiled the ‘Kakao Data Trend’ as a service designed to meet the intended and positive function. This big data-based service enables users to look up integrated search keyword data provided by the portal Daum on the basis of such varying criteria as timeframe, device, gender, age or region. Our plan is to add big data generated from Kakao's content and platforms to search keyword data to make it easier for users to identify trends across diverse sectors.

**Introduction of Talk Siren into Kakao Talk**

We newly introduced the feature 'Talk Siren' to prevent 'messenger phishing' used by scammers demanding money. With Talk Siren, a user is alerted with a pop-up window when someone who is not registered as a friend attempts to text the user. Once the user enters the chat window, a pop-up window appears again cautioning the user to be aware of any requests for money. The Globe Signal feature was also added to display an orange-color globe profile image when the system recognizes a subscriber originating from overseas. As messenger phishing evolves to become more sophisticated with scammers disguising themselves as users' family or friend, we also become more adept at deploying damage prevention techniques, and will add a variety of functionalities to bolster even stronger user protection.



**Preventing Scams on the Trade of Secondhand Goods**

As online trading becomes more popular, scams targeting the trade of secondhand goods has unfortunately become more common. Since such transactions are primarily made among individuals transferring money in exchange for goods, there is no legal basis to sanction fraud in spite of circumstantial evidence indicating otherwise. Kakao Bank's solution is to detect money transfers that are highly likely to be involved in fraud by calculating the risk of peer-to-peer scam transactions based on our transfer network and to display transaction alert messages to our users. As of the end of 2020, a total of 10,137 alert messages were triggered, and 838 of them resulted in the cancelation of transfers.

**Business Agreement for the Improvement of Kakao T Service Quality and Safety**

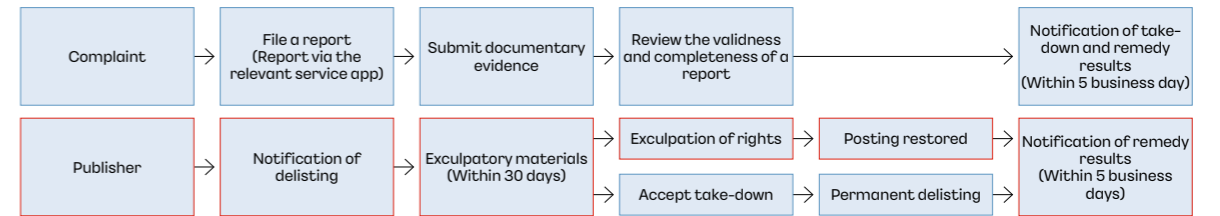
In July 2020, Kakao Mobility signed a business agreement for the improvement of service quality and consumer safety with the Consumers Union of Korea in order to deliver a greater experience to mobility service users and enhance user safety. This agreement will drive our efforts to offer advice on all mobility services delivered on the Kakao T platform and build user protection programs. Meanwhile, Kakao Mobility has been operating the 'Quality & Safety First TF' since 2019 to undertake a host of projects to advance service quality and safety. Kakao Mobility will develop safety and quality policies that resonate both with drivers and passengers to bring innovation to the culture of mobility.

**User Damage Compensation Process**

Any user, during his/her use of services delivered by Kakao, suffering any damage incurred on the part of Kakao, is entitled to damage compensation in accordance with applicable laws and regulations and the service terms & conditions. Damages can be reported through our wide-ranging customer contact channels and when such reports are submitted, they are swiftly routed to the responsible service team. Compensation is then provided in conformity with applicable laws and regulations as well as the terms and conditions following the reviews made on the details of the damages and losses incurred. If the use of Kakao's service leads to the infringement of users' rights including but not limited to privacy violations, defamation, or postings that infringe upon copyrights, such damages can be remedied through our Rights Infringement Notice Channel. When those whose rights have been violated submit their concern with documented evidence through the reporting channel, the responsible team verifies these details and notifies the party who posted the concerned content to cease. If their rights are vindicated through the due explanation process, the content can be re-posted, and if they fail to do so, a permanent ban is imposed on the posting of the concerned content. In principle, both parties — the submitter of the report and the person who posted the content are notified of the handling outcomes within five business days.

[Link to the Rights Infringement Notice Channel](#)

**<Remedy Procedure for Rights Infringement>**



**Guaranteed Freedom of Expression**

Kakao ensures that the freedom of expression, as user's fundamental right, is not adversely impacted, along with protecting users' rights in the internet environment. Years of consideration on this issue led us to join the Korea Internet Self-Governance Organization (KISO) in 2009 to make concerted efforts with other internet businesses to promote self-initiated regulations. Internally, our User Rights Protection Committee serves to develop policies on the user's right to know and the protection of freedom of expression and to engage in year-round consultations.

**#Balance between the guarantee of freedom of expression and user protection**

Kakao seeks to guarantee the freedom of expression to bring greater freedom and diversity to connectivity. We also believe that protecting a user's human rights is our paramount responsibility, and established the 'Principle to Counter Hate Speech' in January 2021 to stay vigilant against any language that exploits the freedom of expression to threaten the human rights and safety of others. Although private posts (private conversation venues within Kakao Talk, e-mails, Talk Drive, etc.) are beyond the realm of our jurisdiction to control, hate speech is banned across publicly-available posts made within the boundary of Kakao services and this has been stipulated within the provision concerning 'activities banned when using our services' of our operational policy. Establishing the above-mentioned principle took us almost a full year of in-depth discussions since January 2020 with internal/external experts, and this part of the process is illustrated within the 'Kakao's Green Paper on Policies for Responding to Hate Speech'.

[Link to Kakao's Green Paper on Policies for Responding to Hate Speech](#)

### Improved Service Accessibility

Kakao is committed to making its services equally and conveniently accessible to all. We continue to work to improve the accessibility of our services so that even people with disabilities, seniors and the information 'have-nots' can easily use our services and obtain the necessary information.

### Improved Accessibility for Users with Compromised Vision or Visual Impairments

In October 2020, Kakao Talk distributed high-contrast themes with up to 21:1 brightness contrast to help people with compromised vision more easily use and rely on its services. Considering that people with compromised vision find it difficult to distinguish objects based solely on color, chat text balloons were clarified as a way to improve the readability of the content. Since the early days of its launching, Kakao Talk has been dedicated to improving mobile accessibility in accordance with its philosophy to pursue growth with its users. Updates on the major functionalities of Kakao Talk are made through accessibility quality assurance (QA) and monitoring to ensure that people with disabilities can easily and successfully use its services. Kakao Talk will continue to improve accessibility to support those with disabilities in using Kakao Talk to engage in daily communication.

### Banking Service for Teens

Kakao Bank provides 'mini Account' and 'mini Card' prepaid electronic payment services to teens with relatively little access to financial services. Teens between the ages of 14 and 18 can sign up for these services with just a mobile phone self-verification for simple money transfers and free-of-charge ATM money withdrawals. These 'mini' services launched by Kakao Bank in October 2020 were enjoyed by nearly 590,000 teens in just two months after its release, which provided them with more convenient access to digital financial services.

### AI Chatbot Available 24/7

Kakao Bank operates AI chatbots available 24/7 to respond to any questions or problems its customers may have. Chatbot service is provided by continuously reflecting frequently-raised inquiries so that issues can be solved in an expedient and convenient manner without relying on phone-based counseling. Since its launch in 2018, these chatbots have handled 5.77 million cases cumulatively as of 2020.

### Digital Literacy

Digital literacy refers to the ability to understand and use digital technology and content and know how and when to apply it. As we advance into the digital society and are exposed to the rapid diffusion of key technologies of the 4th Industrial Revolution, digital literacy has been garnering much attention recently. This highlights the need for wide-ranging activities led by businesses such as Kakao to improve users' digital literacy. In particular, Kakao is working to elevate user's understanding of algorithm technology. Our 'Kakao Policy and Industry Research' section of our Brunch platform frequently uploads posts that concretely illustrate, in easy-to-understand terms, how algorithms are applied to specific services and through which modalities they are applied. We plan to publish diverse content concerning algorithm-related updates, Kakao's service and digital environment, and major social discussions. This will be done on an ongoing basis from the viewpoint of users to help them better understand our service offerings and gain accurate information and knowledge on the shifting digital society.

#### <Algorithm Learning Materials>

Kakao's recommendation algorithm that applies Deep Reading Index and its outcomes?

Kakao! Evolution of the recommendation engine

AI assistant at your fingertips, recommendation algorithm

### Online Financial Education for Seniors

Kakao Bank provided online financial education for nearly 20 days to help senior users develop knowledge on online financial transactions and prevent financial crimes. Nearly 2,550 seniors attended from a total of nine welfare facilities: welfare workers personally visited those seniors who could not travel out due to COVID-19 to assist them in watching educational materials.



### Improving User Satisfaction

Kakao ensures that all users can use its services in a safe and convenient manner.

#### User Satisfaction Management System

Kakao takes heed of the diverse array of voices from its service users and pursues shared growth with them. We operate diverse communication channels to gather user feedback – their candid opinions, service reviews, and both good and poor service experiences. Such invaluable feedback gathered through our channels all go to the integrated Customer Relationship Management System (CRMS) and is safely managed. From the submitted issues, those which can be immediately resolved are addressed through counselors, and those that are not readily solvable are promptly routed to the team in charge of service planning and development. This significantly contributes to developing service modalities and formats which would otherwise not have been considered by service planners and developers, and drives our growth journey to deliver only those services that meet customer expectations head on.

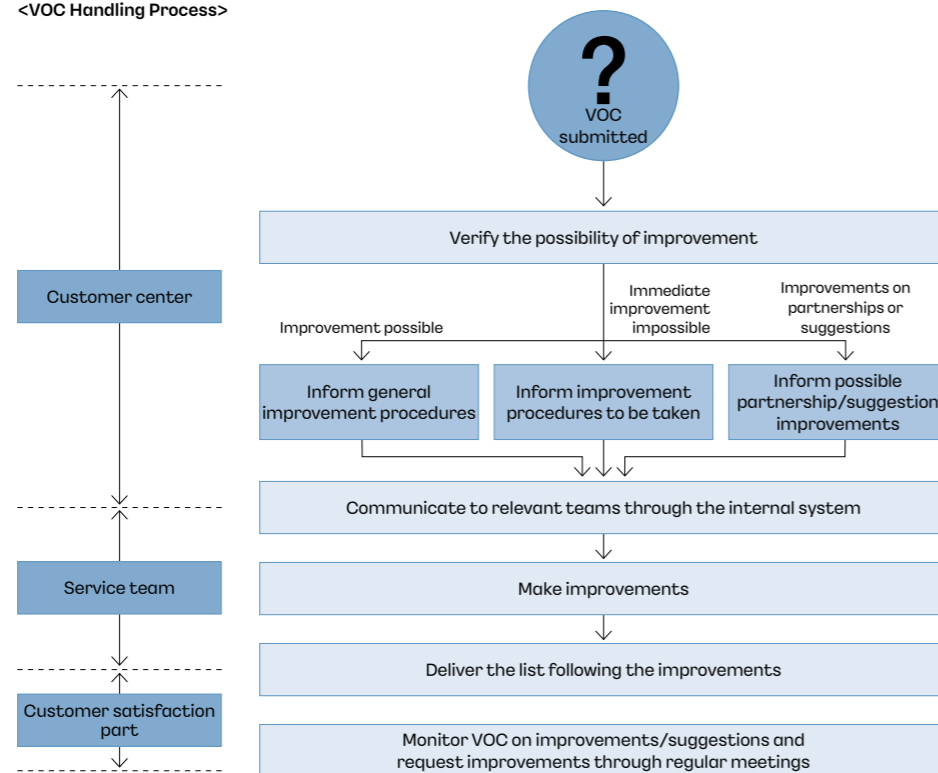
##### <Wide-ranging Communication Channel>

- Counseling Talk through Kakao Talk
- Making inquiries with the customer center established on the website and application
- Emergency phone counseling and reporting center open 24/7
- In-person visits at customer centers

#### User VOC Handling Process

Service improvement requests and suggestions submitted through our communication channels are handled promptly and accurately in accordance with the set VOC (Voice of Customer) handling process. This process is primarily led by the customer center, the service planning and development team, and the customer satisfaction part, and VOCs are gathered and managed at the company-wide level through the CRMS.

##### <VOC Handling Process>



#### Our first steps to build an AI-powered customer center #24/7 customer center, #Chatbot, #Knowledge Plus

Our 'counseling chatbot', available through the Kakao Customer Center Plus Friend, is the first in Korea to deploy machine learning-based technology to analyze questions and recommend answers.

If the question input by a customer on the chat window finds an exact match, its answer is prepared through the use of diverse content such as the 'shortcut to the function menu', 'video instruction' or 'instruction image' concerning frequently-asked services and functions, and customer input on the chat window is analyzed to enable the chatbot to answer with the corresponding content.

What happens if the question input by a customer on the chat window does not have an exact match? Whereas counseling chatbots would generally respond by saying 'I don't understand' or 'I will try harder', our 'Knowledge Plus' as Korea's first chatbot-embedded search functionality will display a list of similar questions and guide the chatbot to find the best possible answer. Knowledge Plus enabled by AI machine learning analytics technology is capable of analyzing content that may help the customer or the relationship between the questions chosen for their exactness or similarity and the answers selected in order to learn on its own and work to recommend more accurate answers.

Leveraging Kakao's more advanced AI technology, we will upgrade a range of functionalities so that we can provide 24/7 accurate assistance based on the conditions and timeframe chosen by customers.

## Community

### Generation of Social Impact

Kakao creates social impact by connecting the dots among people, technology and value. We leverage our impact platform to engage people and create an ecosystem to disseminate the value of serving public interest. With each passing day, we take yet another step to build a world where every member of society serves as an 'impact maker' to make a positive difference.

#### Social Impact Approach

Kakao harnesses its technology and resources to generate social impact with an aim to take a systemic approach to solving a host of social issues. Our 'Kakao Together' and 'Kakao Project100' platforms serve to create meaningful connections with users, and our 'Kakao Impact Fellowship' joins hands with innovators who create a better world. In undertaking all these social impact projects, our ultimate goal lies in generating a meaningful difference in society rather than simply providing more resources.

In 2020, we focused on the Kakao Together donation campaign and the sales of donated emoticons to weather the large-scale disasters of COVID-19 and the flooding that occurred here in Korea. In particular, we proactively raise awareness on such catastrophic events through our major platforms to engage more users to join our sharing events, and the donations made through Kakao amounted to a total of KRW 5.3 billion.

#### Social Impact Organization

We operate the Social Impact Team dedicated to resolving a range of issues by leveraging innovative ideas and Kakao's capabilities. The team consists of professionals who undertake social impact projects through the use of technology and platforms in the areas of our greatest strengths, and collaborates with innovative and professional partners from outside Kakao to engage in diverse projects.

#### Kakao Impact

Kakao has established the Kakao Impact Foundation in 2018 to take a more systemic and professional approach to generating social impact. The Foundation is developing and implementing platforms and projects that bring to life innovative ideas that contribute to the resolution of wide-ranging social challenges.

##### <Mission of the Kakao Impact>

<b>We lay the basis to disseminate a culture of serving the public interest.</b>	We build and operate diverse platforms that help serve the public interest to disseminate a climate of giving and create a culture of community based on consensus and communication.
<b>We identify innovation projects.</b>	We identify and develop a range of innovation projects that ignite positive social change. We deliver a participatory platform for all members of society to serve as both agents and beneficiaries of social change, and present the directions and ideas to fundamentally solve pending social issues.
<b>We build a creative ecosystem.</b>	We build and support an ecosystem for creators to unleash both their ideas and potential to grow. We identify creators and provide a platform for the production and dissemination of creative content.

#### Kakao Together

Kakao Together is Kakao's CSR platform launched in December 2007. This voluntary donation platform enables any individual as well as any professional organization or group to directly propose, implement and participate in donation campaigns so long as they serve public interest. We are reinforcing its role as a public interest platform by extending its scope from mere fund-raising and monetary donations to donating 'time-consuming' services - and through measurements and diagnostics that chart the psychological status of individuals and the well-being of our society- we are in a sense sampling droplets from the larger water from which society springs.

As of the end of 2020, a total of 3.58 million people participated to raise KRW 41.3 billion. In 2020, nearly 120 projects were launched under the overarching theme of COVID-19 emergency relief to raise KRW 5.3 billion. Our COVID-19 fund-raising 'giveticon' initiative was designed to donate 100% of the proceeds from the sales of emoticons and was able to donate KRW 260 million. In addition to fund-raising, diverse campaigns were launched from offering free meditation content and 'mind-casts' that help people get in touch with the index of their own well-being to the non-contact volunteer program 'Good Picnic' which allows users to volunteer from home.

#### Kakao Project100

Kakao Project100 is a platform geared at behavior change through the lens of incremental goal-setting and creating small yet meaningful achievements in our daily lives. We operate this platform seasonally, so that a community of members sharing the same goal initiates and terminates a project in unison. In 2020, Beta Season 2 and 3 were run, and as of April 2021, the open beta test is underway.

There has also been a gradual increase in the diversity of projects dealing with social challenges, including the NEET (Not in Education, Employment or Training) Company Project that aims to support the psychological resiliency of our youth by building a sense of community in the online world and with the 100-Day Action Project designed to strengthen solidarity among neighbors. The 100-Day Project and the 30-Day Complete Reading Campaign were launched to assist local bookstores facing difficulties amid the pandemic and joined by a total of 52 bookstores. The 30-Day Project Campaign was designed to build bonds between middle/high school teachers and their teen students and was joined by a total of 46 schools.

#### Kakao Impact 100up

Kakao Impact 100up is our problem-definition project that aims to help build a cultural foundation and competency from which people can solve problems with success and confidence from the very start point. '100up problem-definition toolkits' are created and distributed so that problem-solving begins with first defining the problem itself, and workshops are hosted using these toolkits to assist participants in easily experiencing the problem-definition process. In 2020, nearly 50 teams were supported with these toolkits and workshops.

We leverage our partnerships to identify and collaborate with problem-definition activities pursued by diverse teams and supporting organizations. In 2020, the problem-definition activity open project selected 11 teams, and the partner cooperation project selected 5 teams to initiate these collaboration projects. Research projects are also launched to identify the status of problem-definitions among individuals and teams trying to solve specific problems and to accumulate relevant data and share content to eventually establish a more systemic problem-definition framework. In 2020, we supported research on the status of problem-definition in the social sector, and this led to the publication of a study on the current status of problem definition in the social sector 'A Beginning'.

**Partner Cooperation**

At Kakao, we pursue sympathy and genuine interaction as equally critical values as convenience in the digital communication era. In the warmth of Kakao's digital world, we successfully connect people with innovative technology.

**Harmonious Digital World**

Harmonious Digital World is a digital citizenship education program jointly hosted by Kakao and the Blue Tree Foundation since 2015. This program educates students and teachers through play and engagement on personal data protection as well as on understanding and responding to cyber violence to help our future world leaders develop digital citizenship from their elementary school years. Its curriculum is custom-designed in consideration of the varied cognitive abilities of respective grades, and is play-driven to suit the characteristics of the Born Digital Generation<sup>1)</sup> who has been exposed to digital devices since their early childhood. As of the end of 2020, a total of 87,473 participants attended this program. While COVID-19 made in-person education difficult in 2020, we revised the curriculum and planned online teacher training and implement educational methods appropriate for the COVID-19 era.

1) Generations born into and raised in the digital environment

**The Significance of Created Monetary Value and Kakao's View on the Outcomes**

Creating a better world starts with resolving issues that our society faces today. These issues vary in terms of their origin and may exert psychological and physical damages to us all. Ultimately, such issues could incur social costs that should be jointly shouldered by present and/or future generations. The amount measured in monetary value terms represents the severity of these social issues, and could serve as a standard by which to set the priorities among these issues to be resolved with improved clarity. We at Kakao will focus on the resolution of four social issues that laid the foundation for our 'Harmonious Digital World' program while approaching more challenging social issues so that we contribute to gradually reducing measurement outcomes (social costs) in the upcoming years. We are also willing to preemptively identify and address emerging social issues that our Born Digital generation will likely live to experience.

**How much social value was created by the 'Harmonious Digital World' program?**

**#2020 #KRW 942 million in total**

The Born Digital Generation grew up during the evolution of information and communication technology, and they are the most active users in cyberspace and are also most influenced by the media. While cyber spaces fulfill a positive function in helping people express their opinions, learn new information and accumulate experience, they can also generate negative results, including cyber violence and personal data leaks. Specifically, adolescents are relatively less mature in distinguishing the merit or danger of such online spaces and it is highly critical that they cultivate proper digital competences early on. Through Harmonious Digital World that aims to help teens improve their digital competences, Kakao quantitatively measures and shares the value created by the digital world in resolving social issues. In 2020, the number of participants fell by approximately 33% from the previous year amid the COVID-19 pandemic, and social value generated amounted to a total of KRW 942 million. When measuring such social value according to the criteria of a normal year cycle, the Harmonious Digital World created KRW 2.1 billion in social value in 2019.

**<Social Value Measurement Outcomes>**

Issue	Program Description and Outcomes	Problem at Hand	Expected Benefits	Value Measurement Approach and Data Use	Measured Value
<b>Prevention of cyber violence</b>	<ul style="list-style-type: none"> <li>Provide training on emotional recognition, empathy, and preventing and addressing cyber violence through 'digital empathy and communication' and 'digital citizenship' courses</li> <li>'Digital Citizenship Education' attended by 8,461 students in 2020 (grades 1-6)</li> </ul>	<ul style="list-style-type: none"> <li>Increasing frequency of exposure to cyber violence among teens in line with mobile and internet developments</li> <li>Emotional anxiety caused among individual teens suffering from cyber violence</li> </ul>	<ul style="list-style-type: none"> <li>(individual) Develop awareness on cyber violence and build competency to prevent and respond to cyber violence through training</li> <li>(society) Prevent both perpetration of and damage from cyber violence among learners to help children and teens resolve emotional issues caused by the recent spike in cyber violence and reduce associated social costs</li> </ul>	<p><b>Measure reductions made in expenses to treat psychological disorders that may stem from experiencing cyber violence among students attending the course</b></p> <ul style="list-style-type: none"> <li>Rate of teens emotionally injured from cyber violence<sup>1)</sup></li> <li>Rate of reporting psychological disorders following cyber violence<sup>2)</sup></li> <li>Per capita treatment expenses for children and teens who developed psychological disorders from cyber violence<sup>3)</sup></li> </ul>	<p>KRW <b>736</b> million</p>

<b>Personal data protection</b>	<ul style="list-style-type: none"> <li>Provide training on understanding and protecting personal data through the 'smart digital use' course</li> <li>'Digital Citizenship Education' attended by 7,027 students in 2020 (grades 3-6)</li> </ul>	<ul style="list-style-type: none"> <li>Information leaks occurring through diverse routes due to lack of awareness on personal data protection</li> <li>Heightening risk levels in the event of personal data leaks</li> </ul>	<ul style="list-style-type: none"> <li>(individual) Provide education on appropriate ways of managing personal data to improve competency to protect one's data with discernment in the digital world</li> <li>(society) Improve awareness on personal data protection to prevent data leaks and reduce associated social costs</li> </ul>	<p><b>Measure reductions made in social costs that occur in the event of personal data leaks affecting students attending the course</b></p> <ul style="list-style-type: none"> <li>Rate of those experiencing personal data leaks and privacy infringements<sup>4)</sup></li> <li>Social costs that incur for every incident of personal data leak<sup>5)</sup></li> </ul>	<p>KRW <b>9</b> million</p>
<b>Digital literacy</b>	<ul style="list-style-type: none"> <li>Provide training on online navigation for personal information queries and development of critical thinking regarding online information through the 'smart digital use' course</li> <li>KRW 112 million spent on 'Digital Citizenship Education' in 2020</li> </ul>	<ul style="list-style-type: none"> <li>Difficulties individual teens face in digital communication due to insufficient digital information use competency and digital literacy</li> </ul>	<ul style="list-style-type: none"> <li>(individual) Understand and use information with discernment in obtaining information in the digital world to develop communication competency required in the digital era</li> <li>(society) Improve digital literacy to contribute to elevating the citizenship in the digital era</li> </ul>	<p><b>Measure SROI in consideration of such values as improved self-esteem and independence and new participation in the digital environment among students attending the course</b></p> <ul style="list-style-type: none"> <li>SROI of digital literacy improvement education programs<sup>6)</sup></li> <li>Outcomes expected from 'Digital Citizenship Education'<sup>7)</sup></li> </ul>	<p>KRW <b>175</b> million</p>
<b>Copyright protection</b>	<ul style="list-style-type: none"> <li>Provide training on rights and responsibilities concerning digital works through the 'smart digital use' course</li> <li>'Digital Citizenship Education' attended by 7,027 students in 2020 (grades 3-6)</li> </ul>	<ul style="list-style-type: none"> <li>Low level understanding on copyrights and awareness on copyright protection</li> <li>Ultimate economic loss at the national level, including drops in the GDP and employment in line with the prevalent use of pirated articles</li> </ul>	<ul style="list-style-type: none"> <li>(individual) Improve understanding on copyrights over one's own creations as well as competency to protect such rights</li> <li>(society) Improve proper understanding and compliance awareness on copyrights to eliminate the use of illegally-created work and prevent associated social losses</li> </ul>	<p><b>Measure reductions made in social losses that may arise due to the use of pirated articles among students attending the course</b></p> <ul style="list-style-type: none"> <li>Ratio of teens who have used pirated on/offline articles<sup>8)</sup></li> <li>Domestic economic losses from pirated articles<sup>9)</sup></li> <li>Total annual consumption of pirated articles<sup>9)</sup></li> </ul>	<p>KRW <b>22</b> million</p>

1) Cyber Violence Survey 2019, National Information Society Agency  
 2) Cyberbullying, Mental Health, and Violence in Adolescents and Associations With Sex and Race: Data From the 2015 Youth Risk Behavior Survey  
 3) Open data from the National Health Insurance Service (2017)  
 4) Information Security Status Survey Report 2020, Ministry of Science and ICT  
 5) PwC Analysis  
 6) "Status Online" Programme SROI Report  
 7) Independence, confidence, and self-esteem, developing skills in participating in new activities, and reducing social isolation  
 8) Annual Copyright Protection Report, Korea Copyright Protection Agency

**Empathic Conversation Program**

Kakao operates the Empathic Conversation Program to help heal individual and relationship issues originating from dysfunctional communication. This prompts participants to engage in new conversation techniques to restore their relationships and helps a culture of sympathy and healing spread. Mind Shared Bus gives participants an opportunity to share bus rides with their family or friends to converse and show their innermost feelings, and Mind Shared Walking pairs people so that they can engage in conversational strolls as a speaker and sympathizer. More than 13,000 people have joined these programs as of April 2021. While COVID-19 made it challenging to proceed with these programs as usual in 2020, we continued with this project through online to help heal the psychological issues the pandemic has caused.

**Game-themed Donation Campaign**

Kakao Games hosted a competitive challenge, joined by streamers and users within the PC online game 'Kakao Battlegrounds'. Any player of this game was able to attend and their donation amount was set in proportion to their competitive rating and participation frequency. The challenge was open during June 2020 to raise nearly KRW 60 million to help children by offering them settlement funds and necessary expenses. The mobile game 'Legendary Moonlight Sculptor' marketed the 'Donation Package' with the ChildFund Korea to help pay the heating bills for underprivileged children. The donations made through the sale of the package went to help children living in foster homes in Gyeonggi Province keep warm during cold winter season.

**Inconvenience App Donation Campaign**

Ground X launched the 'Inconvenience Donation Campaign' with the Beautiful Foundation and Nitpick in 2019. Under this campaign, Ground X made donations in proportion to the number of inconvenience posts submitted to Nitpick's app 'Inconvenience Box' with the keywords of 'orphan, dementia, Utoro, and donation culture', and a total of 3,600 posts were gathered. The app provides Social Innovator Tokens to users whenever they upload posts about their inconvenient experiences, and implemented the technology of incorporating user levels and nicknames into Non-Fungible Tokens on Klaytn, the blockchain platform developed by Ground X. Those who took part in this campaign also shared their thoughts and even proposed solutions to social issues, demonstrating their enthusiasm to create a better world. The donations made all went to the Beautiful Foundation.

**Support for the Descendants of Independence Movement Activists**

Kakao Commerce marketed 'special products in memory of Korea's Independence Movement activists' on the occasion of the 75th anniversary of Korea's National Liberation Day through its made-to-order platform Kakao Makers. KRW 100 million in profits were donated to Habitat Korea's project to improve the living conditions for descendants of these national heroes. These products, from T-shirts with designs based on the calligraphic style of a well-known activist to mobile phone cases inspired by the Korean national flag and the Monami 153 ballpoint pens created in honor of these activists, conveyed the significance of the Independence Movement. The proceeds generated went towards providing a better living space for descendants of patriots and veterans.

**Support for Teens Transitioning on from Shelters**

In celebration of the 10th anniversary of Kakao Talk's Gift service, Kakao Commerce donated KRW 1 billion to the Beautiful Foundation to help teens transition out of shelters as a way to give back to society. The day these teens turn 18, they are expected to leave the shelter, and each year, nearly 2,600 adolescents face the reality of standing on their own. The funds donated will provide learning programs and help build a social network so that these teens can exchange information and be psychologically supported from a mid/long term perspective.

**Activities That Engage Our Krew**

It is with the belief that even small actions, when taken together, bring greater change to the world, that we at Kakao join hands with our Krew in creating a positive and lasting change in the world.

**Together Fund**

Kakao launched an employee donation program back in 2009 and then took a step further in 2015 by creating 'Together Fund' as a regular donation fund engaging our Krew. Today, we team up with partner organizations who are experts in their own field and undertake a total of seven CSR projects. Our Krew are permitted to donate for the project of their choice, and Kakao matches the donations and donates the funds raised as such to pioneer the dissemination of a culture that finds value in giving. At Kakao, giving is closely weaved into our daily routines. The profits generated from the food vending machines that Krew members use are donated, and Heart Apeach Tag Donation devices are installed within the in-house cafeteria for the Krew to donate at will by tagging their ID card. In addition, we offer Krew a variety of ways to give, including regular donations and through donating the income they earn as guest lecturers outside the Company.

(As of Dec. 31, 2020)



**<Together Fund Project Areas>**

<b>Support for Children in Korea</b>	In the name of Kakao Krew, we provide learning support to more than 150 children from low-income families in Korea. We operate partnership programs with ChildFund Korea, an NGO with expertise in the child assistance sector, and host volunteer programs.
<b>Support for Children with Disabilities</b>	In cooperation with the Purme Foundation, we undertake a rehabilitation project for children with disabilities. We help these children pay their rehabilitation treatment expenses so that they can make daily hospital visits to receive much-needed treatment.
<b>Educational Support for Children Overseas</b>	We provide educational support for children overseas in conjunction with the international aid organization, Global Vision. The donations made by our Krew go to repair old schools and support IT education for children.
<b>Environmental Protection of the Baekdudaegan Mountain Range</b>	We partner with Green Korea, a civil organization dedicated to environmental protection, to monitor changes occurring along the Baekdudaegan Mountain Range, an important pillar of the Korean Peninsula ecosystem, and raise awareness on the severity of ecological changes and aid in their improvements.
<b>IT Support for the Underprivileged</b>	In conjunction with the Daum Foundation, we create diverse IT education venues for children from low-income families to pursue their dream, and provide digital photograph education to assist teens in achieving a more self-reliant mindset and future.
<b>Support for Low-income Families in Jeju</b>	We offer economic assistance to low-income families in partnership with the 'Jeju Family Support Center' for these families to maintain their subsistence, and help underprivileged children continue their education.
<b>Residential Support for Seniors</b>	We help provide a cozy and comfortable living environment for seniors living alone in conjunction with Habitat Korea.

**Together Act**

Kakao operates 'Together Act' to support Krew members in their volunteering so that they become more involved in self-initiated social giving programs. Under this unique volunteer initiative, our Krew members take the lead- all the way from planning to execution - and are supported in paying activity and program expenses, offering educational programs and liaising with beneficiaries. As they volunteer across several environments including orphanages, soup kitchens and animal shelters, they realize their small yet meaningful actions bring a positive impact on the world. In 2020, COVID-19 inevitably imposed restrictions on in-person volunteering, and our Krew volunteered at animal shelters three times, and engaged in virtual volunteering at orphanages five times.

**Communication with Local Communities**

Kakao reaches out ever closer to the local community of Jeju where it is headquartered, and endeavors to contribute to positive changes and development in Jeju.

**Communication Approach in Local Communities**

Kakao is actively communicating with the local community in Jeju through the Community Chest of Korea in Jeju and the Jeju Center for Creative Economy & Innovation among others, contributing to the development of the local community and exploring opportunity for shared growth. On the island of Jeju where creativity thrives through new connections, Kakao will accompany Jeju's journey into an even more pleasant future.

**Local Cooperation Project**

**Kakao Class**

Kakao Class is our lecture program provided through business cooperation with the Jeju Center for Creative Economy & Innovation to enable prospective small businesses in and outside of Jeju receive training on how to use the diverse service platforms. Our Krew in charge of operating Brunch, advertising and other services serve as lecturers and mentors. Initiated in 2016, this program has been attended by more than 600 participants as of April 2021. In 2020, Kakao Class went online due to COVID-19, and contributed to expanding the sales routes and revenue of small businesses. In particular, after these businesses joined the Kakao Talk Store, we supported them with promotional banner designs and productions, donated 100 emoticons, and helped them pay for advertising expenses.

**Jeju Data Hub**

Kakao is operating the Jeju Data Hub as a public-private convergence big data testbed in partnership with the Jeju Province with support from the Ministry of Science and ICT. Combining public and private-sector data, this Data Hub serves to generate new value in such wide-ranging areas as startups, small businesses, tourism and policy-making. In addition, big data education, seminars, conferences, competitions, and hackathons are hosted to help developers, students and citizens in Jeju enjoy easy access to the Data Hub. We are currently planning and developing cooperation projects with small/mid-size businesses and startups in the province.

**Link to the Jeju Data Hub** <https://jejudatahub.net/>

**Korea's First Super Precision Bus Location Service**

Kakao is Korea's first to provide a super precision bus location service in partnership with Jeju. Through the project led by the Ministry of Science and ICT and the National Information Society Agency, Jeju has installed satellite navigation system terminals on all buses operating in the province to generate data while Kakao Map developed the service by aligning those terminals with its system. This service is capable of identifying bus locations at the 10cm level which greatly helps in reducing passenger wait times while making transfers and the overall ride far more convenient. Jeju will perform big data analytics to pinpoint bus drivers who break the speed limit, fail to stop at bus stops, or engage in any other dangerous driving habits. Jeju will then use the generated data in retraining these specific drivers and developing traffic policies.

**Jeju Center for Creative Economy & Innovation**

We partner with the Jeju Center for Creative Economy & Innovation to help create a startup ecosystem in Jeju. Established in June 2015 by the Ministry of SMEs and Startups, the Future Strategy Bureau of Jeju Province, and Kakao, the Center established the goal to lead the transformation of the regional startup ecosystem, innovate through collaboration and partnership, and build a community of learning and practice under the vision of 'Jeju, a Creative Island with a Novel Connection'.

**CSR Initiatives in the Local Community**

**Dolharbang on the Internet of Kakao**

This CSR program fulfills the wishes of individuals and families residing in Jeju as well as social welfare and non-profit organizations located in Jeju. Jointly operated by Kakao and the Community Chest of Korea in Jeju, wishes submitted are reviewed every two months and selected for their contribution to public interest to bring positive change to the local community of Jeju. In 2020, we identified groups of people suffering information inequity through 10 social welfare centers and donated 5,000 'Kakao mini's. We also provided 'contactless' infrastructure support amid the COVID-19 to donate related devices and facilities to local social welfare centers, seeking partnerships with the Jeju local community. In 2021, we launched the Jeju Impact Challenge project to support local innovators committed to solving local community issues.

(As of March, 2021)

Total funds raised

KRW **845** million

No. of occasions individuals were supported

**483**

No. of occasions organizations were supported

**219**

**IT Education for Teens**

Kakao is fully committed to providing IT education for teens in Jeju. We provide software education to local elementary students to help them better cope with the shifting information and knowledge paradigm in society, and are operating career experience programs for middle/high school students to pursue their desired paths forward.

**<Educational Program>**

<b>Unplugged Day</b>	Unplugged education allows kids to learn computing principles all without even using computers. We help kids learn the basic principles of the computer through play-driven learning.
<b>On-site Coding Class with Kakao</b>	This program drives our commitment to help kids develop the creativity and ingenuity that is so sought after in the digital age.
<b>Show me the IT</b>	This is our career experience program held during the free-semester period. Students are able to attend workshops on career options and services available at Kakao.

**Kakao Track**

Kakao Track is an industry-academic cooperation project jointly undertaken by Kakao Krew members and Jeju University's Center for Innovation in Engineering Education. Our Krew members provide lectures and internship opportunities to Jeju University students to assist them in developing their talent and bolster the competencies necessary to their future job. As of the end of 2020, a total of 107 undergraduates completed this project on a cumulative basis, and a whopping 74% of them landed a job at domestic IT businesses.

**Collaboration with Local Brands for Shared Growth with the Community**

Kakao Commerce is collaborating with local brands that represent their local community to promote the growth of these small/mid-sized businesses and reciprocate the support the local community has extended to Kakao Friends. Prime examples include its collaboration with the 'PNB Pungnyeon Bakery' and 'Your Orchard', a local tangerine farm in Jeju, which both enjoyed a positive reception from visitors. Going forward, Kakao Commerce will develop diverse local products with Kakao Friends and expand its mutually beneficial partnership programs to broadly publicize local community cultures.

# Governance

## **Why This Matters**

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Building sound governance and forging trust-based relationships with stakeholders in so doing is one of the key determining factors of a company's sustainable growth. As such, stakeholders today increasingly demand that businesses establish transparent governance. With the scope of disclosure requirements extending both in Korea and abroad, this also highlights the need to continuously improve governance in order to embed transparency into business conduct and to protect the rights and interest of stakeholders.

## **Approach**

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Kakao set forth the Corporate Governance Charter with the view to ensure transparent governance that will serve as the basis for its sustainable business operations. The Charter guides our top management to responsibly fulfill their managerial roles under the supervision of a professional and independent Board of Directors. We comply with our Code of Ethics to pursue utmost integrity in our relationship with all stakeholders and to build trusted relationships with them.

## **Reporting Contents**

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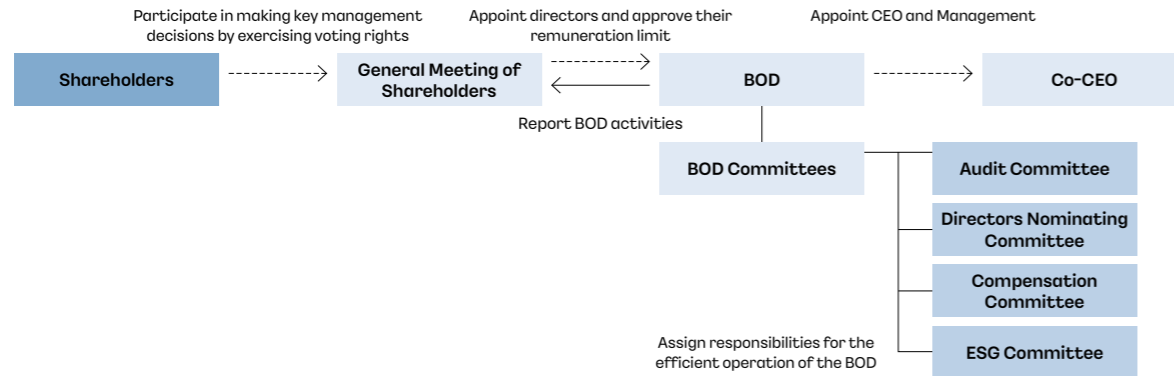
Corporate Governance  
Risk Management  
Ethics Management

## Corporate Governance

### Governance Principle

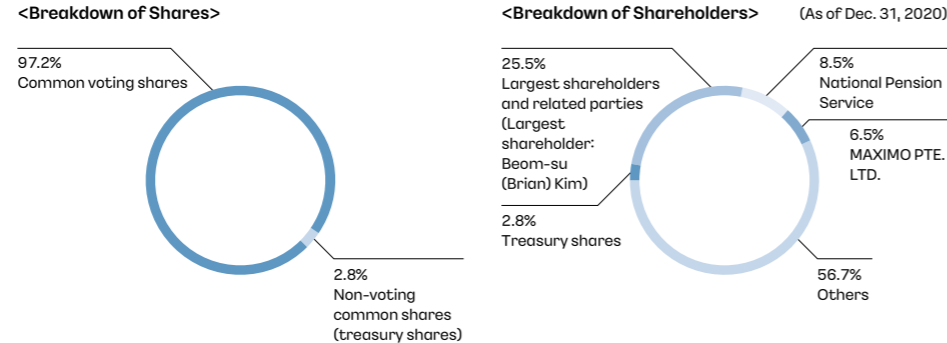
At Kakao, we aim to build stable, reasonable governance that supports business transparency so as to pursue sustainable growth, increase shareholder value, and protect the rights and interests of shareholders. To this end, we fully disclose governance-related work procedures and their results. Our Articles of Incorporation, Corporate Governance Charter, Board of Director (BOD) activities and operational regulations, Code of Ethics and other relevant standards and their implementation are made widely available to help stakeholders better understand our governance operation.

#### <Decision-Making System at Kakao>



### Stock and Capital Structure

Kakao follows the One Share One Vote principle. As of December 31, 2020, there were 88,501,998 common shares carrying voting rights as well as 2,489,934 treasury shares that have no voting rights in conformity with commercial law. Following the 5-for-1 stock split which lowered the face value of stocks from KRW 500 to KRW 100 per share as of Apr. 14, 2021, the number of shares issued amounted to 443,809,305.



### Shareholder-friendly Policy

We implement electronic voting and proxy solicitation for our shareholders to easily exercise their voting rights without physically attending the general meeting of shareholders. In setting the date of our general meeting of shareholders, we have avoided the period when such meetings are concentrated as published by the Korea Listed Companies Association since 2017, and have also joined the association's compliance program since 2018 to promote the equal distribution of general shareholder meetings.

### Excellence Award Granted at the 2020 Korea IR Awards

Kakao was honored with the Excellence Award in the securities market category at the 2020 Korea IR Awards. The Awards recognizes companies that contribute to achieving the shared interests of shareholders and investors and the development of the capital market through proactive and efficient IR activities and shareholder-centered management. Kakao specifically gained high scores for close communication with shareholders and investors and the transparent disclosure of corporate and business information with its senior management taking keen interest and proactively participating in IR operations. Going forward, we will further reach out to our shareholders and investors and advance our shareholder-friendly management in doing so.

### BOD Composition

As stated in the Corporate Governance Charter announced in January 2021, Kakao will ensure the expertise, independence and diversity of its Board of Directors to establish sound governance.

### BOD Independence and Efficiency

As of March 31, 2021, Kakao's Board of Directors (BOD) consisted of seven directors, with four of them being independent directors (57% of total). This exceeds the majority requirement stipulated in commercial law concerning the ratio of independent directors and demonstrates the independence of our BOD. Our Directors Nominating Committee regulations specify the criteria to evaluate the independence and transparency of directors in accordance with domestic commercial law, fair trade law and other applicable regulations. We comprehensively factor the expertise, diversity and independence of the BOD in the director nomination process. The BOD chairmanship is assumed by one of the inside directors, excluding the CEO. The BOD also ensures its independence from top management and controlling shareholders. Independent directors are prohibited from holding more than two positions in conformity with applicable laws to improve the efficiency of BOD operations. In case any of our independent directors serves as an executive at companies other than Kakao, this should be approved by the BOD according to Article 10-(1) 4@ of the BOD Regulations.

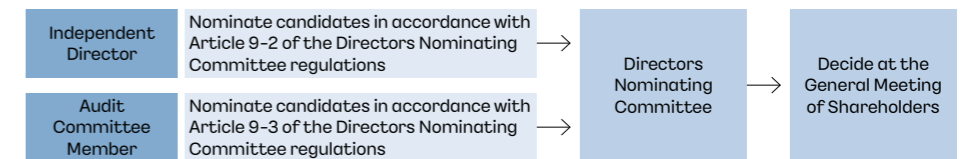
### Diversity and Expertise of Directors

Our Corporate Governance Charter endorses the 'diversity principle' in the composition of the BOD to ensure that the expertise areas of directors do not overlap and that directors do not represent specific interests. As of March 31, 2021, all four independent directors were experts in their field — finance, media and technology — and their diverse backgrounds and expertise contribute to facilitating high-quality discussions on the agenda items submitted to the BOD and efficiently monitoring the work of senior management. There are two female independent directors (29% of total) and this helps improve the gender diversity of the BOD.

### Independent Director Appointment Process

Our directors are appointed through the General Meeting of Shareholders, and director candidates are nominated to the Meeting following the in-depth reviews performed by the BOD (inside director candidates) and the Directors Nominating Committee (independent directors candidates). The Directors Nominating Committee is primarily mandated as stipulated in its regulations to nominate independent director candidates and preliminarily review the qualifications of inside director candidates. The Committee has established internal review standards and conducts thorough reviews on director candidates in accordance with Article 9-2 of its regulations and on Audit Committee member candidates in accordance with Article 9-3 of its regulations.

#### <Independent Director Appointment Process>



#### <Independent Director Nomination Criteria>

Independent Director	Audit Committee Member
Article 9-2 of the Directors Nominating Committee Regulations ① Expertise and diversity of the BOD ② Independence of BOD operations ③ Possible damage to corporate value or shareholder rights & interests ④ Fulfillment of qualifications as defined in applicable laws (Article 382, 542-8 of the Commercial Law)	Article 9-3 of the Directors Nominating Committee Regulations ① Consideration of the provisions stipulated in applicable laws (Article 542-11, 542-12 of the Commercial Law)

<BOD Composition>

(As of Mar. 31, 2021)

Director	Name	Gender	Date of Birth	Term	Career	Expertise	Responsibility
Inside Director	Beom-su (Brian) Kim	Male	Mar. 1966	Oct. 2007~ Mar. 2023	<ul style="list-style-type: none"> <li>M.S. in Industrial Engineering, Seoul National University</li> <li>Founder of Hangame Communications Inc.</li> <li>Co-CEO, NHN Corporation</li> <li>CEO, NHN Corporation</li> <li>CEO, NHN USA, Inc.</li> <li>Non-executive director, NHN Corporation</li> <li>(Current) Chairman of the BOD, Kakao</li> </ul>	General management strategy	Chair of BOD, member of the Directors Nominating Committee, Chair of the ESG Committee
Inside Director	Minsoo (Mason) Yeo	Male	Oct. 1969	Mar. 2018~ Mar. 2022	<ul style="list-style-type: none"> <li>MBA at Massachusetts Institute of Technology</li> <li>Director of eBiz, NHN</li> <li>Senior Director, eBay Korea</li> <li>Managing Director of Global Marketing, LG Electronics</li> <li>Executive Vice President of Advertising, Kakao</li> <li>(Current) Co-CEO, Kakao</li> </ul>	General business management	Co-CEO
Inside Director	Suyong (Sean) Joh	Male	Jan. 1974	Mar. 2018~ Mar. 2022	<ul style="list-style-type: none"> <li>M.A in Industrial Design at Seoul National University</li> <li>Director of Marketing &amp; Design Division, NHN</li> <li>CEO, JOH</li> <li>Executive Vice President of Kakao Brand Design</li> <li>Head of Kakao Community Band Center</li> <li>(Current) Co-CEO, Kakao</li> </ul>	General business management	Co-CEO
Independent Director	KyuJin Cho	Male	Sep. 1973	Mar. 2017~ Mar. 2023	<ul style="list-style-type: none"> <li>Ph.D in Mechanical Engineering, MIT</li> <li>Post-doctoral fellowship at MIT</li> <li>Post-doctoral fellowship at Harvard Microrobotics Lab</li> <li>Assistant professor at Seoul National University</li> <li>(Current) Professor, Department of Mechanical &amp; Aerospace Engineering, Seoul National University</li> <li>(Current) Head of Soft Robotic Future Technology Center, Seoul National University</li> </ul>	Robotics research	Chair of the Compensation Committee, member of the Audit Committee, member of the Directors Nominating Committee
Independent Director	Seok Yun	Male	Mar. 1962	Mar. 2020~ Mar. 2023	<ul style="list-style-type: none"> <li>B.A. in Business Management, Yonsei University</li> <li>MBA at NYU</li> <li>Managing director/head of equity research center, Credit Suisse Korea</li> <li>Managing director, head of wholesale business/head of research center, Samsung Securities</li> <li>Executive Vice President, Samsung Asset Management, General Manager of active investment operation</li> <li>CEO, Samsung Active Asset Management</li> <li>Advisor, Samsung Active Management</li> <li>(Current) CEO, Yun &amp; Co</li> </ul>	Finance and accounting	Chair of the Audit Committee, member of the Compensation Committee
Independent Director	Sejung Choi	Female	Jul. 1971	Mar. 2020~ Mar. 2023	<ul style="list-style-type: none"> <li>Ph.D. in Mass Media (Advertising), Michigan State University</li> <li>Assistant Professor/Associate Professor, Department of Advertising, University of Texas at Austin</li> <li>Independent director, JTBC Mediacom</li> <li>President, Korea Media Management Association</li> <li>Editor-in-chief, Korean Journal of Advertising and Public Relations</li> <li>(Current) Professor, School of Media and Communication, Korea University</li> <li>(Current) Independent director, GIRR Co., Ltd.</li> </ul>	Media and advertising	Chair of the Directors Nominating Committee, member of the Audit Committee, member of the ESG Committee
Independent Director	Saerom Park	Female	Jul. 1971	Mar. 2020~ Mar. 2023	<ul style="list-style-type: none"> <li>D. Eng. in Industrial Engineering, Seoul National University</li> <li>Researcher, Industrial and Mathematical Data Analytics Research Center, Seoul National University</li> <li>(Current) Assistant Professor, Department of Convergence Security Engineering, Sungshin Women's University</li> </ul>	AI security	Member of the Compensation Committee, member of the ESG Committee

**BOD and Committee Operation**

We will promote the efficient and reasonable operation of the BOD and its committees so as to make the best-possible management decisions to serve the interests of Kakao and our shareholders.

**BOD Operation**

As the BOD Regulations stipulate, our BOD meets regularly every quarter and holds ad-hoc meetings whenever deemed necessary. Decisions are made by the BOD with a majority of the directors present and a majority of the attending directors voting for or against, unless otherwise stated in applicable laws and regulations. Our BOD Regulations and committee regulations are subject to periodic annual reviews to continuously make necessary improvements with the view to promote the efficient and reasonable operation of the BOD. To assist independent directors in making decisions, we ensure they have access to support from outside experts when necessary as specified in the BOD Regulations.

<BOD Meeting Summary in 2020>

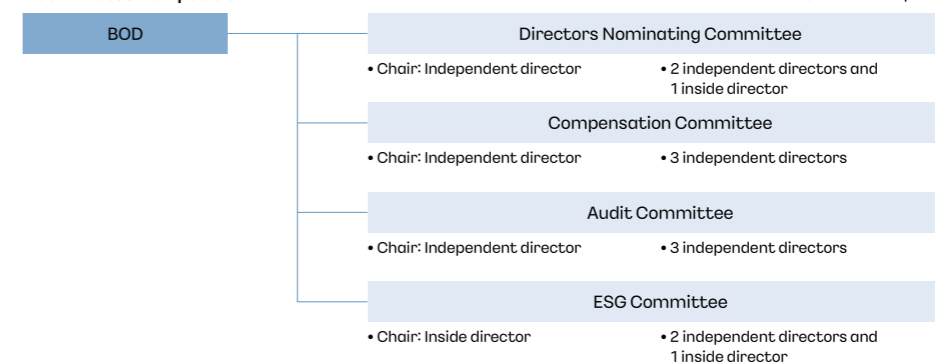
- Regular Meeting: 4 meetings
- Ad-hoc Meeting: 6 meetings
- Director Attendance: 100% (all inside/independent directors)
- Major Agenda Item: 37 decision items and 11 information items including report of ESG evaluation outcomes, appointment of directors, approval of the split-merger agreement, and stock option grant

**BOD Committees**

Under the BOD, there are four committees of the Directors Nominating Committee, the Compensation Committee, the Audit Committee and the ESG Committee to aid in the efficient operation of the BOD. Independent directors account for a majority of all these four committees. The Directors Nominating Committee, the Compensation Committee and the Audit Committee are chaired by independent directors to enhance their independence and mandate as a management supervisor. Specifically, the Audit Committee and the Compensation Committee are solely composed of independent directors to ensure their independent decision-making as expert committees.

<Committee Composition>

(As of Mar. 31, 2021)



**Creation of the ESG Committee**

In January 2021, the ESG (Environmental, Social, Governance) Committee was created under the BOD in accordance with the decision made at the BOD. The Committee is responsible for examining the strategic direction of our ESG management and for managing and supervising relevant achievements and issues to perform final reviews and grant approval on the annual 'Kakao Commitment and Responsibility Report'. Besides, the Committee presents non-financial issues and countermeasures concerning the environment and society, non-financial risk review outcomes, domestic and international ESG evaluation outcomes, and issues in need of support for ESG capacity building and internalization.



**BOD Performance Assessment**

We are building a performance assessment system for our BOD and directors to improve the operational efficiency of the BOD. Our plan is to conduct periodic annual self assessments on the activities of the BOD and directors. Assessment items include the performance and operational efficiency of the BOD and the activities of committees. Assessment results will be analyzed by the Compensation Committee to provide mutual feedback on the performance of the BOD and its committees. In February 2021, a self-assessment checklist was used to evaluate the BOD and the Audit Committee, with all directors participating. The assessment outcomes were discussed at the Compensation Committee and then reported to the BOD. Such assessments will be performed on the BOD and all its committees in the upcoming years.

**Director Remuneration**

The remuneration limit of directors is set through the decisions made at the General Meeting of Shareholders, and directors are compensated based on the payment plans approved by the Compensation Committee in accordance with our executive remuneration regulations. Our compensation package for inside directors consists of base pay as well as bonuses aligned with business performance: the former is calculated based on the job position and individual skills and experiences, and the latter is determined in full consideration of their contribution to corporate financial performance and strategic goals achievement as well as the growth of corporate valuation, the domestic and global business environment, and compensation competitiveness against external benchmarks. Presently, our independent directors receive base pay only, without bonuses, stock options or any other additional compensation.

**<Director Compensation in 2020>**

(Unit: KRW million)

Director	No. of Directors	Total Compensation	Average Compensation per Person
Registered Director (excluding independent directors and members of the Audit Committee)	3	10,488	3,496
Independent Director (excluding members of the Audit Committee)	1	36	36
Audit Committee Member	3	144	48

**Risk Management****Risk Management System**

As the business environment and society grow increasingly complex, this adds to unexpected risks and presents new business opportunities. Businesses need to establish a risk prevention and management system for their sustainable growth. Kakao is operating a year-round risk monitoring system to address potential risks that may arise in Korea and abroad both in the short and mid/long-term.

**Implementation Organization**

At Kakao, we constantly review risks associated with business conduct in the areas of investment, finance, compliance, ethics, services and regulations, and manage such risks from the mid/long-term viewpoint. An ESG Risk TF team is also under operation to examine and prevent non-financial risks. This TF team is responsible for reporting to the BOD the results of analyzing non-financial risks that may affect Kakao. Our priority for 2021 will be to further review potential risks by reinforcing our company-wide ethics management review system among others.

**Risk Management Procedure**

We are establishing a system to review and respond to issues that may arise across the entire business operations to promptly address risks that occur in each of our main work domains. Financial risk factors are comprehensively examined by the Internal Control over Financial Reporting(ICFR) team. Non-financial risks that could occur in the technology development and service planning/operation phases are thoroughly reviewed by relevant teams. In coping with risks that occur randomly concerning technology and service, our system is designed in a way to enable the identification and immediate sharing of such risks among the entire Krew as well as responsible departments.

**Dissemination of Risk Management Culture**

At Kakao, risks, upon their identification, are instantly shared among responsible organizations. Cross-sectoral risks are also efficiently addressed through our collaboration system that engages experts from relevant teams. For instance the Media Advisory Committee, the Privacy Advisory Committee and other committees are set up to hold regular meetings at least every quarter, and they also host extraordinary meetings when advice is needed on specific risk issues. In the event of occurrence of socially controversial issues, consultation bodies are created with experts in related areas to develop risk mitigation measures. In 2020, we engaged in discussions on associated risks with such expert consultation bodies to protect users from online hate speech, which resulted in the creation and announcement of the 'Kakao's Principle to Counter Online Hate Speech'.

**Risk Definition and Response**

We generally classify risks into financial and non-financial risks. Financial risks are associated with the domestic/international markets that surround our business operations as well as the flow and value of capital, including currency rates, credit, liquidity, interest rates, prices and capital. Non-financial risks are risks that may occur in our business conduct in relation to compliance, corporate/technology/service ethics, and human resources management. Risks that may arise in the course of service operations concerning information security, privacy and user protection as well as risks that stem from the shifting business landscape in Korea and abroad and policy/regulatory changes are also defined as non-financial risks.

## &lt;Definition of Major Risks and Our Response&gt;

Type of Risk	Description	Our Response
<b>Policy and regulation</b>	<ul style="list-style-type: none"> <li>Policy and regulatory changes impact the competitiveness of our existing business, and could hamper our stable advancement into new business areas.</li> </ul>	<ul style="list-style-type: none"> <li>Continuously monitor domestic and oversea policy and regulation changes</li> <li>Strengthen internal capabilities to build a sustainable business model</li> </ul>
<b>External conditions</b>	<ul style="list-style-type: none"> <li>Infectious diseases, wars, terrorism and other unexpected changes in the external environment may cause disruptions in our sustainable business operations.</li> </ul>	<ul style="list-style-type: none"> <li>Develop internal operational guidelines and business response measures to flexibly cope with shifting external conditions</li> </ul>
<b>Ethics</b>	<ul style="list-style-type: none"> <li>Unethical behaviors of Krew or partners that occur in the course of business conduct expose us to operational and reputational risks.</li> </ul>	<ul style="list-style-type: none"> <li>Reinforce ethics awareness among Krew</li> <li>Request partners to comply with Kakao's ethics management principles</li> </ul>
<b>Technology ethics</b>	<ul style="list-style-type: none"> <li>AI, cloud, blockchain and other emerging technologies not only provide varying benefits but also bring adverse effects and a range of risks with them.</li> </ul>	<ul style="list-style-type: none"> <li>Provide company-wide training on algorithm ethics</li> <li>Review possible adverse effects that may occur in planning and operating services and technologies</li> </ul>
<b>User protection</b>	<ul style="list-style-type: none"> <li>Technical defects and other risks may cause inconvenience for users in their service use and infringe upon users' rights.</li> </ul>	<ul style="list-style-type: none"> <li>Consistently review and improve the user protection policy</li> <li>Operate whistle-blower channels to receive reports on the infringement of rights</li> </ul>
<b>Privacy</b>	<ul style="list-style-type: none"> <li>User information collected through service offerings inherently entails privacy infringement risks, and any violation of applicable laws may lead to sanctions imposed on the concerned services.</li> </ul>	<ul style="list-style-type: none"> <li>Constantly monitor the status of privacy infringement</li> <li>Perform data privacy impact assessments prior to launching services</li> <li>Provide notice related to user information prior to changing the service</li> </ul>
<b>Information security</b>	<ul style="list-style-type: none"> <li>Abusing activities that disrupt normal service operations, malicious hacker attacks against systems and other information security issues are always present.</li> </ul>	<ul style="list-style-type: none"> <li>Constantly review security performance in the service and infrastructure sectors</li> <li>Prevent risks from occurring through security audits performed on source codes, operational tools, services and systems</li> </ul>
<b>Finance</b>	<ul style="list-style-type: none"> <li>Abrupt currency rate fluctuations, interest rate changes, capital risks, credit rating risks, and tax risks all represent the instability of and dramatic volatility of the future market.</li> </ul>	<ul style="list-style-type: none"> <li>Continuously manage financial risks</li> <li>Submit preliminary questions to the tax authorities concerning critical tax issues and address such issues based on authoritative interpretations</li> </ul>

**Tax Risk Management Policy**

Kakao strictly complies with Korea's tax laws and the tax agreements signed in countries where the Company has interests, and aims to contribute to national finance through accurate tax filings and honest tax payments. We fully cooperate in the implementation of the tax policies of countries where we operate, and maintain transparent working relationships with tax authorities.

**Tax Risk Management Process**

To preemptively manage tax risks, we regularly receive advice from external tax experts on our management of tax issues. For highly critical tax issues, we submit preliminary questions to tax authorities and handle such issues based on authoritative interpretations in addition to external advice. In making transactions with the Kakao Community (related parties), we engage in close consultations with the Community as transaction parties and seek advice from external experts to ensure fair pricing.

**Our Commitment to Tax Transparency**

We regularly disclose our tax-related information to internal/external stakeholders through our annual reports to promote a transparent and accurate presentation of such information.

<Income Tax Paid>		(consolidated figures)		
Category	Unit	2018	2019	2020
Income before tax	KRW million	130,670	- 234,257	414,271
Income tax expenses	KRW million	114,781	107,668	240,912
Cash taxes paid	KRW million	141,310	110,595	77,453
Effective tax rate <sup>1)</sup>	%	88	-	58
Cash tax rate	%	108	-	19

<Tax Paid by Country>		(separate figures)			
Category	Unit	2018	2019	2020	
Sales	Korea	KRW million	1,173,925	1,513,471	1,779,195
	Japan	KRW million	473	909	1,635
	Others <sup>2)</sup>	KRW million	684	-	-
Operating profit	Korea	KRW million	122,366	196,064	300,064
	Japan	KRW million	425	833	1,532
	Others <sup>2)</sup>	KRW million	605	-	-
Income tax expenses	Korea	KRW million	92,435	29,077	82,787
	Japan	KRW million	48	76	103
	Others <sup>2)</sup>	KRW million	79	-	-

1)  
The difference between effective tax rates and the statutory tax rate (24.2% in Korea) is attributable to tax adjustments made on expenses that are not recognized under tax laws and the impact of losses that occur at consolidated companies that result in a change in the consolidated profit/loss while the corporate income taxes remain unchanged

2)  
In 2018 that precedes the spin-off of Kakao M, taxes were paid in a total of eight countries – the US, China, Taiwan, Australia, Hong Kong, Malaysia, Singapore and New Zealand. From 2019 onwards, taxes were paid only in Japan with withholding taxes deducted concerning Kakao Japan's use of trademark rights and infrastructure service fees.

# Ethics Management

## Practicing Ethics Management

Kakao advances ethics management to pursue the highest-possible level of integrity in all its actions taken and its relationships established with internal and external stakeholders.

### Code of Ethics

Kakao set out the Code of Ethics that defines principles for all Kakao Krew to adhere to, and complies with the Code in its entire business operations to ensure that its corporate values are not undermined and any seemingly suspicious situations concerning ethics do not occur. Provisions contained within the Code of Ethics are based on the generally-applicable laws in society, and a portion of them even go beyond the realm of our legal responsibility. Since 2021, we have had all our employees sign the pledge to fully abide by the Code of Ethics as Kakao Krew.

**<Kakao's Code of Ethics>**

- Chapter 1 General Provisions
- Chapter 2 Attitude of the Krew
- Chapter 3 Responsibility towards Customers
- Chapter 4 Responsibility towards the Krew
- Chapter 5 Responsibility towards Stockholders
- Chapter 6 Relationship with Business Partners
- Chapter 7 Responsibility towards Society
- Chapter 8 Reporting and Informant Protection

### Implementation Organization

We operate the Standing Ethics Committee as the top governance body for ethics management, and under the Committee is the Ethics Management Team which serves as a working-level ethics team. The Committee deliberates on ethics issues in general and makes decisions based on deliberation outcomes and on other relevant actions taken. The Committee ensures the balanced representation of its members in consideration of position, gender and age, and is operated fairly by making decisions on all agenda items through discussions and secret votes.

### Implementation System

The Ethics Management Team as a working-level team plays a pivotal role in undertaking prevention, review and remedy activities with respect to ethics management. In case the ethics management system is not fully established and members of the Community request assistance as a result, the Team also aids in the verification of related factual grounds.

**<Ethics Management Implementation Process>**



### Ethics Training

New recruits are provided with monthly ethics training under our onboarding program. Training topics include understanding Kakao's Code of Ethics as well as sharing and disseminating the violation cases of the Code. In 2020, ethics training was provided to 577 new hires, and all our Krew have received training on Kakao's ethics management principles including AI algorithm ethics since 2021 in order to embed ethics management across the entire business operations. In 2021, 2,634 out of 2,660 Krew members completed ethics training.

### Internal/External Counseling and Whistleblowing

Our Online Ethics Center serves as a channel for external stakeholders to receive counseling or report concerns on unethical or corrupt practices involving employees at Kakao and other affiliated companies, including but not limited to unfair actions taken, unjustifiable requests such as bribery and entertainment, improper use or misuse of corporate assets, illegal investments in suppliers, leaks of confidential information, and document/data fabrication. The reports and identity of whistleblowers are thoroughly protected under any circumstances so that they could raise their concerns without fear for reprisal, and we ensure that the reports submitted are handled in an expedient manner.

**<Contact Information on the Online Ethics Center>**

Report online	Report by e-mail

Besides, we operate an intranet whistleblowing system dedicated to Kakao Krew, dubbed TellMe@kakao. Any Krew may access the system to receive counseling when witnessing the violation of the Code of Ethics and to submit their reports anonymously or under their real name. In 2020, a total of 23 counseling requests and whistleblower reports were turned in through our internal/external counseling and whistleblowing systems, and necessary measures were taken on all of them.

**<Counseling and Reporting Type>**

- Receipt of rewards from stakeholders
- Lack of transparency in selecting business partners
- Improper use or misuse of corporate assets
- Illegal investment in transacting parties
- Double employment
- Leak of business information
- Other moral hazards
- Sexual harassment
- Workplace harassment

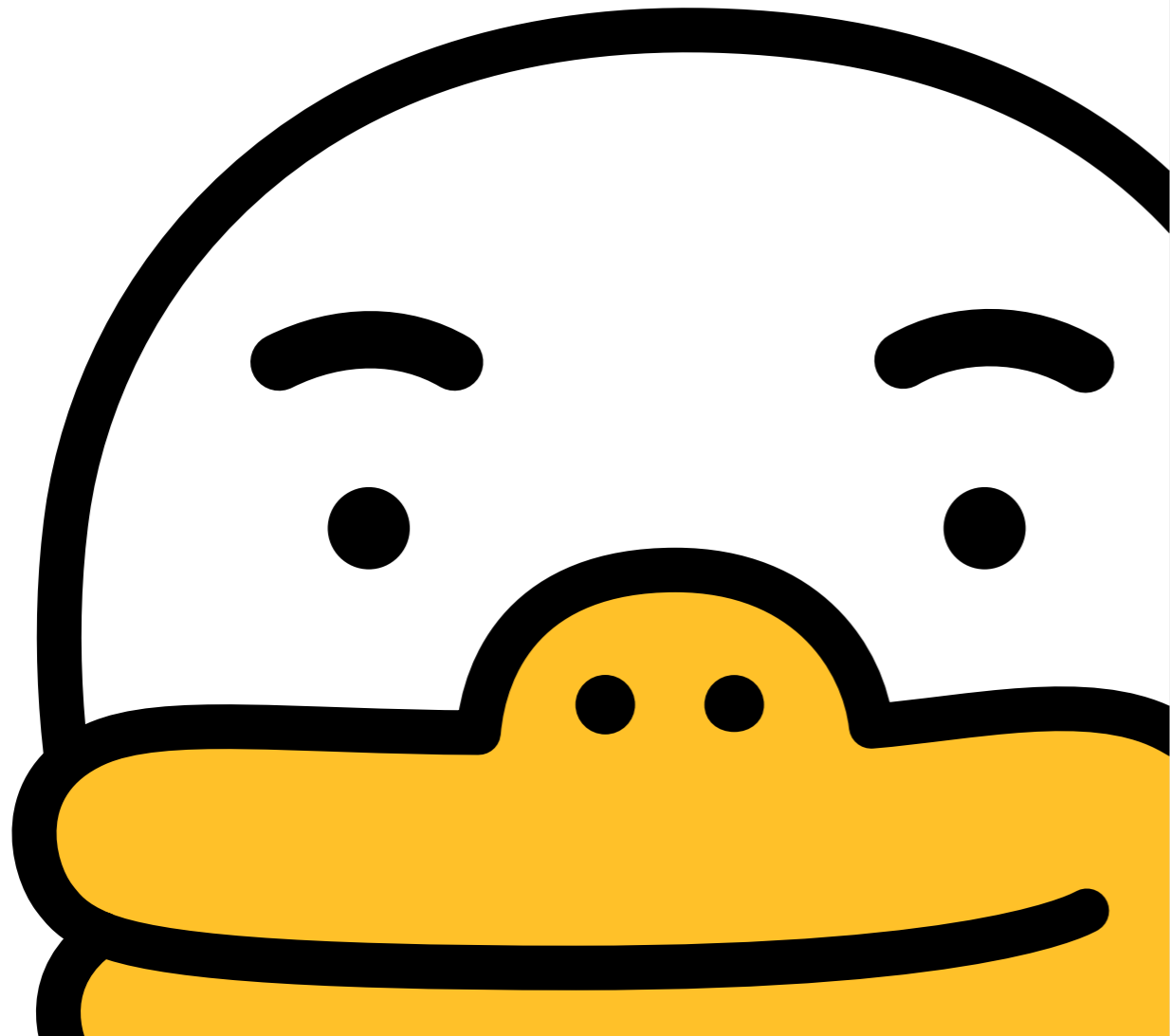
### Gift Return Center

Kakao Krew and their families are prohibited from receiving any bribes or entertainment that may give rise to conflict of interest. In principle, any gifts or bribes that are provided should be immediately returned. Gifts that have been received must be turned in to our gift return center and then are handled in accordance with the set procedures.

# Part. IV

## Appendix

- Kakao Community at a Glance
- Stakeholder Communication
- Materiality Test
- Performance Data
- GRI Content Index
- SASB Index
- TCFD
- UN SDGs
- UN Global Compact
- Memberships
- Awards
- GHG Emissions Verification Statement
- Third-party Assurance Statement



## Kakao Community at a Glance

### kakao commerce

**Kakao Commerce** | CEO: Euntaek Hong | Establishment: Dec. 2018

Kakao Commerce delivers platform services to support both social interaction and product trading on the Kakao Talk platform, and creates a brand new mobile shopping environment. Its goal is to facilitate the trading of exceptional products to help make shopping and our everyday tasks more convenient and ultimately improve our quality of life.

<https://kakaocommerce.com>

### kakao ENTERTAINMENT

**Kakao Entertainment** | CEO: Sungsu Kim, Jinsoo Lee | Establishment: Jul. 2010

Starting fresh through the merger between Kakao Page and Kakao M in March 2021, Kakao Entertainment, under its vision 'Entertain Different', thinks outside the box to take a 'pleasant experience' to a whole new level.

<https://kakaotent.com>

### kakao games

**Kakao Games** | CEO: Whon Namkoong, Kyehyun Cho | Establishment: Aug. 2013

As a total game service provider spanning from game development to global publishing on the unrivaled platforms of 'Kakao Talk' and 'Daum Game', Kakao Games delivers a wide array of content created through the integration of VR and AR technologies as well as PC online and mobile games, greatly enriching the lives of countless users.

<https://www.kakaogamescorp.com/?lang=en>

### kakaopay

**Kakao Pay** | CEO: Young Joon Ryu | Establishment: Apr. 2017

As Korea's first to offer easy payment services, Kakao Pay has emerged as a tech-fin business by extending its scope of services into money-transfer, billing, membership, investment, loan and insurance, unveiling new financial services that bring benefits to the daily lives of users on the strength of information technology. Kakao Pay seeks to create a financial platform that can be easily and safely accessed through the Kakao Talk and Kakao Pay apps.

<https://www.kakaopay.com>

### kakaobank

**Kakao Bank** | CEO: Ho-young Yun | Establishment: Jan. 2016

Under the vision of 'Bank, Beyond Bank', Kakao Bank redefines finance through innovation delivered through the combination of finance and information technology. Its products and services include not only deposits, loans, debit cards, and international remittance services, but also co-branded credit card, loan referral, my credit information, securities brokerage account, and 'mini' accounts/cards.

<https://www.kakaobank.com>

### kakao investment

**Kakao Investment** | CEO: Kioh Kwon | Establishment: Apr. 2017

As a member of Kakao Community with investment expertise, Kakao Investment supports startups that promise innovation on the basis of Kakao's philosophy of 'making a better world with people and technology', and provides M&A, IPO and other exit opportunities to establish a virtuous cycle within the venture ecosystem.

<http://www.kakaoinvestment.com>

### kakao mobility

**Kakao Mobility** | CEO: Gung Seon Ryu | Establishment: May 2017

Under the goal of rendering mobility experiences 'faster and more convenient' for all, Kakao Mobility provides a range of mobility services including easy access to taxis, parking, navigation, chauffeurs, e-bikes, trains and buses on the basis of its 'Kakao T' MaaS platform, to relentlessly pursue innovation and growth. Kakao Mobility is committed to promoting improved options and experiences in our daily lives, extending the definition of the mobility platform from people to services and things.

<https://www.kakaomobility.com>

### kakao Japan

**KAKAO JAPAN** | CEO: Jaeyong Kim | Establishment: Jul. 2011

As our local subsidiary in Japan, KAKAO JAPAN is responsible for servicing the manga app 'Piccoma' in Japan while delivering the value of 'pleasure' in the daily lives of all.

<https://www.kakao.co.jp>

### kakao enterprise

**Kakao Enterprise** | CEO: Sang Yeop Baek | Establishment: Aug. 2019

Kakao Enterprise pursues the further evolution of AI technology and service operation expertise through its innovative business service and provide AI technology and platforms that meet the needs of businesses. As Korea's leading IT platform operator, Kakao Enterprise pioneers technology development and works to establish an AI industry ecosystem.

<https://www.kakaoenterprise.com>

### kakao ventures

**Kakao Ventures** | CEO: Shina Chung | Establishment: Mar. 2012

As a dedicated investor in startups and Kakao's venture capital subsidiary, Kakao Ventures, has raised more than KRW 300 billion since its inception through a total of eight investment associations to invest in more than 190 startups.

<https://www.kakao.vc>



**Ground X** | CEO: Jaesun Han | Establishment: Mar. 2018

Established to contribute to creating a healthy blockchain ecosystem and securing global growth drivers, Ground X is developing 'Klaytn', Asia's leading public blockchain platform, and 'Klip', its blockchain-powered digital asset wallet service.

<https://www.groundx.xyz>



**Kakao Brain** | CEO: Ildoo Kim | Establishment: Feb. 2017

Kakao Brain specializes in AI technology and was established to contribute to the development of Korea's AI technology ecosystem and secure Kakao's growth drivers. Kakao Brain develops 'intelligence' that 'thinks and behaves' like a human to help us rise to the challenge that we as people have failed to solve throughout history.

<https://www.kakaobrain.com>



**KnWorks** | CEO: Seok Cheol Shin | Establishment: Feb. 2005

KnWorks is a professional operational service provider armed with an extensive domain knowledge base, competency across respective advanced functions, and years of experience and expertise. On the strength of the varying services available within Kakao Community, KnWorks nurtures a sustainable mobile ecosystem.

<http://www.knworks.co.kr>



**dktechn** | CEO: Won Joo Lee | Establishment: Aug. 2015

As a development business arm of Kakao, dktechn pursues mutual cooperation among respective information technology areas to accompany clients in their business success and innovation and deliver greater value. dktechn delivers end-to-end IT services, including but not limited to B2B services, solution development, SI and IT system deployment, and infrastructure (data center) operation and monitoring.

<https://www.dktechn.co.kr>



**Linkage Lab** | CEO: Dongwook Kang | Establishment: Feb. 2016

As Kakao's subsidiary and as a standard site that hires people with disabilities, Linkage Lab expands its scope of business and creates greater opportunities through the connections made between those with disabilities and those without. Linkage Lab provides these individuals with a universally-designed work environment to help them develop IT expertise and gain confidence.

<http://www.linkagelab.co.kr>

## Stakeholder Communication

Kakao defines shareholders/investors, users, Krew, partners, communities and governments as its major stakeholder group who is directly/indirectly impacted in the course of its business conduct. We listen to the voice of stakeholders to create a better world and proactively reflect it in our business operations.

Stakeholder	Main Areas of Interest	Major Communication Channel	Our Response
Shareholder/ investor	<ul style="list-style-type: none"> <li>Financial performance generation and dividend payout ratio</li> <li>Development of future growth driver</li> <li>Preemptive risk management competency</li> <li>Transparent performance disclosure</li> <li>Sound governance</li> </ul>	<ul style="list-style-type: none"> <li>Corporate website</li> <li>General Meeting of Shareholders (annual)</li> <li>NDR (Non-Deal Roadshow)</li> <li>Earnings conference call</li> <li>Analyst Day</li> <li>One-on-one meeting</li> <li>Shareholder engagement</li> <li>Disclosure materials</li> </ul>	<ul style="list-style-type: none"> <li>Establish the Corporate Governance Charter</li> <li>Preemptively manage non-financial risks through the creation of the ESG Committee</li> <li>Share financial performance through disclosures</li> <li>Share business outcomes through diverse IR meetings</li> </ul>
User	<ul style="list-style-type: none"> <li>New service launching</li> <li>User satisfaction improvement</li> <li>Service quality improvement</li> <li>Personal data protection</li> </ul>	<ul style="list-style-type: none"> <li>Corporate website</li> <li>Counseling Talk within Kakao Talk</li> <li>Service-specific customer center (web/application)</li> <li>Emergency phone counseling and reporting center</li> <li>Customer center for in-person visits</li> <li>Disclosure materials</li> </ul>	<ul style="list-style-type: none"> <li>Reinforce the user data protection system</li> <li>Operate a user protection system to protect them from the harmful internet environment</li> <li>Operate a user VOC handling process</li> <li>Undertake activities to improve digital accessibility</li> </ul>
Krew	<ul style="list-style-type: none"> <li>Support for individual growth</li> <li>Workplace human rights protection</li> <li>Fair and reasonable appraisal</li> <li>Work-life balance</li> <li>Welfare benefits</li> </ul>	<ul style="list-style-type: none"> <li>In-house portal</li> <li>Open Talk</li> <li>Agit</li> <li>TellMe@Kakao</li> <li>Counseling at Labor lab for Krew</li> <li>Roundtable grievance-handling member</li> <li>Time's Up</li> <li>Occupational Safety and Health Committee (quarterly)</li> <li>Kakao Organizational Health Check (annually)</li> </ul>	<ul style="list-style-type: none"> <li>Operate various grievance-handling mechanisms</li> <li>Establish Growth Stages and support training for the growth of Krew</li> <li>Implement fair appraisal and compensation systems</li> <li>Operate diverse welfare programs</li> <li>Create a safe and pleasant work environment</li> </ul>
Partner	<ul style="list-style-type: none"> <li>Fair trade practices</li> <li>Provision of shared growth opportunity</li> <li>Training and infrastructure support</li> <li>Cooperation and communication</li> </ul>	<ul style="list-style-type: none"> <li>Official shared growth website</li> <li>e-Bidding system K-pick</li> <li>Online Ethics Center</li> <li>Purchasing briefing session</li> <li>Emoticon proposal website</li> <li>T Story profit center</li> <li>Kakao Talk Store seller training center</li> <li>Partner's Day</li> <li>Kakao Class with Partners</li> <li>Dispute Settlement Committee</li> <li>Disclosure materials</li> </ul>	<ul style="list-style-type: none"> <li>Establish the Supplier Code of Conduct</li> <li>Comply with the fair trade principle</li> <li>Operate shared growth programs, including the sharing of technology and knowledge</li> <li>Offer copyright training to emoticon creators</li> </ul>
Community	<ul style="list-style-type: none"> <li>Local economic development</li> <li>Corporate social responsibility</li> <li>Environmental protection</li> <li>Cooperation and communication</li> </ul>	<ul style="list-style-type: none"> <li>Corporate website</li> <li>Kakao Together</li> <li>Kakao Class</li> <li>Dolharbang on the Internet of Kakao</li> <li>Jeju Data Hub</li> <li>Jeju with Kakao</li> <li>Disclosure materials</li> </ul>	<ul style="list-style-type: none"> <li>Promote investment and cooperation for community development</li> <li>Build community communication channels and facilitate their operation</li> <li>Undertake various platform-based CSR activities in local communities</li> </ul>
Government	<ul style="list-style-type: none"> <li>Economic value generation</li> <li>Regulatory compliance</li> <li>Transparent tax practices</li> <li>Participation in major policy decisions</li> </ul>	<ul style="list-style-type: none"> <li>Corporate website</li> <li>Public service support</li> <li>Disclosure materials</li> </ul>	<ul style="list-style-type: none"> <li>Reinforce the compliance system</li> <li>Cooperate in responding to COVID-19</li> <li>Create high-quality jobs</li> <li>Sincerely pay taxes</li> </ul>

## Materiality Test

In publishing our first-ever Commitment and Responsibility Report this year, we performed the materiality test to select major issues that impact our sustainability as a company in accordance with the international sustainability reporting standards(GRI Standards). We will conduct such tests regularly in the upcoming years to identify and manage sustainability issues that are material to Kakao, and transparently illustrate associated activities for stakeholders through our reports.

### Test Process

Kakao will perform the materiality test each year to select sustainability issues to report. These issues material to Kakao will be determined based on their impact on our business and the level of concern on the part of stakeholders.

#### Step 1. Create a pool of sustainability issues

We created a pool of a total of 36 sustainability issues by reviewing the external environment that surrounds us at Kakao.

- Requirements presented by ESG disclosure and assessment initiatives (GRI Standards, SASB, TCFD, KCGS, MSCI, DJSI, RDR)
- Sustainability issues handled by industry peers
- Sustainability issues covered by media
- ESG-related questions raised by major investors

#### Step 2. Evaluate sustainability issues

(analysis of business impact)

- ESG-related questions raised by investors between 2019 and 2020
- ESG-related issues addressed in the major publications disclosed externally by Kakao
- Sustainability survey on Krew members: Performed between Jan. 12, 2021 and Jan. 21, 2021 (10 days)

(analysis of stakeholder concern)

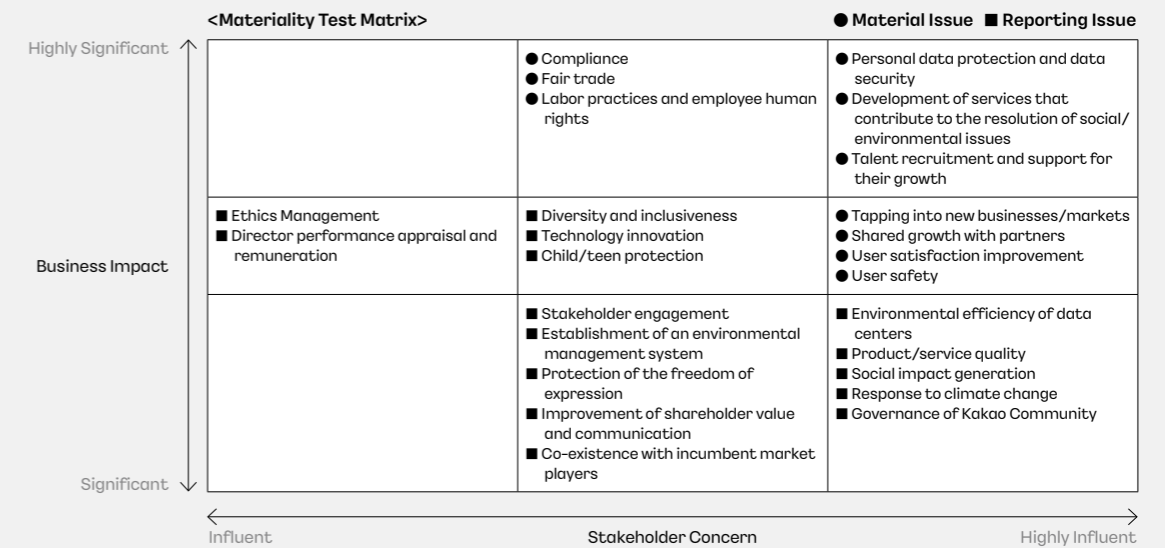
- Analysis of international sustainability standards
- Issues reported by industry peers
- Media research analysis
- Survey on external stakeholders: Performed between Jan. 21, 2021 and Jan. 29, 2021 (9 days)

#### Step 3. Select material issues and review their validity

We selected 10 issues that are high on the list in terms of business impact and stakeholder concern, and reviewed these sustainability issues for their validity through the ESG TF.

### Test Outcomes

As a result of the materiality test, a total of 10 sustainability issues were selected. The top three reporting issues found to be highly material to Kakao include 'personal data protection and data security', 'development of services that contribute to the resolution of social/environmental issues', and 'talent recruitment and support for their growth'. This report was prepared to help stakeholders better understand our responses to highly material issues and the resulting achievements as well as our future plans and approaches.



\* ● High ● Medium ● Low

Material Issue	Scope of Stakeholders					Business Significance*				Reporting Page
	Shareholder/Investor	User	Partner	Local Community	Krew	Sales	Cost	Reputation	Regulation	
Personal data protection and data security		○	○		○	●	●	●	●	70~73
Development of services that contribute to the resolution of social/environmental issues		○		○	○	●	●	●	●	47~48, 60~66
Talent recruitment and support for their growth					○	●	●	●	●	54~57
Compliance		○	○		○	●	●	●	●	97~98
Shared growth with partners			○			●	●	●	●	60~68
Tapping into new businesses/markets	○	○	○			●	●	●	●	14~17
Labor practices and employee human rights			○		○	●	●	●	●	52~53
Fair trade			○		○	●	●	●	●	69
User satisfaction improvement	○	○				●	●	●	●	80~81
User safety		○				●	●	●	●	74~77

## Performance Data

### Environmental Performance

#### <GHG Emissions Generated>

Category		Unit	2017 <sup>1)</sup>	2018	2019	2020
Scope 1 emissions	Total	tCO <sub>2</sub> e	220	251	287	256
	Pangyo Office	tCO <sub>2</sub> e	54	86	116	125
	Jeju Office	tCO <sub>2</sub> e	166	146	150	47
	Data centers	tCO <sub>2</sub> e	-	19	21	85
Scope 2 emissions	Total	tCO <sub>2</sub> e	3,413	55,368	64,478	76,670
	Pangyo Office	tCO <sub>2</sub> e	2,077	2,149	2,130	1,969
	Jeju Office	tCO <sub>2</sub> e	1,336	1,251	1,168	859
	Data centers	tCO <sub>2</sub> e	-	51,968	61,180	73,842
Scope 3 emissions	Employee commutes made at the Pangyo Office	tCO <sub>2</sub> e	82	156	185	203
Emissions intensity	Total Emissions	tCO <sub>2</sub> e	3,714	55,774	64,949	77,130
	Emissions intensity (Scope 1,2,3)	tCO <sub>2</sub> e/ KRW 100 million	-	2.3	2.1	1.9
	Sales (consolidated figures)	KRW 100 million	19,723	24,170	30,701	41,568

#### <Energy Used>

Category		Unit	2017 <sup>1)</sup>	2018	2019	2020	
Energy consumption	Direct energy	Total	GJ	3,415	3,840	4,377	3,875
		Fixed combustion (LPG, diesel)	GJ	1,479	1,535	1,596	2,002
		Mobile combustion (gasoline)	GJ	1,936	2,306	2,781	1,873
	Indirect energy	Total	GJ	73,921	1,143,879	1,331,131	1,581,492
		Electricity	GJ	58,560	1,129,108	1,318,190	1,571,936
		Heat	GJ	15,362	14,770	12,941	9,556
External energy	Mobile combustion (commuter bus)	GJ	1,155	2,205	2,614	2,881	
Energy consumption intensity	Total energy consumption	GJ	78,492	1,149,924	1,338,123	1,588,248	
	Energy consumption intensity (direct, indirect, and external energy)	GJ/ KRW 100 million	-	47.6	43.6	38.2	
	Sales (consolidated figures)	KRW 100 million	19,723	24,170	30,701	41,568	

#### <Water Used<sup>2)</sup>>

Category		Unit	2017	2018	2019	2020
Water withdrawal	Total	m <sup>3</sup>	17,152	18,020	17,167	11,317
	Pangyo Office	m <sup>3</sup>	3,085	3,237	3,614	2,781
	Jeju Office	m <sup>3</sup>	14,067	14,783	13,553	8,536
Water withdrawal intensity	Total	m <sup>3</sup> / KRW 100 million	1.8	1.5	1.1	0.6
	Sales (separate figures)	KRW 100 million	9,787	11,739	15,135	17,792

1) Data centers were excluded in the scope of data collection for the year 2017, and GHG emission and energy consumption intensity was not calculated accordingly.

2) Water withdrawals at data centers were not included.

\* As of December 2020, Kakao was using its Pangyo Office and data centers under the rental contract, and thus is not subject to the enforcement ordinance of the Framework Act on Low Carbon, Green Growth in Korea and the Act on the Allocation and Trading of GHG Emissions Credits'. Independent of relevant regulations, Kakao voluntarily calculates and reports its GHG emissions and energy consumption to internally practice sound environmental management.

\*\* The above sums of GHG emissions and energy consumption were rounded down to the integer level.

### Social Performance – Krew

#### <Employee Data<sup>1)</sup>>

Category		Unit	2018	2019	2020	
Total		No. of persons	2,705	2,701	2,837	
By gender	Male	No. of persons	1,618	1,616	1,682	
	Female	No. of persons	1,087	1,085	1,155	
By age	Under 30	No. of persons	545	556	625	
	30-50	No. of persons	2,147	2,124	2,190	
	Over 50	No. of persons	13	21	22	
By contract type <sup>2)</sup>	Full-time	Subtotal	No. of persons	2,569	2,534	2,747
		Male	No. of persons	1,578	1,533	1,660
		Female	No. of persons	991	1,001	1,087
	Fixed-term	Subtotal	No. of persons	136	167	90
		Male	No. of persons	40	83	22
		Female	No. of persons	96	84	68
By job category	Office	Subtotal	No. of persons	1,377	1,319	1,380
		Male	No. of persons	505	467	485
		Female	No. of persons	872	852	895
	Technology	Subtotal	No. of persons	1,328	1,382	1,457
		Male	No. of persons	1,113	1,149	1,197
		Female	No. of persons	215	233	260

#### <Recruitment>

Category		Unit	2018	2019	2020	
Recruitment		No. of persons	958	758	738	
By gender	Total	Male	No. of persons	537	432	446
		Female	No. of persons	421	326	292
	Male	%	56.1	57.0	60.4	
		%	43.9	43.0	39.6	
	By age	Under 30	No. of persons	374	425	528
		30-50	No. of persons	573	325	208
Over 50		No. of persons	11	8	2	
Under 30		%	39.1	56.0	71.5	
30-50	%	59.8	42.9	28.2		
Over 50	%	1.1	1.1	0.3		

1) The number of employees is calculated as of December 31 of each year, and does not include registered directors.

For further details on employee data, please refer to the 'Status on Employees and Others' under the section 'VIII. Matters on Executives, Employees and Others' of our annual report.

2) There were no temporary employees between 2018 and 2020.



## &lt;Turnover&gt;

Category		Unit	2018	2019	2020
Turnover	Total turnover <sup>1)</sup>	No. of persons	317	269	171
	By gender	Male	189	161	112
		Female	128	108	59
	By age	Under 30	42	56	37
		30-50	274	212	133
		Over 50	1	1	1
	Turnover rate <sup>1)</sup>	%	12.4	9.9	6.3
Average years of service <sup>2)</sup>	No. of years	4.7	4.9	5.3	
Dismissal <sup>3)</sup>	Employees dismissed	No. of persons	0	0	0
	Employees affected by mergers and acquisitions	No. of persons	0	0	0

## &lt;Employee Training&gt;

Category		Unit	2018	2019	2020
Total training hours		No. of hours	23,922	20,622	22,925
Average training hours	Training hours per person	No. of hours/person	8.8	7.6	8.1
	By gender	Male	11.3	10.5	8.8
		Female	5.2	3.4	7.1
	By contract type	Full-time	9.1	7.8	7.3
		Fixed-term <sup>4)</sup>	4.7	4.4	32.7
Training expenses per person	KRW million/person	0.3	0.3	0.3	

1) Representing voluntary resignation

2) Average years of service of employees working at Kakao as of December 31st of each year

3) Calculating only those dismissals decided for management reasons

4) An increase in training hours for fixed-term employees in 2020 against 2019 attributable to increased employment of interns

## &lt;Diversity Data&gt;

Category		Unit	2018	2019	2020	
Executives	Total	No. of persons	8	7	7	
	By gender	Male	7	6	5	
		Female	1	1	2	
	By age	Male	%	87.5	85.7	71.4
		Female	%	12.5	14.3	28.6
		Under 30	No. of persons	0	0	0
		30-50	No. of persons	4	3	4
		Over 50	No. of persons	4	4	3
		Under 30	%	0	0	0
	30-50	%	50.0	42.9	57.1	
	Over 50	%	50.0	57.1	42.9	
High-level managers	Total	No. of persons	91	97	107	
By gender	Male	No. of persons	72	75	83	
	Female	No. of persons	19	22	24	
By age	Male	%	79.1	77.3	77.6	
	Female	%	20.9	22.7	22.4	
	Under 30	No. of persons	0	0	0	
	30-50	No. of persons	87	90	101	
	Over 50	No. of persons	4	7	6	
	Under 30	%	0	0	0	
30-50	%	95.6	92.8	94.4		
Over 50	%	4.4	7.2	5.6		
Low-level managers	Total	No. of persons	312	308	346	
By gender	Male	No. of persons	230	211	252	
	Female	No. of persons	82	97	94	
By age	Male	%	73.7	68.5	72.8	
	Female	%	26.3	31.5	27.2	
	Under 30	No. of persons	2	1	4	
	30-50	No. of persons	308	305	339	
	Over 50	No. of persons	2	2	3	
	Under 30	%	0.6	0.3	1.1	
30-50	%	98.8	99.0	98.0		
Over 50	%	0.6	0.7	0.9		
Foreign national employees	No. of foreign national employees	No. of persons	9	7	13	
	Ratio of foreign national employees	%	0.3	0.3	0.5	

## &lt;Compensation Data&gt;

Category		Unit	2018	2019	2020	
Average employee pay	Total	KRW million	84	80	108	
	Male	KRW million	97	92	132	
	Female	KRW million	66	62	72	
Retirement pension plan	Defined contribution (DC)	Funds under management	KRW million	607	544	599
		No. of subscribers	No. of persons	91	76	78
	Defined benefit (DB)	Funds under management	KRW million	71,204	79,279	91,336
		No. of subscribers	No. of persons	1,778	1,824	2,260

## &lt;Parental Leave&gt;

Category		Unit	2018	2019	2020
Employees eligible for parental leave	Male	No. of persons	492	529	429
	Female	No. of persons	100	139	175
Employees who took parental leave	Male	No. of persons	17	20	13
	Female	No. of persons	94	103	112
Employees who returned to work	Male	No. of persons	11	13	10
	Female	No. of persons	54	59	65
Ratio of employees who returned to work <sup>1)</sup>	Male	%	100	92.9	90.9
	Female	%	96.4	96.7	98.5
Retention rate of employees who took parental leave <sup>2)</sup>	Male	%	75.0	90.9	61.5
	Female	%	96.6	77.8	91.5

1) Ratio of employees who returned to work = (No. of employees who returned to work after parental leave) / (No. of employees set to return for the concerned year after taking parental leave during the previous reporting period) X 100

2) Retention rate of employees who took parental leave = (No. of employees who continued to work for 12 months after return from parental leave) / (No. of employees who returned to work after parental leave during the previous reporting period) X 100

## &lt;Labor-Management Relations and Organizational Culture&gt;

Category		Unit	2018	2019	2020
Ratio of applying collective bargaining		%	100	100	100
Period to give prior notice on major business changes		No. of days	-	50	50
Employee satisfaction	Great Work Place certification	-	No	Yes	Yes
	Cycle of Organizational health check	-	Once a year	Once a year	Once a year
	Organizational health check outcomes <sup>1)</sup>	%	60	84	77

## &lt;Employee Safety &amp; Health&gt;

Category		Unit	2018	2019	2020
Occupational safety and health management system <sup>2)</sup>	Employees managed under the system	No. of persons	2,805	2,806	2,929
Work-related injuries	Injury rate <sup>3)</sup>	No. of injuries for every 200,000 work hours	0	0	0.03
	No. of fatalities	No. of persons	0	0	0
	No. of injuries <sup>4)</sup>	No. of persons	0	0	1

1) Indicator that shows how much employees take the ownership and proactively engage themselves with respect to their work

2) Including dispatched and subcontractor employees who are not Kakao's own employees but are under the control of Kakao

3) Injury rate = (No. of work-related injuries) / (annual work hours) X 200,000 hours

4) One case of a broken leg resulting from a slip in 2020

## Social Performance – Partner

## &lt;Supplier Data&gt;

Category	Unit	2018	2019	2020	
No. of suppliers	Total No. of registered suppliers <sup>1)</sup>	No. of companies	384	261	210
	Long-term suppliers <sup>2)</sup>	No. of companies	39	48	50

## &lt;Win-Win Activities with Partners&gt;

Category	Unit	2018	2019	2020	
Kakao Class with Partners	Participants <sup>3)</sup>	No. of persons	853	489	323
	Classes	No. of classes	2	2	2

## Social Performance – User

## &lt;Personal Data Protection and Information Security&gt;

Category	Unit	2018	2019	2020	
Training for employees handling personal data	Participants <sup>4)</sup>	No. of persons	1,567	1,022	1,231
	Training hours	No. of hours	1	1	1
Violation of personal data regulations	Personal data breaches	No. of breaches	0	0	0
	Ratio of infringements that occurred in relation to personally identifiable information	%	0	0	0
	Users affected by personal data breaches	No. of persons	0	0	0
	Monetary losses that incurred due to legal procedures concerning personal data protection	KRW million	0	0	0

## &lt;User Satisfaction&gt;

Category	Unit	2018	2019	2020	
User satisfaction survey outcomes	Customer center satisfaction survey (internal) <sup>5)</sup>	%	-	-	79
	User protection assessment (Korea Communications Commission)	Rating	Good	Good	Average
User VOC management	VOCs submitted	No. of VOCs	-	2,874,719	3,011,591
	VOCs handled	No. of VOCs	-	2,709,725	2,849,905
	Rate of handling	%	-	94	95

1) Representing the No. of companies that sign contracts each year, and the No. of registered companies declining due to spin-offs from Kakao.

2) No. of companies attending 'Partner's Day'

3) A drop in the No. of participants attributable to a decline in the total No. of registered suppliers

4) As Kakao continues to spin off specific service operations, the number of employees handling personal data is gradually declining, which resulted in a drop in the number of participants in this training. In addition to such training, company-wide information security training is also provided to all Krew members.

5) Customer center satisfaction surveys have been conducted since 2020

## Social Performance - Community

## &lt;Social Impact Activity&gt;

Category	Unit	2018	2019	2020		
Kakao Together	Projects undertaken	No. of projects	1,179	1,167	1,420	
	Donations made	No. of donations	4,901,628	6,084,449	8,303,744	
	Funds donated	KRW million	4,885	5,176	11,847	
Kakao Project100	Projects undertaken	No. of projects	-	195	1,625	
	Participants	No. of persons	-	922	52,300	
Kakao Impact 100up	Participating teams	No. of teams	-	48	87	
	Participants	No. of persons	-	543	572	
CSR programs undertaken in Jeju	Unplugged Day	Participating students	No. of persons	256	256	256
		Career experience workshops	Participating students	No. of persons	1,349	1,321
	Dolharbang on the Internet of Kakao	Individuals supported	No. of persons	32	51	27
		Organizations supported	No. of teams	12	83	27
		Funds provided	KRW million	70	102	216
Participants in Kakao Class	No. of persons	80	237	149		
External sponsorships and cooperation projects	Harmonious Digital World	Participating students	No. of persons	19,895	20,803	8,461
		Participants in teacher training	No. of persons	107	120	61
	Mind Shared Bus	Passengers	No. of persons	1,783	1,972	1,082
		Participants in Mind Shared Walking	No. of persons	355	820	337
Activities engaging Krew members	Together Fund (donation program)	Donations made	KRW million	222	221	227
		Projects supported	No. of projects	6	7	7
	Together Act (engagement program)	Participants <sup>1)</sup>	No. of persons	452	161	19
	Engagement hours <sup>2)</sup>	No. of hours	1,787	2,045	231	

1) Based on the number of net participants excluding redundancies

2) Including redundancies

## Governance Performance

<b>&lt;BOD Data&gt;</b>		<b>(As of Dec. 31 of the concerned year)</b>				
<b>Category</b>		<b>Unit</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	
BOD composition	Total	No. of persons	8	7	7	
	By director type	Inside director	No. of persons	4	3	3
		Independent director	No. of persons	4	4	4
	By gender	Male	No. of persons	7	6	5
		Female	No. of persons	1	1	2
Board operation	Meetings held	No. of meetings	14	10	10	
	Average attendance of independent directors	%	98.2	97.5	100	
	Agenda items	For decision	No. of items	35	20	37
		For information	No. of items	0	2	11
<b>&lt;BOD Committees<sup>1)</sup>&gt;</b>		<b>(As of Dec. 31 of the concerned year)</b>				
<b>Category</b>		<b>Unit</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	
Audit Committee	Ratio of independent directors	%	100	100	100	
	Meetings held	No. of meetings	2	5	5	
	Agenda items	For decision	No. of items	2	2	2
		For information	No. of items	0	5	5
Compensation Committee	Ratio of independent directors	%	66.7	66.7	66.7	
	Meetings held	No. of meetings	1	1	2	
	Agenda items	For decision	No. of items	1	1	2
Directors Nominating Committee	Ratio of independent directors	%	66.7	66.7	66.7	
	Meetings held	No. of meetings	1	1	2	
	Agenda items	For decision	No. of items	1	1	2

**<Ethics Management>**

<b>Category</b>		<b>Unit</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	
Ethics training <sup>1)</sup>	Training participants	No. of persons	-	192	577	
	Training courses	No. of courses	-	1	1	
Hotline reporting	Total reports submitted <sup>2)</sup>	Total	No. of reports	39	36	23
	Reports submitted by violation type	Sexual harassment	No. of reports	4	4	1
		Workplace harassment	No. of reports	3	9	5
		Professional malpractice/ embezzlement	No. of reports	5	4	1
		Regulatory violation	No. of reports	10	10	6
		Others	No. of reports	17	9	10
		Measures taken	Reprimand	No. of actions	0	0
		Pay cut	No. of actions	1	3	0
		Suspension	No. of actions	1	2	3
		Dismissal	No. of actions	2	4	0
	Others	No. of actions	35	23	20	

**<Value Distributed among Stakeholders>**

<b>Category</b>		<b>Unit</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Shareholder/investor	Dividends and interest expenses	KRW million	23,576	21,633	14,868
Krew	Labor and welfare and benefits expenses	KRW million	502,869	649,420	859,351
Partner	Product and manufacturing costs, payment agency fees	KRW million	1,131,094	1,434,352	1,791,929
Community	Donations	KRW million	6,493	4,651	14,745

1) Based on the performance data gathered until Dec. 31, 2020, excluding the performance of the ESG Committee created in January 2021

1) Participants in the ethics training program designed for new hires

2) Calculated based on the reports submitted through hotline, Time's Up, TellMe@Kakao, Kakao Talk, and e-mail, and including simple inquiries and questions on violations

Data on Kakao Community Members<sup>1)</sup>

Category		Unit	2018	2019	2020
<b>Kakao Commerce</b>					
Employees	Total	No. of persons	242	322	489
	By gender	Male	102	144	199
		Female	140	178	290
	Recruitment	No. of persons	6	88	138
Diversity	Female managers	No. of persons	25	29	44
	Ratio of female managers	%	53.2	51.8	48.9
<b>Kakao Games</b>					
Employees	Total	No. of persons	404	384	379
	By gender	Male	269	255	247
		Female	135	129	132
	Recruitment	No. of persons	158	67	49
Diversity	Female managers	No. of persons	28	28	33
	Ratio of female managers	%	30.8	28.3	32.7
<b>Kakao M</b>					
Employees	Total	No. of persons	180	231	313
	By gender	Male	85	112	150
		Female	95	119	163
	Recruitment	No. of persons	12	79	108
Diversity	Female managers	No. of persons	10	15	20
	Ratio of female managers	%	32.3	34.1	37.0
<b>Kakao Pay</b>					
Employees	Total	No. of persons	294	509	665
	By gender	Male	186	318	418
		Female	108	191	247
	Recruitment	No. of persons	169	247	244
Diversity	Female managers	No. of persons	10	14	12
	Ratio of female managers	%	20.8	21.5	12.9

1) Registered executives excluded in calculating data on the No. of managers in the 'Diversity' data table

Category		Unit	2018	2019	2020
<b>Kakao Bank</b>					
Employees	Total	No. of persons	603	786	913
	By gender	Male	323	417	474
		Female	280	369	439
	Recruitment	No. of persons	239	243	204
Diversity	Female managers	No. of persons	5	6	11
	Ratio of female managers	%	20.0	23.1	26.8
<b>Kakao Page</b>					
Employees	Total	No. of persons	218	320	435
	By gender	Male	102	153	198
		Female	116	167	237
	Recruitment	No. of persons	85	145	195
Diversity	Female managers	No. of persons	13	19	36
	Ratio of female managers	%	32.5	27.9	33.6
<b>Kakao Investment</b>					
Employees	Total	No. of persons	15	17	22
	By gender	Male	10	14	16
		Female	5	3	6
	Recruitment	No. of persons	6	6	7
Diversity	Female managers	No. of persons	1	1	1
	Ratio of female managers	%	14.3	11.1	10.0
<b>Kakao Mobility</b>					
Employees	Total	No. of persons	298	372	474
	By gender	Male	211	272	327
		Female	87	100	147
	Recruitment	No. of persons	143	115	143
Diversity	Female managers	No. of persons	7	11	15
	Ratio of female managers	%	17.9	15.7	17.9

Category		Unit	2018	2019	2020	
<b>KAKAO JAPAN</b>						
Employees	Total	No. of persons	63	77	96	
	By gender	Male	No. of persons	34	39	51
		Female	No. of persons	29	38	45
	Recruitment	No. of persons	26	25	31	
Diversity	Female managers	No. of persons	7	9	8	
	Ratio of female managers	%	38.9	36.0	29.6	
<b>Kakao Enterprise</b>						
Employees	Total	No. of persons	N/A	532	891	
	By gender	Male	No. of persons	N/A	379	623
		Female	No. of persons	N/A	153	268
	Recruitment	No. of persons	N/A	52	474	
Diversity	Female managers	No. of persons	N/A	8	20	
	Ratio of female managers	%	N/A	11.1	13.5	
<b>Kakao Ventures</b>						
Employees	Total	No. of persons	17	17	21	
	By gender	Male	No. of persons	12	12	13
		Female	No. of persons	5	5	8
	Recruitment	No. of persons	5	6	6	
Diversity	Female managers	No. of persons	1	0	1	
	Ratio of female managers	%	16.7	0	14.3	
<b>Ground X</b>						
Employees	Total	No. of persons	65	88	85	
	By gender	Male	No. of persons	51	67	63
		Female	No. of persons	14	21	22
	Recruitment	No. of persons	61	42	14	
Diversity	Female managers	No. of persons	0	2	1	
	Ratio of female managers	%	0	10.5	9.1	

Category		Unit	2018	2019	2020	
<b>Kakao Brain</b>						
Employees	Total	No. of persons	42	42	65	
	By gender	Male	No. of persons	35	33	56
		Female	No. of persons	7	9	9
	Recruitment	No. of persons	33	14	44	
Diversity	Female managers	No. of persons	0	2	1	
	Ratio of female managers	%	0	25.0	9.1	
<b>KnWorks</b>						
Employees	Total	No. of persons	436	1,073	898	
	By gender	Male	No. of persons	148	347	294
		Female	No. of persons	288	726	604
	Recruitment	No. of persons	235	227	41	
Diversity	Female managers	No. of persons	40	64	65	
	Ratio of female managers	%	59.7	48.9	52.4	
<b>dktechin</b>						
Employees	Total	No. of persons	269	336	438	
	By gender	Male	No. of persons	170	198	257
		Female	No. of persons	99	138	181
	Recruitment	No. of persons	101	130	186	
Diversity	Female managers	No. of persons	1	2	4	
	Ratio of female managers	%	8.3	11.8	13.8	
<b>Linkage Lab</b>						
Employees	Total	No. of persons	104	107	130	
	By gender	Male	No. of persons	52	54	62
		Female	No. of persons	52	53	68
	Recruitment	No. of persons	39	19	29	
Diversity	Female managers	No. of persons	5	5	7	
	Ratio of female managers	%	62.5	62.5	63.6	
	Employees with disabilities	No. of persons	73	71	81	
	Ratio of employees with disabilities	%	72.3	68.3	63.8	

# GRI Content Index

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Standard	Disclosure	Reporting Page	Note
<b>Reporting practice</b>	102-45 Entities included in the consolidated financial statements		- Refer to pages 4-10 of the 2020 annual report
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	102-48 Restatements of information		- Not applicable
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<b>GRI 201: Economic Performance 2016</b>	201-1 Direct economic value generated and distributed	119	
<b>GRI 103: Management Approach 2016</b>	103-1-3 Management Approach	51, 82	
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<b>GRI 205: Anti-corruption 2016</b>	205-2 Communication and training about anti-corruption policies and procedures	100-101	
	205-3 Confirmed incidents of corruption and actions taken		- One incident of professional negligence/embezzlement in 2020 was determined not to be subject to disciplinary measures (personnel measures were taken instead)
<b>GRI 103: Management Approach 2016</b>	103-1-3 Management Approach	51, 69, 109	
<b>GRI 206: Anti-competitive Behavior 2016</b>	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices		- No legal action taken for anti-competitive behavior or monopoly practices during the reporting period
<b>Environmental Performance (GRI 300)</b>			
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	305-4 GHG emissions intensity	110	
GRI 103: Management Approach 2016	103-1~3 Management Approach	41~42	
GRI 307: Environmental Compliance 2016	307-1 Non-compliance with environmental laws and regulations		- No occurrence of non-compliance with environmental laws and regulations during the reporting period
<b>Social Performance (GRI 400)</b>			
GRI 103: Management Approach 2016	103-1~3 Management Approach	51, 54, 58, 109	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	111~112	
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GRI 402: Labor/Management Relations 2016	402-1 Minimum notice periods regarding operational changes	115	
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GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	59	
	403-2 Hazard identification, risk assessment, and incident investigation	59	
	403-3 Occupational health services	59	
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	403-5 Worker training on occupational health and safety	59	
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GRI 103: Management Approach 2016	103-1~3 Management Approach	51, 54~57, 109	
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	112	
	404-3 Percentage of employees receiving regular performance and career development reviews	57	

Standard	Disclosure	Reporting Page	Note
GRI 103: Management Approach 2016	103-1~3 Management Approach	51~52, 93	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	94, 113	
GRI 103: Management Approach 2016	103-1~3 Management Approach	51~53	
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken		- No occurrence of discrimination and corrective actions taken during the reporting period
GRI 103: Management Approach 2016	103-1~3 Management Approach	51~53	
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		- Risk assessments to be conducted
GRI 103: Management Approach 2016	103-1~3 Management Approach	51~53	
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor		- Risk assessments to be conducted
GRI 103: Management Approach 2016	103-1~3 Management Approach	51~53	
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor		- Risk assessments to be conducted
GRI 103: Management Approach 2016	103-1~3 Management Approach	51~52	
GRI 412: Human Rights Assessment 2016	412-2 Employee training on human rights policies or procedures	52	
GRI 103: Management Approach 2016	103-1~3 Management Approach	51, 82, 88	
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	82~89	
GRI 103: Management Approach 2016	103-1~3 Management Approach	91	
GRI 415: Public Policy 2016	415-1 Political contributions		- No political contributions made in accordance with Article 31 of the Political Funding Act
GRI 103: Management Approach 2016	103-1~3 Management Approach	51, 74~77, 109	
GRI 416: Customer Health and Safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services		- No occurrence of non-compliance with applicable regulations during the reporting period
GRI 103: Management Approach 2016	103-1~3 Management Approach	51	
GRI 417: Marketing and Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling		- No occurrence of non-compliance with applicable regulations during the reporting period
	417-3 Incidents of non-compliance concerning marketing communications		- No occurrence of non-compliance with applicable regulations during the reporting period
GRI 103: Management Approach 2016	103-1~3 Management Approach	51, 70~73, 109	
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	116	
GRI 103: Management Approach 2016	103-1~3 Management Approach	91, 98, 100, 109	
GRI 419: Socioeconomic Compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area		- Refer to pages 421 of the 2020 annual report



## SASB Index

Kakao makes disclosures in accordance with the Conceptual Framework developed by the SASB (Sustainability Accounting Standards Board) as industry-specific standards that companies can voluntarily adopt to disclose their data on sustainability issues. We believe that in so doing, we can provide investors and other wide-ranging stakeholders with useful information that aids in their decision-making process. The following SASB Index was prepared in conformity with the Internet Media & Services Industry Standard of the Technology & Communications Sector under the SASB Sustainable Industry Classification System (SICS).

Topic	Code	Accounting Metric	Reporting Page	Description
Environmental Footprint of Hardware Infrastructure	TC-IM-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	110	(1) 1,588,248GJ <sup>1)</sup> (2) 99.0% (3) We plan to install 1,000kW-capacity photovoltaic panels and use 50kW of green fuel cell electricity at our data center to be built in Ansan, Korea.
	TC-IM-130a.2	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	110	(1) 11,317m <sup>3</sup> (excluding data centers) (2) Our Pangyo, Jeju Office and data centers are not located in those regions.
	TC-IM-130a.3	Discussion of the integration of environmental considerations into strategic planning for data center needs	44-46	-
Data Privacy, Advertising Standards & Freedom of Expression	TC-IM-220a.1	Description of policies and practices relating to behavioral advertising and user privacy	71-72	For further details, please refer to the webpage describing Kakao's tailor-made advertising <sup>2)</sup> and Kakao's privacy policy website <sup>3)</sup>
	TC-IM-220a.2	Number of users whose information is used for secondary purposes	-	Zero <sup>4)</sup>
	TC-IM-220a.3	Total amount of monetary losses as a result of legal proceedings associated with user privacy	116	-
	TC-IM-220a.4	(1) Number of law enforcement requests for user information, (2) number of users whose information was requested, (3) percentage resulting in disclosure	72	Further details are available on the Kakao's privacy policy website <sup>3)</sup> .
	TC-IM-220a.5	List of countries where core products or services are subject to government-required monitoring, blocking, content filtering, or censoring	-	-
	TC-IM-220a.6	Number of government requests to remove content, percentage compliance with requests	-	-
Data Security	TC-IM-230a.1	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of users affected	116	(1) Zero (2) 0% (3) Zero
	TC-IM-230a.2	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	70, 73	-
Employee Recruitment, Inclusion & Performance	TC-IM-330a.1	Percentage of employees that are foreign nationals	113	In 2020, foreign national employees accounted for 0.46% of total employees. Kakao respects the value of diversity and puts competency first without discrimination on the grounds of place of origin, race, nationality, gender, age or disability. We also respect the diverse backgrounds and values of Krew, and work to promote diversity and create a flexible corporate culture.
	TC-IM-330a.2	Employee engagement as a percentage	53, 115	Kakao performs annual organizational health check. In 2020, it was revealed that positive responses amounted to 77% concerning indicators show how much employees take the ownership and proactive engage themselves with respect to their work.
	TC-IM-330a.3	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees	111, 113	-
IP Protection & Competitive Behavior	TC-IM-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	-	Please refer to '7. Sanctions Imposed' of the Kakao annual report 2020.

<sup>1)</sup> Based on country-specific calorific values by fuel type

<sup>2)</sup> <https://info.ad.daum.net/optout.do>

<sup>3)</sup> <https://privacy.kakao.com/transparency/statistic?lang=en>

<sup>4)</sup> Kakao uses personal data for the intended purposes only with prior consent from users.

## TCFD

Kakao actively join hands in responding to climate change as demanded by the global community, and has identified both actual and potential financial impacts that climate change could bring, setting its strategic directions and establishing a management system accordingly. To further reach out to stakeholders, we will transparently share our efforts to respond to climate change in accordance with the TCFD recommendations.

Recommendation	Kakao's Response	Reporting Page	
Governance	Disclose the organization's governance around climate-related risks and opportunities	At Kakao, the ESG Committee under the BOD is responsible for monitoring the entire environmental area including climate change. The Committee meets regularly to deliberate and decide on climate change and other environment-related agenda items. As to internal activities associated with climate change, the IBS Office, in charge of environmental operations, measures and manages our environmental performance.	42
Strategy	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material	Transition risks refer to risks that may occur in the process of transitioning to a low carbon society to mitigate climate change, and physical risks are defined as risks caused by abnormal climate conditions. In the short term, transition risks could arise as tightening environmental regulations are expected to result in cost increases, including investment in low-carbon equipment and infrastructure. Growing awareness on green services and a surge in demand for such services, however, could provide us with opportunities. Physical risks may occur in line with change in the operational method of data centers as a result of climate change. To manage and increase energy efficiency at data centers, we improved the air-conditioning environment of server rooms by upgrading the rack structure and the air-conditioning system while introducing high-efficiency energy servers/units and developing and operating a smart temperature management system.	44-46
Risk management	Disclose how the organization identifies, assesses, and manages climate-related risks	To systematically manage climate change risks, the IBS Office as the responsible team regularly reviews environmental risks and reports them to the ESG Committee. Our own data center to be completed in 2023 has factored in eco-friendliness even from the design phase. Notably, such green considerations as the installation of PV panels and the adoption of green fuel cells were made to improve its energy efficiency while reducing carbon emissions. We are also making investments to satisfy the LEED and WELL green building standards for Pangyo Alphadom City, a building that will accommodate our Kakao Community members from 2022. To raise awareness on climate change through the products and services delivered by Kakao, we are further disseminating e-bike sharing services, facilitating the distribution of EVs, establishing green brands, and launching eco-friendly products to help resolve environmental issues, along with setting a goal to develop new green services by 2022.	42-48
Metrics and targets	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material	To measure and manage climate-related risks and opportunities, we have built GHG inventories (Scope 1, 2 & 3) at our Jeju Office and Pangyo Office as well as four data centers in 2021 to calculate GHG emissions while monitoring our energy consumption. In 2020, our total GHG emissions amounted to 77,130tCO <sub>2</sub> eq.	42, 110

## UN SDGs

The UN Sustainable Development Goals (UN SDGs) are 17 goals to be attained by all countries across the globe by 2030 to ensure the sustainable development of people and the planet earth. As Kakao's raison d'être lies in its commitment to changing the world for the better, this deeply resonates with the UN's global agenda to pursue the sustainable development of humanity.

SDG	Target	Kakao's Contribution in 2020	Reporting page
 4 QUALITY EDUCATION	(4.4) By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	<ul style="list-style-type: none"> <li>'Unplugged Day' attended by 256 students</li> <li>'Digital Citizenship Education' attended by 8,461 students</li> <li>Career experience workshops attended by 113 students</li> <li>'Kakao Class' attended by 149 people</li> </ul>	84~85, 88~89, 117
 7 AFFORDABLE AND CLEAN ENERGY	(7.3) By 2030, double the global rate of improvement in energy efficiency	<ul style="list-style-type: none"> <li>Made investments to satisfy the LEED and WELL green building standards for Pangyo Alphadom City</li> <li>Adopted a green design approach for our data center to be built in Ansan</li> <li>Made equipment improvements to increase the energy efficiency of data center server rooms</li> <li>Installed temperature/humidity sensors and established a real-time monitoring system within data center server rooms</li> <li>Kakao Mobility contributing to the wider distribution of EVs in Korea</li> </ul>	42, 44~48
 8 DECENT WORK AND ECONOMIC GROWTH	(8.3) Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	<ul style="list-style-type: none"> <li>SME consulting support program attended by 1,473 people</li> <li>Supported SMEs to explore new sales opportunities (94 product items, KRW 250 million generated in transaction value)</li> <li>Kakao Ventures supporting startups in the ICT and SW sectors</li> </ul>	64~65
	(8.5) By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	<ul style="list-style-type: none"> <li>Employed 81 employees with disabilities through Linkage Lab, a subsidiary and a standard site hiring people with disabilities</li> <li>Provided employment to Health Keepers, visually-impaired individuals who are government-certified massagers, as well as baristas with developmental disabilities at in-house cafes</li> </ul>	54, 123
 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	(12.6) Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	<ul style="list-style-type: none"> <li>Published the '2020 Kakao's Commitment and Responsibility Report'</li> </ul>	-
 13 CLIMATE ACTION	(13.3) Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	<ul style="list-style-type: none"> <li>Established the Kakao Environmental Policy</li> <li>Built GHG inventories</li> <li>Encouraged Krew to opt for green commuting and mobility                             <ul style="list-style-type: none"> <li>Provided commuter buses (operating 19 routes to bring Krew to work and 17 routes to take them to their residential destinations)</li> <li>Supported the use of bikes</li> <li>Established EV infrastructure within the Jeju Office</li> </ul> </li> </ul>	42~43
 16 PEACE, JUSTICE AND STRONG INSTITUTIONS	(16.5) Substantially reduce corruption and bribery in all their forms	<ul style="list-style-type: none"> <li>Operated the Kakao Code of Ethics</li> <li>Ethics training for new hires attended by 577 persons</li> <li>Handled 100% of the reports submitted through internal/external counseling/reporting systems</li> </ul>	100~101
 17 PARTNERSHIPS FOR THE GOALS	Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships Data, monitoring and accountability	<ul style="list-style-type: none"> <li>Increased participation through the Kakao Together platform                             <ul style="list-style-type: none"> <li>No. of donations made: 8,303,744</li> <li>Donations made: KRW 11,847 million</li> </ul> </li> </ul>	83, 117

## UN Global Compact

The UN Global Compact (UNGC) is the global corporate citizenship initiative endorsed by more than 100 countries and businesses, and presents 10 principles to follow in the areas of human rights, labour, the environment and anti-corruption. Kakao joined the initiative in February 2021 to fulfill its corporate social responsibility and comply with the 10 UNGC Principles. Going forward, we will transparently share our progress made in abiding by these principles and faithfully take on our responsibility as a corporate citizen.

Area	10 Principles	Reporting Page
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights; and	52
	2. make sure that they are not complicit in human rights abuses.	52~53
Labour	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	53
	4. the elimination of all forms of forced and compulsory labour;	52
	5. the effective abolition of child labour; and	52
Environment	6. the elimination of discrimination in respect of employment and occupation.	52
	7. Businesses should support a precautionary approach to environmental challenges;	42
Anti-corruption	8. undertake initiatives to promote greater environmental responsibility; and	42~48
	9. encourage the development and diffusion of environmentally friendly technologies.	47~48
	10. Businesses should work against corruption in all its forms, including extortion and bribery.	100~101

## Memberships

Name of Association
OECD digital for SMEs global initiative (D4SME)
UN Global Compact
Best Regulatory Reform Forum
Korea Startup Forum
Korea Blockchain Industry Promotion Association
Korea Listed Companies Association
South Korea Internet Governance Forum
Korea Internet Corporations Association
Korea Internet Self-Governance Organization
Korea Investor Relations Service

## Awards

Year	Host	Name of Award
2021	Newsis	Deputy Prime Minister and Finance Minister Award, Korea Employment Awards
	Ministry of Culture, Sports and Tourism	Presidential Commendation for Contribution to Promoting Policy Communication
	Korea Management Association Consulting	Korea's Most Admired Company in the ALL STAR sector, and ranked 1st in the portal service sector
	Korea Exchange	Named a Top Performer in creating English disclosures in the securities market (2 consecutive years)
2020	Korea Advertising Society	Brand of the Year Award, Kakao Bizboard
	Korea Investor Relations Service	Excellence Award in the securities market sector, Korea IR Awards
	Money Today	Overall Grand Prize at the Money Today IR Awards
	Korea Exchange	Designated as a top performer in creating English disclosures in the securities market
	Edaily	Minister of Employment and Labor Award in the work environment improvement sector, Great Work Place Awards
	Asia Business Daily	Asia Business Daily CEO Award in the organizational culture sector, 5th Asia Women Index Awards
	ADFEST (Asia Pacific Advertising Festival)	Bronze Award in the Mobile sector
	Arts Council Korea	Award in the Frontier sector, Arts Patron of the Year Awards
2019	Gyeonggi Employers Federation	Awarded at the Work Life Balance Company Awards in the Gyeonggi Province
	Korean Society for Internet Information	Internet Technology Award
	IDSA (Industrial Designers Society of America)	Named an IDEA Finalist for if Kakao and Kakao School brand identity
	iF (International Forum Design)	iF Award for if Kakao, Kakao School, Kakao mini C, and Melon Branding
	AD STARS	Gold Award in the mobile sector, Crystal Award in the media sector
2018	iF (International Forum Design)	Awarded for the Melon application
	KOSRI	Minister of Health and Welfare Award in the talent donation sector, Korea CSR Film Festival
2017	Women News	Educational Content Award, 12th Parent's Choice Educational Brand Awards

## GHG Emissions Verification Statement



## Kakao Corporation

## Introduction

Korea Management Registrar has been requested by Kakao Corporation to verify greenhouse gas emissions for 2017~2020. 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:
  - √ Limited to the Pangyo office, Jeju office and data centers (4 facilities) of Kakao Corp., according to the operating and controlling approach of the standards.
- Verification period: 01/01/2017 ~ 12/31/2020
- Types of Greenhouse Gases: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O (not applicable for HFCs, PFCs, SF<sub>6</sub>)
- Verification scope: Scope 1 (direct emissions), Scope 2 (indirect emissions), Scope 3 (other indirect emissions)
- Performed verification work:
  - √ Visiting Kakao Corp. and interviewing with the manager responsible for overall emissions data collection of the organization
  - √ Reviewing the emissions data monitoring standard and process
  - √ Examination on raw data including information system, bills and payment statements related to verification scope
  - √ Comparative examination through on-desk review, risk analysis, observation and inspection, etc.
- Level of assurance: Limited assurance

## Standard &amp; 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 (2006),
- ISO 14064-3 Greenhouse gases -- Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions (2006),
- IPCC Guidelines for National Greenhouse Gas Inventories (2006),
- WRI/WBCSD GHG Protocol,
- MOE Verification guidelines for operation of greenhouse gas and energy target management scheme (Criterion of materiality/ IPCC emission factors and calorific values / Country specific calorific values and emission factors)

## Results

(Unit: tCO<sub>2</sub>-eq./yr)

Scope	2017	2018	2019	2020
Scope1	220	251	287	256
Scope2	3,413	55,368	64,478	76,670
Scope3	82	156	185	203
<b>Total</b>	<b>3,714</b>	<b>55,774</b>	<b>64,949</b>	<b>77,130</b>

- \* 1. The emissions of data centers in 2017 was excluded.
- \* 2. The scope3 emissions was limited to the commuter buses of Pangyo office.

## Conclusions

As a result of the verification according to the verification scope and standard presented above, the assurance opinion of Korea Management Registrar is as follows.

- √ KMR verified the greenhouse gas emissions for 2017~2020 of Kakao Corp. as described above. Based on the procedures performed, no evidence was identified that the emissions information is not prepared in accordance with the monitoring requirements to meet the verification scope and standards.
- √ This opinion may be influenced by the limitations of provided data, sampling methods, etc., and because of these limitations of verification, there could be unavoidable possibility of existence of undiscovered misstatements.

May 7, 2021  
Korea Management Registrar  
President Hwang Eun Ju

## Third-party Assurance Statement

### Relating to Kakao ESG Report for the 2020 calendar year

This Assurance Statement has been prepared for Kakao Corporation in accordance with our contract but is intended for the readers of this Report.

#### Terms of engagement

Lloyd's Register Quality Assurance Limited (LR) was commissioned by Kakao Corporation to provide independent assurance on its '2020 Kakao's Commitment and Responsibility' ("the report") against the assurance criteria below to a "moderate level of assurance and materiality" using "Accountability's AA1000AS v3", where the scope was a Type 2 engagement.

Our assurance engagement covered the operations and activities of Kakao Corporation in Korea and specifically the following requirements:

- Evaluating adherence to the AA1000 AccountAbility Principles<sup>1)</sup> of Inclusivity, Materiality, Responsiveness and Impact
- Confirming that the report is in accordance with GRI Standards<sup>2)</sup> and core option
- Evaluating the accuracy and reliability of data and information for only the selected indicators listed below:
  - GRI 200 (Economic): 201-1, 203-2, 205-2~3, 206-1
  - GRI 300 (Environmental): 302-1~3, 305-1~4, 307-1
  - GRI 400 (Social): 401-1~3, 402-1, 403-1~10, 404-1, 404-3, 405-1, 406-1, 407-1, 408-1, 409-1, 412-2, 413-1, 415-1, 416-2, 417-2~3, 418-1, 419-1
- SASB<sup>3)</sup> Accounting Metrics

Our assurance engagement excluded the data and information of Kakao Corporation's suppliers, contractors and any third-parties mentioned in the report. LR's responsibility is only to Kakao Corporation. LR disclaims any liability or responsibility to others as explained in the end footnote. Kakao Corporation's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of Kakao Corporation.

#### LR's Opinion

Based on LR's approach nothing has come to our attention that would cause us to believe that Kakao Corporation has not, in all material respects:

- Met the requirements above
- Disclosed accurate and reliable performance data and information as all errors or omissions identified during the assurance engagement were corrected
- Covered all the issues that are important to the stakeholders and readers of this report.

The opinion expressed is formed on the basis of a moderate level of assurance and at the materiality of the professional judgement of the verifier.

Note: The extent of evidence-gathering for a moderate assurance engagement is less than for a high assurance engagement. Moderate assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a moderate assurance engagement is substantially lower than the assurance that would have been obtained had a high assurance engagement been performed.

1) <https://www.accountability.org>  
 2) <https://www.globalreporting.org>  
 3) <https://www.sasb.org>

#### LR's approach

LR's assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Assessing Kakao Corporation's approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly. We did this through reviewing documents and associated records.
- Reviewing Kakao Corporation's process for identifying and determining material issues to confirm that the right issues were included in their Report. We did this by benchmarking reports written by Kakao Corporation and its peers to ensure that sector specific issues were included for comparability. We also tested the filters used in determining material issues to evaluate whether Kakao Corporation makes informed business decisions that may create opportunities that contribute towards sustainable development.
- Auditing Kakao Corporation's data management systems to confirm that there were no significant errors, omissions or mis-statements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification. We also spoke with those key people responsible for compiling the data and drafting the report.
- Checking whether GHG emissions and energy consumptions in the appendix of the report were transposed correctly from the GHG inventory which was verified by the third-party assurance provider.
- Reviewing additional evidence made available by Kakao Corporation at its Pangyo Office in Gyeonggi-do.

#### Observations

Further observations and findings, made during the assurance engagement, are:

- **Inclusivity:** We are not aware of any key stakeholder groups that have been excluded from Kakao Corporation's stakeholder engagement process.
- **Materiality:** We are not aware of any material issues concerning Kakao Corporation's sustainability performance that have been excluded from the report. It should be noted that Kakao Corporation has established extensive criteria for determining which issue/aspect is material and that these criteria are not biased to the company's management.
- **Responsiveness:** Kakao Corporation organized ESG committee under the board of directors to direct ESG management and established ESG strategies and action plans. It is expected that performances against the targets will be reported in the future.
- **Impact:** In consideration of business field, Kakao Corporation established social contribution strategies which focus on tackling social challenges and implemented various and innovative social contribution programs. In addition, Kakao Corporation is striving to assess the impact of social contribution programs on the society by measuring the outcomes of programs.
- **Reliability:** Kakao Corporation developed the process to compile sustainability performance data for this report, which is published in 8 years after 2013. Kakao Corporation should maintain more robust data management system by taking appropriate actions to ensure consistent data compiling for future reports.

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**LR's standards,  
competence and  
independence**

LR implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition and ISO/IEC 17021 Conformity assessment – Requirements for bodies providing audit and certification of management systems that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants. LR ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent. This verification engagement is the only work undertaken by LR for Kakao Corporation and as such does not compromise our independence or impartiality.

Dated: 6th May 2021

Tae-Kyoung Kim

LR Lead Verifier

On behalf of Lloyd's Register Quality Assurance Limited

17th Floor, Sinsong Building, 67 Yeouinaru-ro, Yeongdeungpo-gu, Seoul, Korea

LR reference: SEO00000823



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