HAPPINESS WITH SK

2020 SK HOLDINGS **SUSTAINABILITY REPORT**

SK holdings

About this Report

Report Overview

SK holdings has published this report in order to disclose the achievements of its economic and social value creation activities in 2019 as well as its mid- to long-term strategies. The material issues covered in the 2020 SK holdings Sustainability Report reflect the main areas of interest of our stakeholders, and the report also covers financial performances and non-financial activities comprehensively.

Period & Scope

This report covers the financial and non-financial performances of SK holdings' major sustainability management activities during the period of January 1 to December 31, 2019, along with some data from the first half of 2020. In order to portray the changes in trends for quantitative results, we have incorporated the results from the past three years, i.e. January 1, 2017 through December 31, 2019.

Standards & External Verification

This report has been prepared according to the Core option of the Global Reporting Initiative Standards and observes the principles of the UNGC CoP (Communication on Progress). To ensure the reliability of the reported content, this report has been verified by the Korea Management Registrar, a professional verification agency for sustainability reports, in accordance with the standard protocol of AA1000AS (2008). The results of the verification are included on pages 94 and 95 of this report.

Reporting Boundaries

This report limits the major boundaries of the quantitative and qualitative performances to SK holdings based on the separate financial statements of the Korean International Financial Reporting Standards (K-IFRS), considering the actual control power of SK holdings and the extent of the its impact of business sites on major issues that may arise. However, sales amounts, which are the key performance indicators of all business sites, are based on the consolidated financial report in order to facilitate the comprehensive understanding of stakeholders.

Communication with Stakeholders

The sustainability management of SK holdings is based on communication with our stakeholders. SK holdings publishes the annual sustainability report to improve communication with our stakeholders. In 2020, we actively identified the needs of our stakeholders regarding sustainability management by conducting surveys and interviews with experts, and we reflected the findings in our management activities.

Contents

Greetings

" SK will continue to pursue the sustainable happiness not only of its
employees but also of all the stakeholders of SK."

This year's sustainability report comes at a different and more difficult time than before. Many businesses are undergoing a tough sustainability test in the wake of the COVID-19 pandemic that began earlier this year. On top of COVID-19, SK is also facing other difficulties such as low oil prices and global geopolitical issues. However, the process of overcoming these difficulties has provided an opportunity to realize what SK's efforts to create social value have meant in the past few years.

Looking back at last year's economic performance, we recorded sales of KRW 139 trillion and an operating profit of KRW 9 trillion. These results are not quite as satisfactory as we would have liked them to be due to the difficult internal and external circumstances. Nevertheless, SK continued to play a leading role in practicing social value in 2019. Last year is particularly meaningful as SK's various experiments with social value produced the desired results.

In 2019, SK hosted the Social Value Connect (SOVAC), Korea's first and largest private event related to social value. In addition, we provided incentives called Social Progress Credit (SPC) to 220 social enterprises as part of an effort to invigorate the social enterprise ecosystem. Internally, SK accelerated Double Bottom Line (DBL) management activities that pursue both economic and social values, creating social value worth KRW 1 trillion. We believe that these achievements have enabled us to share SK's sincere desire for a sustainable society beyond sustainable management.

At the same time, 2019 is also the year when SK declared its "Happiness Management" initiative. We formed a consensus among employees through 100 rounds of "Happiness Talk" and revised SK Management System (SKMS), the group's management philosophy. Happiness management is also reflected in the articles of association of our major subsidiaries, providing an institutional foundation for SK to practically pursue the value of happiness. It is a testament to SK's declaration and commitment to make economic/social value, which tend to be strongly understood as monetary/quantitative meaning, become warm-hearted happiness for each and every person. SK will continue to pursue the sustainable happiness not only of its employees but also of all the stakeholders of SK.

Today, the meaning of the word "sustainability" and the sense of urgency surrounding it have changed significantly. Since the COVID-19 outbreak, the safety net that protects the minimum wellbeing of individuals, regardless of business or society, has been under threat. SK has recently reaffirmed that SK's commitment to social value and happiness is directly related to the well-being of its stakeholders as well as society. We have witnessed such changes through a project in which SK, a social enterprise, and Daegu City cooperated to deliver Happiness Lunchboxes to vulnerable children in the Daegu and Gyeongbuk regions and the ongoing blood donation relay among SK members, a joint program of SK and the Red Cross. It seems unlikely that the global threat of COVID-19 will be resolved any time soon. As such, it requires a different perspective and a different level of social effort.

Corporate sustainability is only possible in a sustainable society. SK will strive to achieve sustainable happiness for the company, society, and all stakeholders. We look forward to strengthening the safety net for the sustainability of SK as well as our society with your continuous interest and participation.

Thank you.

Chey, Tae-won
Chairman & CEO of SK holdings Co., Ltd.

CEO's Message

"We seek to become a global investment holding company with the management philosophy of sustainable growth through social value creation."

Jang, Dong-Hyun
President & CEO, SK holdings Co., Ltd.

Dear stakeholders,

SK holdings, which is growing into a sustainable global investment holding company through aggressive investment and business model innovation, has made remarkable achievements not only in key growth areas such as bio and pharmaceutical and semiconductor materials, but also in seed investments.

First, in the bio and pharmaceutical sector, we entered the European market by exporting a new anti-epileptic drug and, after obtaining sales approval from the US Food and Drug Administration (US FDA), we began selling products in the United States, the world's largest pharmaceutical market. We also established an integrated corporation called SK phamteco to maximize synergy by integrating pharmaceutical production capabilities distributed in Korea, the US, and Europe. Furthermore, AMPAC, our US-based Contract Manufacturing Organization (CMO), was recently selected as a supplier for the US-government project to stockpile essential medicines, earning global recognition.

In the materials field, SK siltron and SK materials, which SK holdings acquired to enhance the competitiveness of its semiconductor business, have achieved remarkable growth in sales and operating profit, becoming a reliable growth engine of SK.

In the seed investment area, we have proactively identified the growth potential of distribution centers in the APAC region, given the expansion of e-commerce, and have therefore invested in ESR, a global logistics center company. ESR was listed on the Hong Kong stock exchange two years later, with its value doubling the investment amount.

As global macroeconomic volatility has recently increased due to the COVID-19 pandemic, uncertainty is expected to grow in the management and investment environment. However, SK holdings will maintain its steady growth by unwaveringly practicing its management philosophy of social value (SV) even in the currently difficult internal and external environments.

More specifically, we will proactively manage investment risks in new growth areas by strengthening the ESG investment standards for new investments, and we will expand social venture investments in SV-centered areas such as society and the environment.

Regarding SK Group's portfolio, we will make decisions to create the most efficient and appropriate structure by considering both social and economic values. We are fully aware that it will not be easy to look at the business portfolio, which SK has built up solidly, from a fresh perspective and find the optimal structure. However, we believe that building an optimal portfolio structure is the most important duty of the holding company of SK Group, which operates a variety of businesses, and the most effective way to maximize shareholder value. To this end, we will create and execute long-term plans that can win your support and trust.

Stakeholders,

SK holdings will constantly fulfill its role as a member of society and strive for the happiness of all its stakeholders based on our management philosophy of sustainable growth through social value creation. We look forward to your continued interest and support to grow into a global investment holding company based on social value creation.

Thank you!

Dear stakeholders,

SK holdings launched its Happiness Management initiative in 2020, coupled with the long-term plans for creating economic and social values and ensuring the happiness of our employees.

Today, companies should not just improve their profit structure but specify their vision and corporate identity and link them with business strategies in order to heighten their value. SK holdings will clarify its vision of leading digital transformations across industries under the trend of convergence between industries using digital technology and will help customers innovate their business models (BM).

In this process, we will focus on promoting cooperation between customers with different capabilities, customers' stakeholders, and the business partners of SK holdings, and thereby fulfill the meaning of shared growth.

Considering the pursuit of social value as the fundamental reason for a company's existence, we would like to present a long-term social value (SV) implementation system in order to maximize the related performances. The system consists of tasks focused on the needs and expectations of customers and stakeholders for solving social problems, and we will set challenging goals for 2030 to add responsibility for execution by ourselves.

The SV implementation system will serve as a core management infrastructure and present important directions and standards for our business strategies as well as employees' execution of tasks.

SK holdings defines the happiness of its employees as the ultimate goal of its management activities. This is based on our conviction that economic and social values can be maximized when employees are happy.

Based on the opinions of our employees in the previous year, competency-based growth was selected as the top priority for increasing happiness, and, this year, we have established a self-directed learning and working environment with dramatically expanded support.

Meanwhile, SK holdings is working together with stakeholders to overcome the unexpected COVID-19 crisis, as company has been with stakeholders at every important moment. This experience has once again reminded us of our corporate responsibility to pursue a safe and healthy society, and we will continue to take part in efforts to strengthen the social safety net.

We ask for your continued interest in SK holding's activities as a corporate citizen, and we hope that all of our stakeholders will overcome COVID-19 safely.

Thank you!

" We will increase the happiness of all our stakeholders by solving social problems using digital technology and supporting customers' BM innovation! "

Park, Sung-ha
President & CEO, SK holdings Co., Ltd.

Introduction to SK Group

SK Group Increases Happiness Together

SK Group, which has been making meaningful achievements and evolving and advancing despite numerous external challenges over the past 67 years, is now moving toward greater happiness. In the fields of energy, chemical, ICT, materials, logistics, and services, SK's subsidiaries have strengthened their fundamental competitiveness and successfully sought a new direction for future growth.SK Group plans to introduce further innovations to its business model and create sustainable happiness for all stakeholders based on its belief and practice in creating social value and happiness.
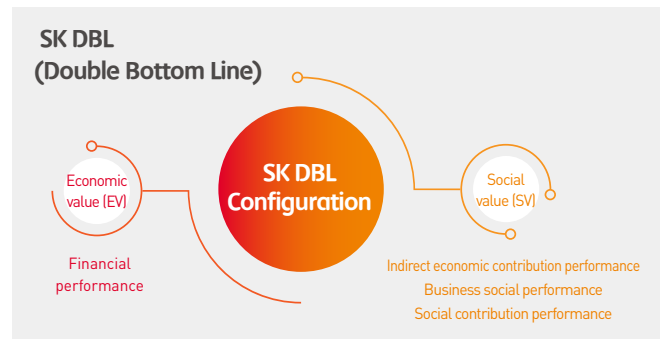
SK Group's Management Philosophy

Happiness of Stakeholders

Companies should strive for balanced happiness among stakeholders and consider both present and future happiness for long-term sustainability. Employees are not only a part of the company's stakeholders but also its constituents. We put into practice our belief that by pursuing the happiness of the stakeholders, we can increase the happiness of our employees as a whole while prolonging the happiness of individual employees as well.

SK Group's Pursuit of Social Value

SK defines all the values that the company creates for the happiness of its stakeholders as "social value" and is actively working to create them. SK is happy when it makes the people around us happy, and this is the value SK pursues. Going beyond the passive concept of "social responsibility," SK contributes significantly to the sustainable growth of businesses and society by creating social value. We strive to gain the trust of our stakeholders by incorporating social value into all processes related to the production and provision of products and services. We are also achieving business innovations that promise coexistence and happiness for all members of society.

SK DBL (Double Bottom Line)

SK DBL Configuration

Economic value (EV)
Financial performance

Social value (SV)
Indirect economic contribution performance
Business social performance
Social contribution performance

SK Group's Organization

SUPEX Council

The SUPEX Council is the official highest consultative body of the management of SK Group. The participation and cooperation of affiliates are promoted based on the "Agreement on the Implementation of Measures for Mutual Cooperation" signed by all major affiliates. The continued and steady growth of SK is propelled by the effective application of the "Independent Yet Together" approach.

The SUPEX Council is comprised of representatives of 16 affiliates (as of January 2020) who signed the Agreement. There are seven specialized committees under the Council to galvanize the collective intelligence and mutual cooperation of affiliates to promote the practice of "Independent Yet United".

SK SUPEX Council

Strategy Committee	Energy-Chemicals Committee	ICT Committee	Global Growth Committee	Communication Committee	Human Resource Promotion Committee	SV(Social Value) Committee
• The Strategy Committee supports the development and execution of strategies at the Group level, identifies new business opportunities and discusses investment cooperation and execution plans.	• The Energy-Chemicals Committee supports the discovery of new growth engines and brings together the R&D capabilities of the Group to expedite the growth and development of affiliates.	• The ICT Committee discusses core agendas of ICT R&D and secures and fosters talent with technological expertise.	• The Global Growth Committee reviews and supports the Group's growth strategy and business opportunities and forges friendly partnerships with global business partners.	• The Communication Committee ensures fluid communication with diverse stakeholders at both home and abroad.	• The Human Resource Promotion Committee supports the identification and development of potential senior executives of the future based on SKMS, the foundation of SK corporate culture.	• The Social Value Committee sets the stage for the Group to generate social value and strives to promote mutual growth with social enterprises and business partners to create and share sustainable happiness.

Subsidiaries Participating in the SUPEX Council

SK holdings, SK innovation, SK telecom, SK E&S, SK hynix, SK chemicals, SK networks, SKC, SK energy, SK global chemical, SK lubricants, SK E&C, SK gas, SK broadband, SK materials, SK siltron

SK Group History

1950

1953
Founded Sunkyong Testiles amid the ashes of the Korean War

1960

1962
The first national export of textiles to Hong Kong

1969
Founded Sunkyong Synthetic Textiles, a producer of polyester, and commenced manufacture of filament yarn

1970

1977
Sunkyong Chemical (currently SKC) became the first Korean company in Korea to successfully develop polyester film

1979
Established business management system SKMS (SK Management System)

1980

1980
Acquired the Korea Oil Corporation

1985
Founded Yukong Gas (currently SK gas), expanded energy business

1988
Yukong (currently SK innovation) became the first company in Korea to succeed in overseas crude oil development

1989
Established SUPEX methodology to go beyond SKMS and evolve into a leading global company

1990

1991
Completed vertical integration from oil to textiles with the inauguration of the new Ulsan plant

1994
Ventured into cutting-edge ICT by becoming the largest shareholder of Korea Mobile Communications (currently SK telecom)

1996
First in the world to commercialize CDMA mobile services

1998
Declared SK as the new CI for the global era

2000

2002
SK telecom, first in the world to commercialize synchronous 3G services

2005
Introduced 'Wings of Happiness' which encapsulates ambition to become a global company

2007
Shifted to a holding company system to boost efficiency and bolster financial soundness

2010

2010
Officially launched SK China

2011
Founded SK innovation, SK energy and SK global chemical

2012
Welcomed SK hynix into the SK family to establish semiconductors as the third pillar of growth

2013
Established autonomous voluntary business management and a foundation for voluntary participation in the SUPEX Council of affiliates by adopting 'Independent Yet United 3.0'

Reorganized SK innovation to have five subsidiaries

2014
SK innovation secured operating rights to oil production fields

SK hynix inaugurated backend process production subsidiary in Chongqing, China

SK E&S made inroads into the North American market via joint development of shale gas

2015
SK holdings merged with and SK C&C to launch integrated holdings company

SK hynix inaugurated the world's largest next generation DRAM FABM14

2016
SK networks acquired Tongyang Magic to secure infrastructure in overall home and life services market

SK materials was acquired to create growth opportunities in the semiconductor materials business

2017
SK siltron, producer of wafers for semiconductors, was acquired to complete the semiconductor materials portfolio

2018
SK telecom acquired ADT CAPS to enter cutting-edge security business

SK hynix inaugurated M15, a culmination of global state-of-the-art technology

SK holdings acquired AMPAC, the first acquisition of a U.S. pharmaceutical company by a Korean firm

2019
Declared 2019 to be the base year of happiness-based management

SK entered into a strategic partnership with Vietnamese company Vin Group

SK telecom, first in the world to commercialize 5G mobile services

SK hynix, first in the world to mass produce 128-layer 1Tb TLC 4D NAND Flash chips

SK siltron acquired DuPont's SiC wafer division

SK biopharmaceuticals, first in Korea to win U.S. FDA approval for a new independently developed anti-epileptic drug

Introduction to SK holdings

Moving toward a Global Investment Holding Company

SK holdings' top management priority is to explore and develop future growth engines for the group and maximize the overall value of our portfolio through active optimization as an "investment-oriented holding company" that leads the growth and advancement of invested companies. We have accumulated new growth engines in the bio, pharmaceutical, semiconductor and materials fields, on top of the stable profit bases of the energy and ICT sectors and have made bold seed investments in areas with high growth potential.

2019 Performance

Pharmaceuticals

SK holdings is accelerating its entry into the bio sector by investing in an antibody drug development company. We have invested in Hummingbird Bioscience, a Singapore-based venture company, in an effort to secure advanced technology to enter the antibody drug market.

In particular, Cenobamate, a new anti-epileptic drug independently developed by SK biopharmaceuticals and granted US FDA approval for sale in November 2019, is the first case of a Korean pharmaceutical company directly receiving FDA approval for the sale of a new drug without exporting the technology.

Medicine Production

SK holdings has expanded its contract manufacturing organization (CMO) business to the world's best level by integrating three pharmaceutical production units distributed in Korea, the United States, and Europe. Currently, SK pharmteco, an integrated CMO corporation, oversees the operation of SK Biotech in Korea, SK Biotech in Ireland, and AMPAC in the US.

In 2020, AMPAC, a US subsidiary of SK pharmteco, earned global recognition when the US Department of Health and Human Services selected the company as a supplier of critical medicines needed during the COVID-19 response, as well as for the US-government project to stockpile essential medicines in the long term.

Materials

SK siltron and SK materials, which SK holdings acquired to strengthen the semiconductor business value chain, posted excellent results in terms of sales and operating profit. In addition, SK siltron acquired DuPont's silicon carbide (SiC) division, which develops next-generation wafers, to strengthen our presence in the power semiconductor market, which is essential for electric vehicles.

New Energy

As part of a series of investments in the gathering & processing (G&P) system of the US to accelerate the energy business in North America, which is rapidly growing around shale energy, SK holdings invested about KRW 170 billion in a US firm called Blue Racer Midstream. G&P is a gathering and processing service that transports the gas produced in wells to pipelines and processes it for sale to the end consumer, which is a key midstream process between energy production and final consumption. In this way, SK holdings is growing into a leading G&P investment company in Korea that fosters and invests in global energy as a future growth engine.

Logistics

SK holdings invested KRW 25 billion in Belstar Superfreeze, a cold chain logistics company, in an effort to strengthen its logistics competitiveness, becoming the second-largest shareholder of Belstar and the first Korean company to acquire a technology for reusing cold energy from LNG in a cold chain (low-temperature transport system). Based on its unique technology and business development experience, Belstar will participate in multiple projects to develop new cold chain logistics centers using LNG cold energy led by public enterprises and local governments in Korea. SK holdings plans to build a cold chain network in Asia in collaboration with various partners within the group. As such, SK holdings has not only gained an edge in the promising low-temperature logistics sector but has also created social value through energy-saving and recycling.

2020 Plans

"Accelerating Portfolio Migration based on
New Financial Stories"

Proving equity story through investment performance in new growth areas

• Bio & Pharmaceuticals
 - Pursue IPO and commercialization of biopharmaceuticals, expand pipeline.
 - Create synergy by launching an integrated CMO unit.

• Materials & New Energy
 - Enhance the portfolio by investing in and cooperating with global materials companies.
 - Establish and expand the renewable energy portfolio.

• Logistics & Agri-Food
 - Accelerate the expansion of the cold chain based on ESR experience.
 - Increase the agri-food portfolio's value through projects in Southeast Asia.

• Mobility & Emerging Tech
 - Discover and explore new growth areas.

Increase shareholder value by accelerating innovation of the business models of previously invested companies.

• Reorganize the portfolio structure of invested companies and build a virtuous cycle
investment system centered on lead/help and return on investment.
 - Lead/assist the establishment and execution of invested companies' new financial stories.
 - Reduce the cash burden of holdings and gain market confidence in realizing investment performance.

Introduction to SK holdings

Growing into a Leader of Digital Innovation

SK holdings continues to innovate its business model to enhance stakeholder value and maximize the happiness of its employees through digital technology. We are constantly expanding the required human and technological capabilities, based on which digital products and services we are developing and disseminating that enable the innovation of customers' business. SK holdings will further consolidate its foundation for sustainable growth by proactively responding to the evolution of future technologies and changes in customer needs as well as creating both economic and social values.

2019 Performance

Strengthening the Competitiveness of Digital Business

SK holdings has consolidated its digital solution and platform lineup through R&D, including "AccuInsight+," which enables easy and rapid analysis of vast amounts of data; "Aiden," a video and object recognition AI solution; "Cloud Z," a multi-cloud platform that can accommodate the customers' diverse needs, along with 165 patents as of the end of 2019. In addition, we continued to enhance the technological capabilities of our employees through SK's unique digital capability development programs, such as Tech. Collabo Lab and Tech. Training Center, and increased the proportion of digital technology experts to 50 percent of our entire workforce through an aggressive recruitment campaign. Furthermore, we established a new organization dedicated to business model innovation that promotes innovation in customers' industries, through which we successfully carried out digital innovation projects in various industries.

Social Value-based Business Model Innovation

SK holdings has explored and promoted various Double Bottom Line (DBL) business models to increase business sustainability by creating economic value and social value simultaneously. In the field of environment and safety, we launched a "CCTV-based field worker safety management solution," an "abnormal vibration analysis solution," a "drone excavation detection solution," an "AI text translation service" to enhance IT accessibility, and an "AI-based legal support service."

Laying the Foundation for Happiness Management

SK holdings has identified major factors that can increase happiness by analyzing a diverse body of employee data based on AI and data technology and has introduced and run various improvement programs. In addition, we have strengthened our management infrastructure for happiness management by launching a platform necessary for expanding communication with employees, designing employee-led happiness, and establishing an organization dedicated to employee happiness.

2020 Plans

"Strengthening the Sustainability of Employees' Happiness through Digital-oriented EV/SV Innovation"

Accelerate innovation in the digital-based business structure

• Enable customers' digitalization based on platforms and solutions
• Innovate digital-based business processes and systems

Enhance the Social Value promotion system and boost performance

• Discover and accelerate additional Double Bottom Line (DBL) BMs
• Reinforce employees' Social Value practice culture

Promote employees' happiness

• Improve the system for fostering the personal growth and competency- building activities of employees
• Explore and implement data-based happiness promotion projects continuously

Happiness Essay

Prologue

CONTENT

SKMS

Stakeholder Happiness Strategy

STORY

Through the 14th revision of SKMS in 2020, SK set the sustainable happiness of employees as the ultimate goal of management. We also defined all social values created by the company for the happiness of stakeholders. To achieve everlasting prosperity, we also pursue the happiness of employees and stakeholders at the same time and defined all the values that the company creates for social happiness as social value.

SK holdings seeks to gain trust from stakeholders by increasing economic value through social value creation in pursuit of the sustainable happiness of stakeholders. To this end, we will identify social problems that our stakeholders consider important as well as customers' pain points, select key problem-solving areas, and set goals and implement solutions.

SV Performance

In 2019, SK holdings generated business social value worth KRW 81.7 billion, a 46% increase compared to the previous year, mainly by using DT technology (expanded cloud service and forestry performance) in the environment sector and reinforcing the big data- and AI-based social safety net infrastructure (Vitality app and AI-based legal service). In addition, we created social value worth a total of KRW 909.3 billion including KRW 819.4 billion in indirect economic contribution and KRW 8.2 billion in social contribution.

Reflecting Stakeholder Priority

SK holdings will expand its stakeholder-centered management by identifying stakeholders' needs in a timely manner by identifying social value areas that our stakeholders consider important and reflecting them in establishing our SV strategy.

Employee Happiness, SV Practice, Vulnerable Groups, Community

SK holdings has engaged in activities pursuing the happiness of employees as the first step in a virtuous cycle where the happiness of employees creates the Voluntarily and Willingly Brain Engagement (VWBE) culture and further leads to a SUPEX (Super Excellent) Company. We strive to ensure that our employees' voices are managed as data and implemented as a happiness map so that they can be reflected in future strategic planning.

SK holdings is also actively carrying out social value creation activities for stakeholder happiness. By sharing the thoughts of employees and creating ideas to establish a system that can be quickly executed, we come up with and implement diverse ways to bring happiness to our stakeholders.

SKMS (SK Management System)

SKMS

Since its inception in 1979, SKMS, SK Group's management system, has served as the basis for uniting all employees and elevating the level of management based on the common understanding of the nature of corporate management. In the 14th revision of SKMS in 2020, SK defined its management goal as "sustainable happiness of employees" with plans to pursue SUPEX** through VWBE*, which is our philosophy and methodology. All SK people will develop a community that continuously creates happiness for employees and stakeholders through a virtuous cycle of Employee Happiness → VWBE Culture → SUPEX Company based on the belief in SK's management philosophy and commitment to practice.

* VWBE: Voluntarily and Willingly Brain Engagement
** SUPEX: Super Excellent, the highest performance level attainable by humans

"The new SKMS started with an understanding of "us," the constituents of SK.
Our community must be sustainable through stability and growth, and our employees must have the conviction and trust that they can achieve what they desire within the community."

- Chairman Chey Tae-won from the 14th revision announcement in 2020

Management Philosophy

Sustainable Happiness of Employees

Corporate management goal: Employee happiness
The ultimate purpose of SK's business management is the happiness of SK employees. As responsible members of SK, SK employees will act on the conviction that cultivating the happiness of all members with the company's organized power can also elevate their own happiness.

Simultaneous pursuit of stakeholder happiness
To pursue the sustainable happiness of SK employees, SK must maintain stability and growth and continuously survive and develop. To achieve this, SK will simultaneously pursue the happiness of SK employees and of its stakeholders.

Stakeholder happiness = Social Value
All value that a company creates for the happiness of its stakeholders is social value. SK, by creating social value, will elevate its economic value and develop a relationship of trust with its stakeholders.

Relationships and roles of SK and stakeholders
SK will:
Earn customers' trust by offering and satisfying them with a variety of values and ultimately develop together with our customers.
Build a fair and competitive business ecosystem with our business partners, and achieve mutual development through cooperation based on this ecosystem.
Raise the company's value by continuously creating shareholder value.
Grow together with our society while making various contributions such as environmental protection, job creation, improvement in the quality of life, and the support of local communities.
SK will make consistent efforts to keep the happiness of our stakeholders in harmonious balance and at the same time consider their present and future happiness in order to ensure the longevity of the stakeholders

| Relationships with Stakeholders

Customers
Trust & choice
Sustain customer satisfaction, address pain points
Environmental protection, job creation, community contribution, etc.
Build a fair and competitive ecosystem
Society
Trust and support for corporate activities
SK (employees)
Mutual cooperation/ development
Business partners
Generate corporate value, Long-term investment ESG etc.
Long-term investment
Shareholders

Strategy to Pursue Happiness of Stakeholders

SK holdings' Social Value Promotion System

SK holdings is working to specify and address social problems that stakeholders consider important and the pain points of major clients. As part of this effort, we desire to design and implement digital and data-driven solutions to resolve social issues and become a global investment-oriented holding company based on social value.

Pursuit of Happiness by Expanding Stakeholder-oriented Management

Digital SV Platform Innovator

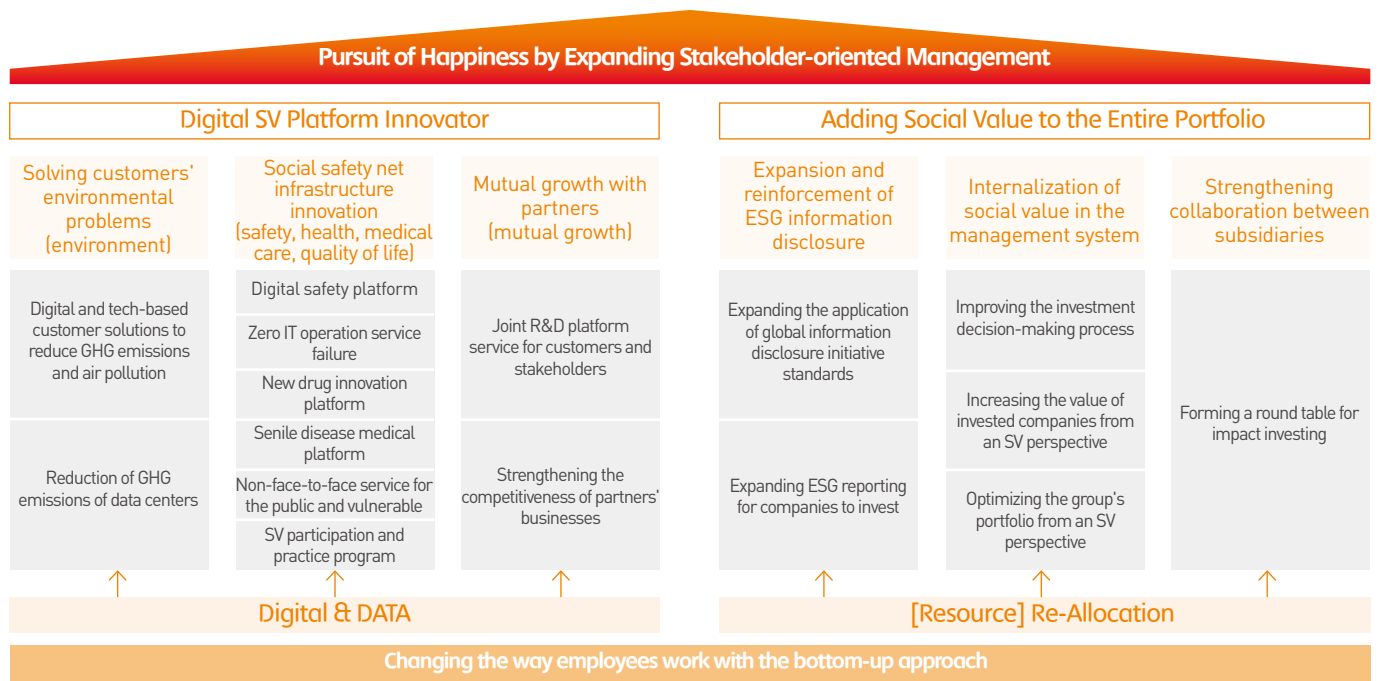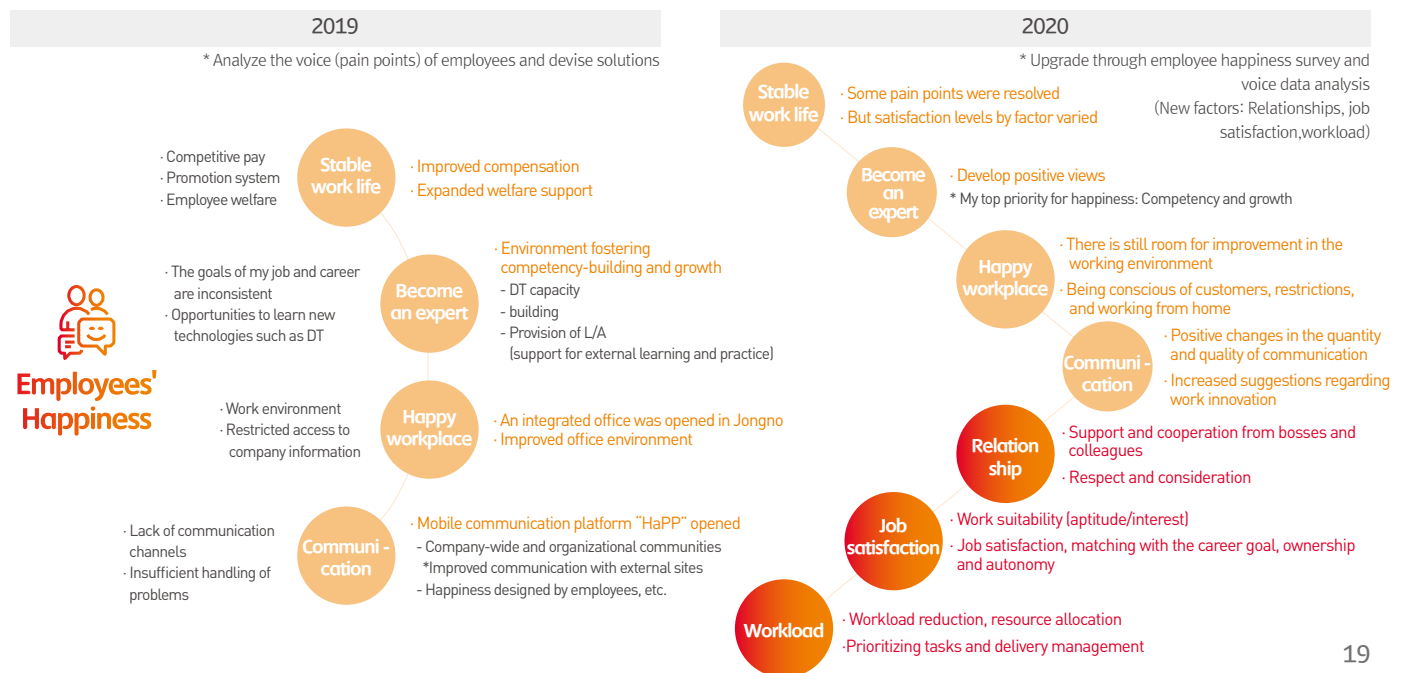| Solving customers' environmental problems (environment)	Social safety net infrastructure innovation (safety, health, medical care, quality of life)	Mutual growth with partners (mutual growth)
Digital and tech-based customer solutions to reduce GHG emissions and air pollution	Digital safety platform	Joint R&D platform service for customers and stakeholders
	Zero IT operation service failure	
	New drug innovation platform	
	Senile disease medical platform	
Reduction of GHG emissions of data centers	Non-face-to-face service for the public and vulnerable	Strengthening the competitiveness of partners' businesses
	SV participation and practice program	

Digital & DATA

Adding Social Value to the Entire Portfolio

Expansion and reinforcement of ESG information disclosure	Internalization of social value in the management system	Strengthening collaboration between subsidiaries
Expanding the application of global information disclosure initiative standards	Improving the investment decision-making process	
	Increasing the value of invested companies from an SV perspective	Forming a round table for impact investing
Expanding ESG reporting for companies to invest	Optimizing the group's portfolio from an SV perspective	

[Resource] Re-Allocation

Changing the way employees work with the bottom-up approach

SK holdings' Effort to Spread Happiness

In pursuit of employees' happiness, SK holdings constantly communicates with employees and brings up discussion topics related to employees' happiness based on the "speak out" culture. We plan to establish strategies for happiness by utilizing the "Happiness Map" and carry out practical activities to spread the happiness of our employees to external stakeholders.

2019

* Analyze the voice (pain points) of employees and devise solutions

Employees' Happiness

Stable work life
- Competitive pay
- Promotion system
- Employee welfare

  · Improved compensation
  · Expanded welfare support

Become an expert
- The goals of my job and career are inconsistent
- Opportunities to learn new technologies such as DT

  · Environment fostering competency-building and growth
  - DT capacity
  - building
  - Provision of L/A (support for external learning and practice)

Happy workplace
- Work environment
- Restricted access to company information

  · An integrated office was opened in Jongno
  · Improved office environment

Communi-cation
- Lack of communication channels
- Insufficient handling of problems

  · Mobile communication platform "HaPP" opened
  - Company-wide and organizational communities
  *Improved communication with external sites
  - Happiness designed by employees, etc.

2020

* Upgrade through employee happiness survey and voice data analysis
(New factors: Relationships, job satisfaction, workload)

Stable work life
· Some pain points were resolved
· But satisfaction levels by factor varied

Become an expert
· Develop positive views
* My top priority for happiness: Competency and growth

Happy workplace
· There is still room for improvement in the working environment
· Being conscious of customers, restrictions, and working from home

Communi-cation
· Positive changes in the quantity and quality of communication
· Increased suggestions regarding work innovation

Relationship
· Support and cooperation from bosses and colleagues
· Respect and consideration

Job satisfaction
· Work suitability (aptitude/interest)
· Job satisfaction, matching with the career goal, ownership and autonomy

Workload
· Workload reduction, resource allocation
· Prioritizing tasks and delivery management

Social Value Promotion Directions

Economic Value

Business Environment

Global investors call for stronger corporate social responsibility such as ESG (environment, social, governance)

- Corporate governance, mid- to long-term business vision and strategy, climate change management, human resource development, investment, etc.

Under the convergence trend where technology is leading industries, there are industrial opportunities to create new values through hyper-connectivity and intelligence

- Platform-based business model innovation is necessary to get ahead in the market (transformation is rapid in industries such as financial and medical with a high level of digital maturity and data utilization)
- Need to expand the playground through disruptive outsourcing (all supply chains) moving away from the existing SI/OS (back office)

Key Business Areas

AI	Data	Blockchain	Cloud

Business Model Innovation

IT

Specify customers' pain points and social issues that stakeholders consider important and devise and implement solutions related to SK's businesses, such as the use of digital technology.

Establishment and execution of the SV promotion system

Establish a mid- to long-term SV promotion system and publically announce the company's commitment to resolving social issues and detailed action plans

- Select key areas based on opinion surveys of stakeholders including customers and priorities
- Develop solutions considering additional efforts such as existing. R&C and investment and set 2030 target

Increasing customer value

Explore and disseminate DBL BM(Business Model) based on digital technology to help resolve customers' pain points

- B2B customers: IT infrastructure innovation to reduce resources, the SHE solution to resolve environmental and safety issues, etc.
- B2C customers: Enhance access to professional services such as legal and medical services. and provide a health promotion solution, etc.

Promoting employee hapiness

Establish and implement a strategy to promote employees' happiness by diagnosing happiness levels in a Bottom-up approach and develop improvement plans

- Provide intensive support for fostering DT(Digital Transformation) experts based on employee happiness surveys (200 hours given for capacity-building, etc.)
- Improve work-life balance through work efficiency by applying RPA and strengthen welfare benefits such as expanded medical support

Shared growth with partners

Expand direct investment in partners and social enterprises, jointly develop and execute BMs, and help them build business competitiveness such as providing IT infrastructure

- Expand IT vocational training and job-related programs (SIAT, etc.) for people with disabilities
- Expand social contribution and strengthen the social safety net related to disasters. such as donating COVID-19 quarantine items

Investment

Considering changes in the internal and external management environment, we will establish an SV strategy to gain trust from stakeholders and continue to improve social performance in connection with our businesses by internalizing SV throughout the management system

Establishment and execution of SV promotion system (common)

Suggest BM innovation points and build trust from stakeholders by establishing the SV promotion system
- Identify social issues from the perspective of stakeholders and set related tasks and 2030 goals

Strengthened SV evaluation in investment decision-making

Strengthen the SV-driven investment process
- Push for a shift from risk management-based negative screening to SV data-based positive screening

Improved SV performance of invested companies

Increase business social performance by improving the SV performance of invested companies
- Gradually expand the application of DBL management to subsidiaries
(SK forest in 2018, SK biopharmaceuticals in 2020)

Impact investment in social ventures

Continue impact investing and drive up the value of outstanding social ventures
Invest in social ventures with innovative business models such as bio and tech and help them increase value by using internal and external R&C

SV Performance & Stakeholder Priority

Social Value Measurement

In 2019, SK holdings generated business social value worth KRW 81.7 billion, a 46% increase compared to the previous year, mainly by using DT technology (expanded cloud service) in the environment sector and reinforcing the big data- and AI-based social safety net infrastructure (Vitality app and AI-based legal service). In addition, we created social value worth a total of KRW 909.3 billion including KRW 819.4 billion in indirect economic contribution and KRW 8.2 billion in social contribution.

In 2020, we will address customers' environmental problems, strengthen the social safety net infrastructure, and promote shared growth with partners by establishing an SV system for SV-driven EV maximization. We will also increase social value in the business social performance of the entire portfolio.

* SK Group developed the SV measurement index in 2019 and is making various attempts to quantify social value creation performance.
  For the development of an internationally and standardized ESG value measurement method, we have formed Value Balancing Alliance (VBA) in cooperation with the Organization for Economic Cooperation (OECD), the World Bank, the world's four largest accounting firms, and global companies.

2019 Social Value Measurement Results

|	Indirect Economic Contribution Performance				Business Social Performance					Social Contribution Performance			
	Employe-ment	Dividend	Tax payment	Total	Environ-ment	Society	Labor	Mutual Growth	Total	CSR	Donation	Volunteer-ing	Total
Holdings (SK forest)	89.4 bln (8.6 bln)	217.3 bln	65.7 bln (900 mln)	372.4 bln	29.4 bln (29.4 bln)	14.6 bln (14.6 bln)	800 mln (-100 mln)	500 mln (400 mln)	45.3 bln	100 mln	5.7 bln (100 mln)	20 mln	5.8 bln
C&C (Happy ICT)	335.7 bln (2.7 bln)	50.7 bln	60.6 bln	447 bln	1.4 bln (900 mln)	23.6 bln	5.3 bln (300 mln)	6.1 bln	36.4 bln	700 mln (200 mln)	1.2 bln	500 mln	2.4 bln
Total	425.1bln	268 bln	126.3 bln		30.8 bln	38.2 bln	6.1 bln	6.6 bln		800 mln	6.9 bln	500 mln	
	819.4 bln (up 42.9 bln YoY)				**81.7** bln (up 25.8 bln YoY)					**8.2** bln (up 1.6 bln YoY)			

※ The social value outcomes measured in 2019 include the related social enterprise "Happy ICT."

Performance Measurement Principles

Measure social values from all quantifiable corporate activities

- All corporate activities including product development, production and sales, HR, and cooperation with business partners

Pursue social value creation (impact)

Input → Output → Outcome → **Impact**
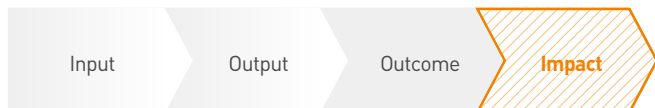
Measure social value in monetary values by applying objective standards

• Environment (production process): Estimated costs required to restore environmental pollution to the original state

• Society (products/services): Measure the higher performance after comparing to other existing alternatives

※ For standard monetary values required to calculate social values, official figures announced by international organizations, the government and industrial associations are applied

Business Model (BM) Innovation to Create Business Social Performance

Cloud

Support for customers' BM innovation and creation of environmental outcomes through CloudZ service

With the emerging trend of convergence among industries based on hyper-connectivity, ultra-intelligence, and super-convergence, which is made through the convergence of information and communication technology (ICT), the needs of society and customers for cloud services are continuously expanding

SK holdings provides shared infrastructure-based IT services to meet customers' needs through CloudZ service. By providing business model innovation tools, we have achieved environmental improvements by saving energy and resources.

Furthermore, the "CloudZ DR service" specialized for cloud disaster recovery automated the process of recognizing, disseminating, and handling various events in the cloud environment to provide fast and stable operation services in any customer environment, thereby improving customer data and operational stability.

Social value of cloud

Support for customer BM innovation and creation of environmental outcomes by expanding shared infrastructure

Abnormal Vibration Detection (DACAR)

Improvement of the safety management level and raw material reduction through real-time rotation equipment vibration analysis

Analysis of vibrations occurring in the rotating equipment of manufacturing plants has required an expensive system and infrastructure construction to install sensors. SK holdings' "Abnormal Vibration Detection Service" provides real-time analysis and diagnosis of vibration with the necessary instructions through sensors based on LTE and cloud, which enables predictive maintenance.

This allows customers to save initial investment costs, increase productivity through non-stop operation, and improve efficiency.

SK holdings is creating social outcomes in terms of extending the life of rotating equipment, saving energy, reducing raw materials, and improving safety management through a shared infrastructure-type abnormal vibration detection service.

Social value of abnormal vibration detection

Contribution to safety risk management

AI Analysis of Real Estate Rights

Ensuring safe transactions in the real estate market through rights analysis

SK holdings launched the "Real Estate AI Analysis (hereinafter referred to as AI analysis)" service jointly developed with law firm Hankyul on "Dabang" and "Peter PanZ."

The AI attorney analyzes real estate rights by automatically downloading a certified copy of the register, the building register, and the land register of the property listed on the real estate platform and provides legal advice on transaction security.

Through AI analysis, consumers can check information on the safety level, which is the result of the right analysis of the property to be traded, and items to be checked before the transaction.

Our AI analysis is creating social value in terms of preventing disputes over real estate transactions and protecting consumer rights through legal advice.

Social value of AI

Reinforcing the social safety net infrastructure by enhancing information accessibility and protecting customer rights

Forestry

Establishing a social enterprise training center utilizing the Hoengseong site

Through SK forest, SK holdings has established the "Social Enterprise Training Center," a combination of space and programs, as a new way to utilize idle assets. A small business organization is contributing to the training and reduction of facility fees required to conduct business. We are providing local products to the center in collaboration with local merchants as part of an effort to promote the employment of local workers. We also contribute to reducing environmental impacts by operating the facility in a way to reduce waste emissions and minimize environmental damages.
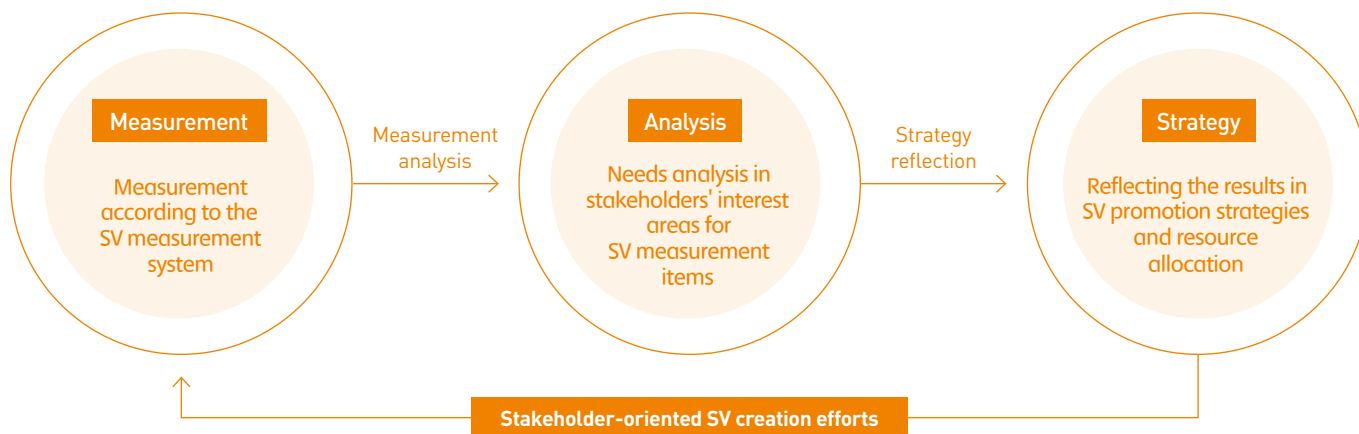
Social value of forestry

Improving access to education and training for social enterprises and contributing to regional employment and economic revitalization

Stakeholder Weight Analysis

SK holdings seeks to deliver happiness to our stakeholders by understanding the interests and needs of all stakeholders. We will promote the expansion of stakeholder-oriented SV performance by identifying each stakeholder's interests in the social value items created by SK holdings and reflecting them in our future social value promotion strategies and resource allocations for the areas to be pursued.

Measurement

Measurement according to the SV measurement system

→ Measurement analysis →

Analysis

Needs analysis in stakeholders' interest areas for SV measurement items

→ Strategy reflection →

Strategy

Reflecting the results in SV promotion strategies and resource allocation

Stakeholder-oriented SV creation efforts

Stakeholder Weight

SV Measurement System		Customers	Partners	Society	Employees	Shareholders
		28%	14%	15%	22%	21%
Indirect economic performance	Employment	17%	22%	18%	20%	17%
	Dividend	8%	10%	10%	11%	24%
	Tax payment	11%	12%	12%	12%	17%
Business social performance	Environment	12%	10%	9%	9%	10%
	Quality of life	12%	10%	9%	11%	5%
	Labor	10%	9%	7%	10%	7%
	Mutual growth	10%	9%	6%	9%	8%
	Governance	-	-	-	-	-
Social contribution performance	Social contribution	7%	6%	9%	6%	4%
	Donation	7%	6%	9%	6%	4%
	Volunteering	7%	6%	9%	6%	4%

Many stakeholders consider employment and tax payment important as indirect economic performance items.

- Employment and tax payment: All stakeholders consider them as the most important roles and responsibilities of a company
- Dividend: Shareholders' top interest area directly related to return on investment

Customers have expectations for social problem solving using digital technology

- Environment and quality of life: Expectation for resolving pain points using digital technology
- Mutual growth and labor: Need to support our key partners' growth and innovation in the way employees work

Increasing the value of stakeholders by creating balanced values between investment and businesses

- Establishing and implementing SV-based EV maximization strategies using digital technology
- Improving the SV-driven investment decision-making process and optimizing the group's portfolio
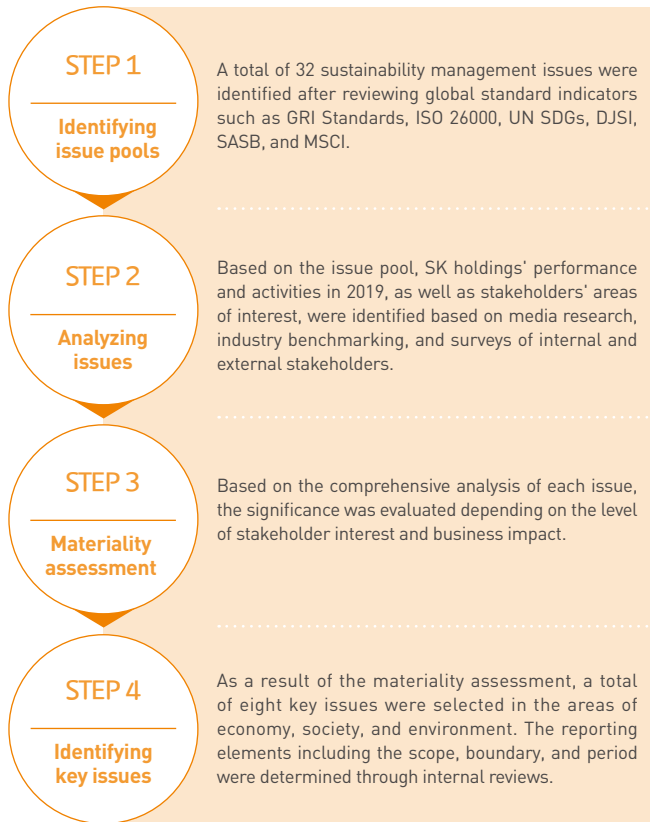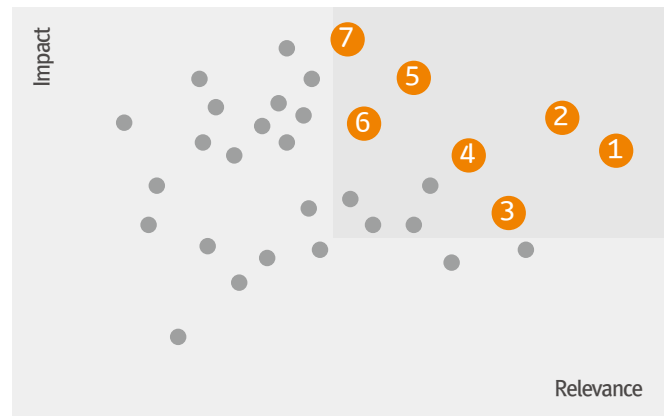
Materiality Assessment

Implementation of Materiality Assessment

SK holdings conducts the "materiality assessment process" to analyze the internal and external business environments and various expectations and interests of stakeholders and to effectively report the outcomes and future goals. Based on global standard indicators, we have established a sustainability management issue pool and evaluated the importance of issues through media research, industry-specific reports, issue benchmarking, and surveys. Issues that were finally selected through materiality assessment have been fully disclosed in the SK holdings' Sustainability Report.

Materiality Assessment Process

STEP 1

Identifying issue pools

A total of 32 sustainability management issues were identified after reviewing global standard indicators such as GRI Standards, ISO 26000, UN SDGs, DJSI, SASB, and MSCI.

STEP 2

Analyzing issues

Based on the issue pool, SK holdings' performance and activities in 2019, as well as stakeholders' areas of interest, were identified based on media research, industry benchmarking, and surveys of internal and external stakeholders.

STEP 3

Materiality assessment

Based on the comprehensive analysis of each issue, the significance was evaluated depending on the level of stakeholder interest and business impact.

STEP 4

Identifying key issues

As a result of the materiality assessment, a total of eight key issues were selected in the areas of economy, society, and environment. The reporting elements including the scope, boundary, and period were determined through internal reviews.

Materiality Assessment Results

Issues
1 ICT technology innovation and R&D investment
2 Building and strengthening the sustainability management strategy system
3 Investment and support for employee competency development
4 Efficient and reduced use of energy (electricity, oil, etc.)
5 Energy consumption management and use of renewable energy
6 Anti-corruption policy
7 Strengthening the portfolio management system focusing on businesses with future growth potential

Key Issues and Business Relevance

1. ICT technology innovation and R&D investment	2. Investment and support for employee competency development	3. Efficient and reduced use of energy (electricity, oil, etc.)
With the advent of various digital technologies and services such as mobility, AI, big data, Cloud, IoT, and fintech, the market's growth potential is growing. As a result, domestic IT service providers are actively seeking to enter the global market as well as advance into the digital transformation market based on IT capabilities. Continuous R&D investment in ICT technology innovation is needed to maintain the sustainability of SK holdings. SK holdings is increasing its sustainability by expanding R&D investment every year.	The digital industry is changing very rapidly, and the market is evolving based on new technologies. Investment and support for employees to develop capabilities for new technologies are an important issue in SK holding's sustainability. SK holdings provides a variety of education and seminars to enhance our employees' competency.	Efforts to reduce various environmental impacts arising from management activities become major concerns of stakeholders. In particular, greenhouse gas generated by the use of energy has become an important issue in connection with climate change. Most of the energy SK holdings uses comes from data centers, and energy management has become crucial in terms of response to climate change and costs. SK holdings is reducing environmental risks through efficient energy use and reduction activities.

Interviews with Experts

Through "Interviews with Experts," SK holdings collects opinions of experts on areas of social value creation to actively reflect them in social value creation activities. Interviews were conducted individually mainly on overall social value creation, organizational culture, and social contribution. Interview contents were partially restructured to facilitate understanding.

Korea University, International Business
Professor Rhee Jay Hyuk

NH Investment & Securities Research Center
Team manager Kim Dong-yang

"For a company to lead social value creation to its sustainable growth and competitiveness, it needs to pay attention to the voices of stakeholders and reflect them in forward-looking plans."

"Since SK holdings has a clear understanding and commitment to the proposition that creating social value leads to improving corporate value by minimizing valuation discounts through the company's growth, improved profitability, and tail risk management; I think the company is constantly developing its social value business model."

SK holdings is internalizing the social value measurement that has been underway since last year. I think it is a very important achievement that the company is transforming its business models that can increase social value as well as create economic outcomes, rather than simply measuring values. This is because the innovation of business models can not only change the way SK holdings conducts business but also the way employees work.
I also highly regard SK's efforts to pay close attention to the voices of stakeholders to enhance social value. This is an important activity that a company must not miss for sustainable growth. I suggest reflecting the measured data regarding social value creation and business model innovation in forward-looking plans through active communication with stakeholders, beyond presenting them as backward-looking data.
If SK holdings continues to change the way of working through social value measurement and reflect the data in its forward-looking plans, I expect that SK holdings will be able to realize its goal of "pursuing happiness through the expansion of stakeholder-oriented management."

The SV business model that SK holdings is currently developing is based on a fresh idea, and the company has continued to make sincere efforts. With the term "happiness," which is easy and friendly yet comprehensively explains the increased value of stakeholders, SK places emphasis on social value creation ahead of other groups. For the sustainability and effectiveness of social value creation activities as well as maintaining balance with economic value creation activities, related outcomes must be precisely measured through quantification.
If the weight, evaluation method and criteria of various social value components are determined and improved based on the group's management philosophy, accumulated measurement data will allow the group to identify room for improvement and share the best practices through the sum of values and performance by item.
There is a common perception that "social value creation equals cost." Amid fierce competition, when a company that should focus on survival and profit generation creates social value, it may seem like a conflict with corporate value and capital cost. However, an analysis of valuation in the stock market shows that ESG factors are highly reflected in corporate valuation. Moreover, the Millennials, which will become mainstream in the consumer and investment markets, are ready to pay for socially responsible businesses. I believe that a social value-driven business model is a virtuous cycle in which the external effects of corporate activities, in turn, lead to corporate value. I hope that SK holdings will set an example through a more sophisticated SV system.
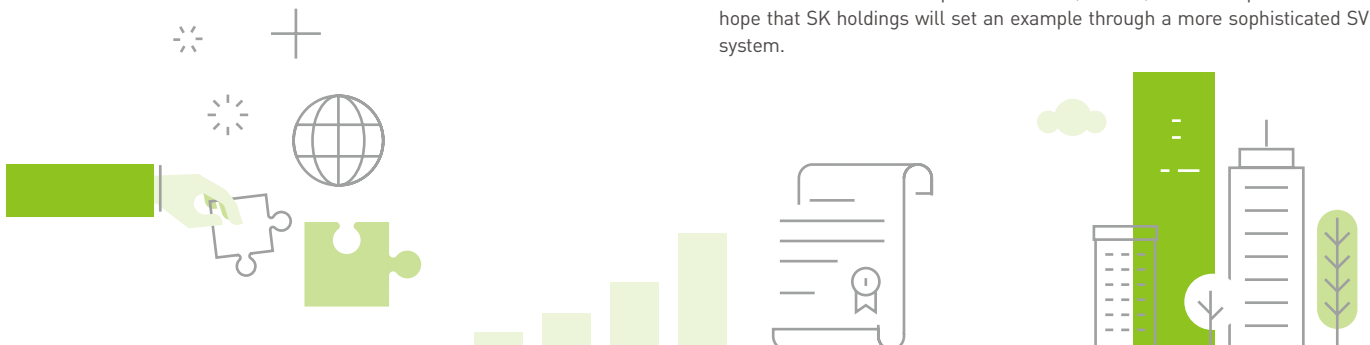
Replus Humanlab
CEO Park Jae-yeon

Volunculture
CEO Goh Da-yeon

"A happy organizational culture can be achieved in mutual relationships with respect for each other."

"I look forward to the leading role of SK holdings in improving the everyday lives of people with limited access to information."

The keywords of flexibility, autonomy, and responsibility, which were symbols of the ideal organizational culture, have been gradually changed due to the advancement of mobile devices and remote solution technologies, and the diverse needs of the Millennials. In particular, environmental events such as COVID-19 are accelerating such changes.

Going forward, the biggest topic and goal surrounding organizational culture is "

How can we communicate with 'autonomy' and 'responsibility' and create 'substantial outcomes' through 'flexible adaptation' in an increasingly 'uncontact' environment?"

We need to ponder employees' responsibilities from this perspective to create a happy organizational culture.

A happy organizational culture starts with the happiness of individuals. As we spend a lot of time in our lives within an organization, personal happiness involves organizational happiness. I think that true work-life balance is possible when members build mutual relationships with respect for each other. Team members and the team leader must work for both personal and organizational growth and maintain mutual respect. How firm the invisible bond called trust is plays an important role in an organization.

I hope that SK holdings considers this when developing programs designed to promote a happy organizational culture.

"The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect," said Tim Berners-Lee, the inventor of the web.

Information technology should not be a tool for discrimination but a technology that improves accessibility for everyone.

Technology improves the everyday lives of people with limited access to information. Smartphones have facilitated communication of visually impaired people in a variety of ways, such as taking pictures in addition to making calls, even an AI speaker can now read fairytale books to children.

SK holdings has also developed a text translation system using digital technology to improve information accessibility for the hearing impaired. There will be more and more areas that technology can improve the lives of people with limited information accessibility.

Social contribution can begin with empathy for social issues. The process in which employees internalize social value will also play an important role in finding a direction for social contribution.

SK holdings has also made great efforts to encourage its employees to participate in creating social value. In 2019, more than 1,700 employees participated in SK's Pro Bono service, and 96.4% of volunteers said they became more interested in social issues. Even in the first half of 2020 when it was difficult for employees to take part in social contribution activities due to COVID-19, SK quickly prepared and carried out non- face-to-face activities.

Investments to increase employee awareness of social value will pave the way for discovering new business opportunities. Using its core competency, SK holdings can also make meaningful efforts to develop an in-depth understanding of the disabled and seniors who have limited access to information.
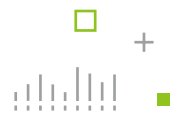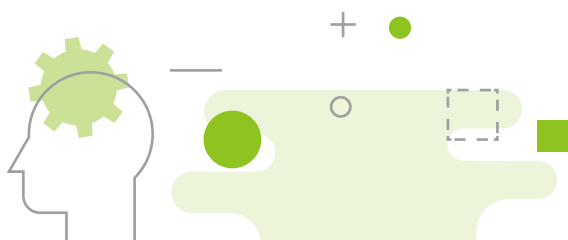
Employee Happiness & SV Practice

SK holdings has engaged in activities pursuing the happiness of employees as the first step in a virtuous cycle where the happiness of employees creates the VWBE culture and further leads to a SUPEX Company. We ensure that the voices of our employees are recorded as data that make up "Happiness Map" so that they can be reflected in future strategies. SK holdings is also actively carrying out social value creation activities for stakeholder happiness. By sharing thoughts of employees and creating ideas to establish a system that can be quickly executed, we come up with and implement diverse ways to bring happiness to our stakeholders.

Employee happiness & SV practice	Communication	H.App
	Practice	Haenggarae
	COVID-19	Non-face-to-face SV activities
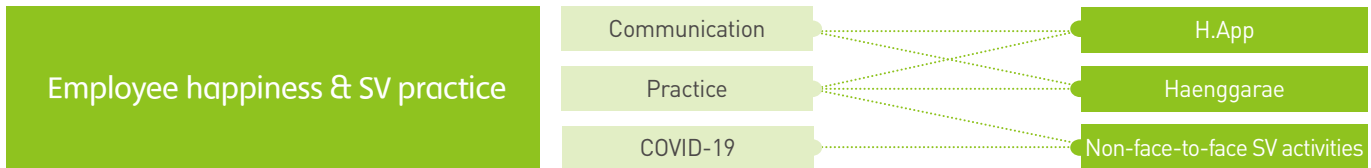
Employee Communication Mobile Platform 'H.App'

SK holdings considers communication and happiness as the core elements of management. A new communication mobile platform called "H.App" allows employees to propose and implement ideas so that they can share happiness and improve their sense of belonging and unity in the community. H.App provides an opportunity to create a mature organizational culture as all members can present ideas and come together to share their opinions and solve problems.

In addition, we actively encourage employee participation through surveys and various bulletin boards such as communities.

* H.App is an abbreviation of "happiness" and "happy application".

행복을 제안하고
공감해보세요
의견을 직접 제안할 수 있고
상대 의견에 공감할 수 있어요

커뮤니티에서
관심사를 공유하세요
소속된 팀, 나의 관심사 등
나와 관련된 내용을 공유 해 보세요

Happiness Design
- Anyone can suggest happiness ideas
- Recruiting happiness promotion committee members and developing improvement measures
- Sharing the final implementation plans

Happy Communities
- Company-wide communication bulletin board
- Organizational communication bulletin board
- Communication bulletin board by interest area

Surveys
- Company-wide/ organizational surveys

Daily communication is accumulated as happiness data

'Happiness Designer,' Employees' Happiness Communication Channel

SK holdings selected "Happy Designers" who serve as a communication channel and a think tank that designs, implements, and promotes the happiness of employees as well as the happiness of the company as a whole.
The name "Happiness Designer" was chosen by the employees themselves through a company-wide "H.App" vote.
Happiness Designers perform various activities to design the happiness of employees centering on divisions and headquarters.

2019 Happiness Designer	Help organizations design happiness	Happiness = Work	Encourage SV practice
	- Promote bottom-up activities led by employees - Participate in the company's happiness management - Promote communication through H.App	- Promote communication among management sub-groups - Competency-building workshops - Reflect designer activities in performance evaluation	- Develop SV practice tasks in daily work through organizational workshops - Perform a coordinating role to promote SV practice

SV Practice in Daily Life

SK holdings has launched an everyday social problem-solving platform for all employees called "Haenggarae" with the belief that it is crucial to increase the understanding of SV among employees, who are the main executors, and seek their empathy and participation through direct engagement to pursue DBL management.

In order to increase the interest, response, and satisfaction of employees, the platform allows them to directly engage and communicate in everything from finding SV practice ideas to developing detailed action plans. Employees can practice items* closely related to daily life at any time, and not only can they record and check their practices but also receive blockchain-based "SV Rewards" every time they practice SV through the mobile app. SV Rewards can create more social value as they can be used to purchase drinks in company cafes or products from social enterprises (works by artists with developmental disabilities, etc.) and donate to charities.

* Climbing stairs, using mugs, not leaving food at the company cafeteria, donating blood, recycling ice packs, printing on both sides, suggesting SV ideas, promoting 3R (recycle, reuse, reduce) activities, volunteering pro bono services


'Non-face-to-face SV Activities' by Members and Their Family

In the wake of the COVID-19 outbreak, SK holdings carried out SV activities that employees can participate in separately and/or together according to their schedule and interests regardless of location.

We offered advice* to social enterprises online and received volunteering kits** offline, with which employees and their family made and donated goods. Such meaningful and fun SV activities encouraged employee participation, and participants shared their experience by posting photos on the Haenggarae site. In collaboration with NGOs, we will create programs that can increase operational efficiency and synergy and allow more employees to support more social enterprises and people in need.

* App/web usability test, how to write attractive proposals
** Making solar lanterns, Raja elephant cushions, children's books in Braille
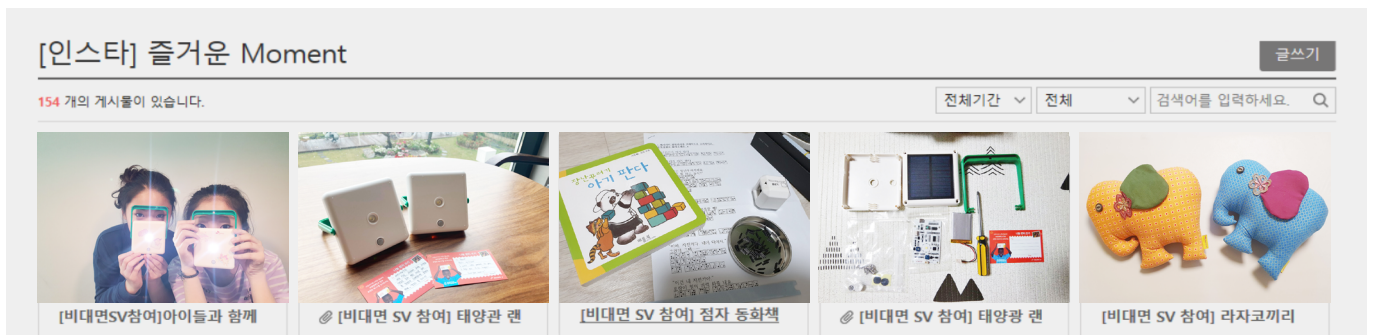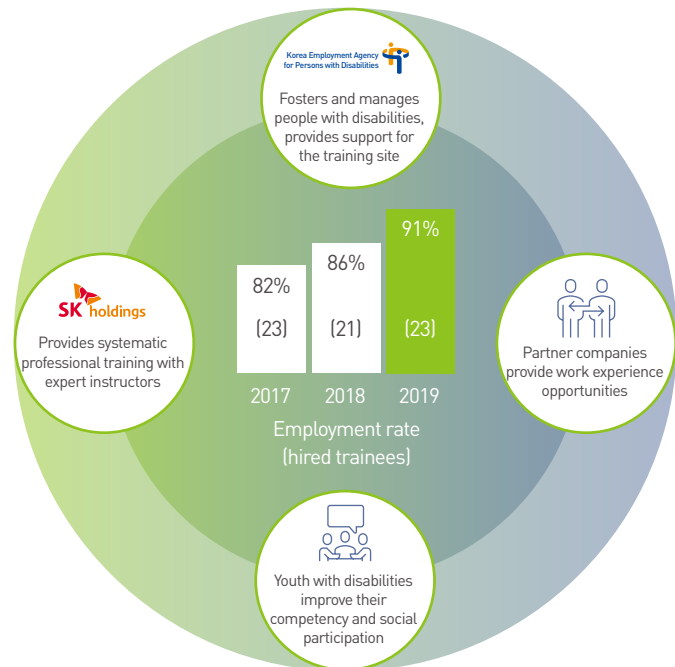
ICT-based Sustainable Social Contribution

SK holdings promotes ICT-based sustainable social contribution activities to raise awareness of social contribution among employees and spread happiness to local communities and vulnerable groups.

'SIAT,' a Program for Strengthening Job Competitiveness for Youth with Disabilities

The SIAT (Smart IT Advanced Training) program for supporting the independence and self-sufficiency of youth with disabilities is SK's major social contribution activity that has been continued since 2017 to enable the disabled to have better jobs based on our ICT capabilities.
In collaboration with the Korea Employment Agency for the Disabled, we are promoting and strengthening job competitiveness and social value of young people with disabilities through a program for fostering IT professionals focused on business practices to provide practical benefits to both the disabled and companies.
In 2019, the number of participating increased to seven from the previous year (three companies in 2018) as a result of expanding IT job types by considering the job positions wanted by companies according to the type of disability and competency.

Korea Employment Agency for Persons with Disabilities
Fosters and manages people with disabilities, provides support for the training site

SK holdings
Provides systematic professional training with expert instructors

Partner companies provide work experience opportunities

Youth with disabilities improve their competency and social participation

Employment rate (hired trainees)

2017	2018	2019
82% (23)	86% (21)	91% (23)

DDA,' a Support Program for the Employment of Vulnerable Groups'

The Digital Dream Academy (DDA) program is SK holdings' project for vulnerable groups in collaboration with the Gyeonggi Business & Science Accelerator. In 2019, the project focused on improving youth unemployment among social problems.
Our program provides training on the latest IT technology for young IT majors who graduated or are to be graduated from universities in Gyeonggi-do and links those who completed the training to SK holdings' partner companies for internships. Based on ICT expertise, SK holdings has carried out social value activities as a bridge by helping companies that have difficulty fostering advanced IT developers secure excellent human resources while providing quality job opportunities to marginalized youth.

IT major graduates (soon-to-be graduates)

'Education project' to foster talent & 'communication platform' linking employment and employees

Re-employment opportunities

'Free Cloud Service,' Social Contribution Activity Using Cloud IT Resources

SK holdings has signed the 'Cloud Service Support Project Agreement for Shared Growth of Large, Small, and Medium Enterprises in Gyeonggi' with the Gyeonggi Business & Science Accelerator to provide free cloud service up to KRW 36 million per year for SMEs for up to 3 years from 2019 to 2024. Companies that want to participate in the project can conveniently use the service by requesting consulting on cloud architecture and service configuration as well as receive free cloud expert training. Currently, 75 companies in Gyeonggi-do in various industries such as games, manufacturing, IT, and education, are receiving cloud service.

| Service (IaaS) provided through the cloud portal (cloudz.co.kr) | Managed Service Provider (MSP) is provided to CloudZ partners | Cloud service expert training is provided to 30 people from participating companies twice a year |

'Speechcatch,' Internet Lecture Subtitle Service Using ICT Technology

SK holdings has developed an Internet subtitle service system for the hearing impaired based on "AI Speechcatch" technology.
In 2019, we have built an AI learning model in collaboration with the Korea Employment Agency for the Disabled (KEAD). In 2020, we signed an agreement with KEAD to provide a real-time subtitle service that reflects the needs of customers on learning materials provided through Internet lectures in an effort to help promote the employment of the hearing impaired by increasing information accessibility. The Speechcatch service has reduced the blind spot of education and information provision caused by the absence of subtitles and helped resolve the disparities in education and information accessibility by expanding the scope of accessible online education. In addition, the service was extended to lecture videos that are used individually as it can be used for all contents featuring human voices.
※ Inquiries about using Internet lecture subtitle service: Seoul Customized Training Center

'SK Pro Bono,' Social Contribution Activity by Employees

SK holdings is contributing to social value creation by solving social problems and supporting the growth of social enterprises through pro bono activities utilizing the knowledge, experience, and skills of our employees. Employees with expertise in areas for which social enterprises need help, such as IT to legal, business strategy, marketing, and translation, are providing tailored consulting.

Contribution to solving social problems through employee participation →
- Visits to social enterprises
- Business consulting for social enterprises Talent donation
- Social Value Open Forum*
- AI education service for elementary students

* 'Sv Open Forum' Designed to Create Social Value
The SV Open Forum aims to increase employees' understanding and awareness of social and economic ecosystems and further achieve DBL BM innovation. The event, participated by officials from major social ventures and social enterprises in Korea, has identified social problems that companies are trying to solve and shared social and economic values through practical cases. We also seek to address problems by listening to difficulties involving business operations. In the 2019 SV Open Forum, 12 social ventures and social enterprises were invited, and 508 employees came together to come up with solutions to social issues.

Response to COVID-19

The World Health Organization (WHO) declared the coronavirus disease (COVID-19) as a pandemic on March 11 due to the worldwide spread after designating it as a public health emergency of international concern in January 2020.
SK holdings prioritizes the safety and happiness of its members and local residents in the pandemic and has worked to overcome the crisis by continuously communicating with employees about the direction the company should prepare for.

Building a Response System for Employee Happiness

SK holdings has responded quickly by establishing comprehensive guidelines to protect employees and their families from COVID-19. By setting up an emergency response organization at the beginning of the outbreak, SK has implemented the communication system and the emergency response process across the company and minimized risks by continuously sharing the status of confirmed cases and countermeasures. In addition, the company has sought to secure the safety of employees through social distancing by introducing telecommuting and providing parking tickets to prevent infection due to the use of public transportation.
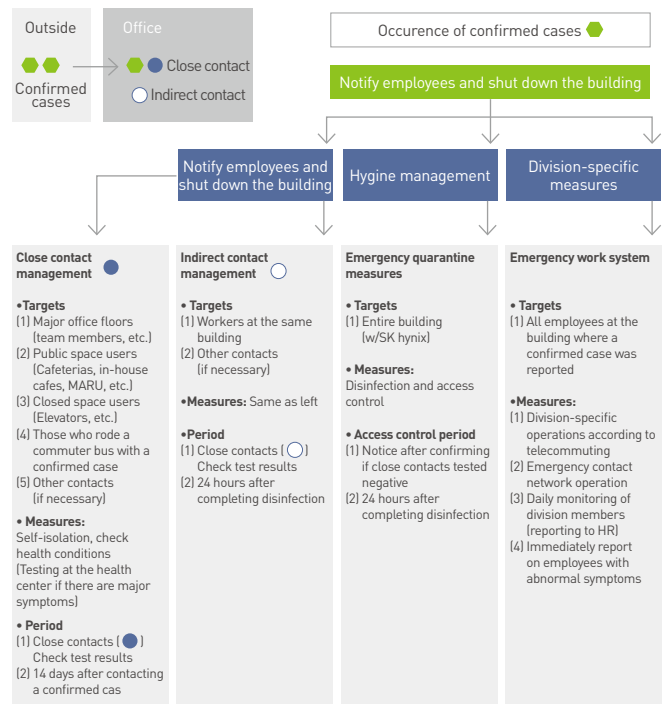
Key Guidelines for Employees

Worksite operation	• Measure the temperature of individuals going in and out of the workplace • Temporarily close and change (reduction/separation) office building facilities • Limit outside visitors
Employee attendance management	• Temporarily suspend the shared seating system • Establish and implement telecommuting standards suitable for business conditions • Adjust and expand flexible working hours • Allow employees in vulnerable conditions to voluntarily work from home or use vacations • Ban overseas business trips and travel and limit domestic business trips
Employee code of conduct	• Minimize face-to-face contact between employees (online reporting and meetings) • Practice strict personal hygiene when going out (wearing a mask, hand washing, etc.) • Do not contact people with respiratory symptoms

Countermeasures

Emergency response system establishment	• Set up an emergency response TF
	  - Establish a rapid communication system
	• Establish an emergency response process
	  - Countermeasures for confirmed cases/contacts

Provision of quarantine supplies	• Provide masks and thermometers
	  - Workplaces where telecommuting is difficult (security control center, external sites, etc.)
	  - Overseas sites and overseas business travelers
	  - Children at in-house daycare centers
	• Supply hand sanitizers to employees and offices

Office building management	• Disinfection - 65 regular and urgent disinfections • Check the temperature of those who enter and exit the building using a non-contact thermometer • Everyone must wear a mask • Provide parking tickets to minimize the use of public transportation

Close contact prevention	• Temporarily close welfare and convenience facilities and changing operations to prevent close contact
	• Enhanced building safety management
	  - Arrange cafeteria tables in a single row
	  - Install acrylic partitions in training sites
	  - Switch from shared seating to designated seating

Emergency response TF		
	Personnel management	Monitor the status of employees on business trips and suspected cases
	Health management	Cooperate with the KCDC and health centers Check and manage the health of suspected cases
	Office management	Building disinfection and access management

| Emergency Process in Case of a Confirmed Case

Outside — Office
● ● Confirmed cases → ● ● Close contact
○ Indirect contact

Occurence of confirmed cases ●

Notify employees and shut down the building

Notify employees and shut down the building | **Hygine management** | **Division-specific measures**

Close contact management ●

• **Targets**
(1) Major office floors (team members, etc.)
(2) Public space users (Cafeterias, in-house cafes, MARU, etc.)
(3) Closed space users (Elevators, etc.)
(4) Those who rode a commuter bus with a confirmed case
(5) Other contacts (if necessary)

• **Measures:**
Self-isolation, check health conditions (Testing at the health center if there are major symptoms)

• **Period**
(1) Close contacts (●) Check test results
(2) 14 days after contacting a confirmed cas

Indirect contact management ○

• **Targets**
(1) Workers at the same building
(2) Other contacts (if necessary)

•**Measures:** Same as left

•**Period**
(1) Close contacts (○) Check test results
(2) 24 hours after completing disinfection

Emergency quarantine measures

• **Targets**
(1) Entire building (w/SK hynix)

• **Measures:**
Disinfection and access control

• **Access control period**
(1) Notice after confirming if close contacts tested negative
(2) 24 hours after completing disinfection

Emergency work system

• **Targets**
(1) All employees at the building where a confirmed case was reported

•**Measures:**
(1) Division-specific operations according to telecommuting
(2) Emergency contact network operation
(3) Daily monitoring of division members (reporting to HR)
(4) Immediately report on employees with abnormal symptoms

- Major symptoms: body temperature which is higher than 37.5 °C and respiratory symptoms (cough, difficulty breathing, etc.).

Donation for Community Happiness

SK holdings donated virus prevention products to vulnerable groups (people with disabilities, orphanages, etc.) in Seongnam as part of community support activities in the wake of the COVID-19 outbreak in 2020. Through Seongnam City on Social Welfare, we donated about KRW 30 million worth of protective items including 2,500 cotton masks, 27,000 mask filters (KF94 level dustproof), and hand sanitizers.

We held an event called the "World of Donation" based on suggestions on the employee bulletin board that we donate masks as well as devices for vulnerable people to take online classes and work from home due to COVID-19. Through this event, we delivered laptops, tablet PCs, and unused masks donated by SK employees to the vulnerable. SK holdings is taking the lead in spreading happiness in local communities through company-level donations and voluntary donations from employees

Support for Online Education and Job Interviews of Vulnerable People to Increase Their Social Participation

SK holdings witnessed that people with disabilities were experiencing difficulties finding jobs as the schedule of training for the disabled and the SIAT nurturing program were postponed due to COVID-19. In response, we provided the disabled with the video conferencing system for online education, job aptitude tests, and job interviews as part of an effort to promote the education and employment of handicapped people. We are also quick to address the needs of the vulnerable in the COVID-19 situation by preparing a contactless IT education project for Gyeonggi residents in need.

Outlook of the IT Industry and SK's Role in the Post-COVID Era

SK holdings held "Post-COVID Tech. Talk" with internal and external experts to discuss the current status of the post-COVID era and the direction to be taken. With the influence of COVID-19, the "un-contact" trend has been emphasized worldwide, thereby drawing much attention to the IT industry and technology. Business platforms that allow people to gather online, operate a working system like a game, or offer a lifelike meeting experience using augmented reality have emerged. In the midst of this, security issues are considered important, and more emphasis is placed on overall IT technologies, including quantum encryption technologies such as edge computing and QRNG.

SK holdings seeks to evolve and advance in line with the un-contact trend by leveraging our technologies.With the growth of the online business, contactless technology, automation, and cost-saving digital technology are required, and digital transformation (DT) is accelerating.

As a leading digitalization enabler, SK holdings seeks to further expand new business areas by sophisticating the existing business areas.

Company Status by Area	
Cloud	• Soaring demand for contactless activities such as telecommuting and online testing • Beyond front-end IT, we are advancing into front-end cloud involving human behavior
Platform Biz.	• A platform combining AI, cloud, and data is emerging as an important edge for digital-centric BM innovation (currently being promoted by BM Innovation Promotion Team)
New Biz.	• Planning to launch a media platform business • Preparing for AI for video reading and new drug development Biz. • Enhancing commerce competitiveness and supplying the 'Panopto' video

BOD's DBL Management & Shareholder Communication

Board of Directors' Efforts to Create Social Value and Innovate Business Model

SK holdings is striving to innovate our business models to maximize the interest of stakeholders based on the measurement of social values as the concept of stakeholders expands. In order to strengthen BOD's function to deliberate social value (SV), we revised the Articles of Incorporation of SKMS and BOD rules and established a process to discuss social value within the board by actively reflecting the opinions of independent directors with expertise in social value.
In 2020, SK holdings reported its social value promotion plan to the Governance Committee, and the BOD has continued to seek ways to innovate business models through social value creation.

Communication with Shareholders

Shareholder Communication Director System

In March 2018, SK holdings established the Shareholder Communication Director System to strengthen the independence and expertise of the BOD and increase shareholder value. In an effort to strengthen communication with shareholders, we appointed Independent Director Lee Chan-keun as Shareholder Communication Director and actively communicated with shareholders as well as Korean and foreign investors. We also shared governance improvements and achievements with shareholders and listened to the opinions of foreign investors on governance. Furthermore, our management philosophy and the BOD's efforts reflect our pursuit of innovating business models through social value creation.

Increased Communication with Shareholders

SK holdings, which aims to be a global investment holding company, has continued to empower the board of directors to play a practical role as the top decision-making body stipulated by the law and strengthen the role and authority of the BOD in line with the global investment environment.
Among the major shareholders of SK holdings, we have invited key opinion leaders in the ESG-related market to shareholder communication focusing on year-on-year improvements in governance. In 2018 and 2019, we communicated our management philosophy and the BOD's efforts to innovate business models by pursuing both economic and social values as well as improving corporate governance to increase shareholder value with major overseas institutional investors and voting advisory groups. In addition, the shareholder communication director gathers and reports shareholders' opinions to the BOD, serving as a direct shareholder account in the BOD. Recently, shareholders' opinions have served as good references in our effort to improve the company's management system in sustainability and ESG sectors as well as sophisticate the sustainability report framework (reflecting SASB).

Shareholder Communication Based on Our Management Philosophy

SK holdings is an investment holding company that creates both economic and social values not only when investing in new businesses but also in the portfolio value-up process, enhancing the trust of external stakeholders. Meanwhile, SK holdings and our subsidiaries are working to create an account with stakeholders by providing solutions for social problems such as environmental pollution, energy deprivation, aging, and famine, thereby creating new business models. Today, stakeholder capitalism is emphasized, and ESG investment that considers all the interests of society as a whole is also attracting attention. Our management philosophy, which pursues both tangible and intangible interests of various stakeholders, is in line with this investment trend. SK holdings expects that shareholders, investors, and society will continue to grow and thrive together through a mutual communication channel between shareholders/investors (stakeholders) → the shareholder communication director → the board of directors → the company.

| Enhanced Shareholder-friendly Management

2016
- Established the Governance Committee

2017
- Introduced an electronic voting system

2018
- Established the corporate governance charter
- Held a series of regular shareholders' meetings 2018
- Established the shareholder communication director system
- Received ESG Grand Prize from the Korea Corporate Governance Service

2019
- Introduced BOD operation evaluation 2019
- Posted CEO's letter to shareholders on the website
- Provided interim dividends for 2 consecutive year

Communication with Shareholders

Independence of BOD	• An independent director was inaugurated as the BOD chairman (Mar. 2019) • Another independent director was appointed (Mar. 2019) • Risk management and supervision by the Governance Committee • Developing improvement plans through workshops led by independent directors
Expertise of BOD	• Alignment of the company's vision and the skill set of board members
Operation of BOD	• Continuous improvement of the board's operation through the evaluation of the BOD • Established a shareholder communication plan to enhance shareholder rights (Apr. 2019) • Introduced the process of discussing social value within the BOD (Apr.2019) • Selected as the best company by the Korea Corporate Governance Service (Jul. 2018) and awarded ESG Grand Prize (Nov. 2018) • (2018.2) Established the governance charter and introduced senior independent directors (Feb. 2018)

SK DBL

"Double Bottom Line (DBL)" means pursuing both economic and social value creation in overall management activities.
Based on DBL, SK is innovating its business models to create social value in all areas of SK businesses.
SK seeks to gain full support from members of society by promoting social value creation as a new management strategy,
thereby maximizing the happiness of stakeholders.

Economic Value

"SK desires to contribute to economic development and grow together with society through social value creation activities."

Social Value

The essence of a company lies in its economic value creation activities. SK Group is strengthening its economic sustainability based on future growth businesses.

In an effort to create social value, we are innovating our existing business models and sharing the infrastructure of SK Group with society

Creating profit by strengthening fundamental competitiveness

Build new business portfolio for future growth

Business model innovation based on DBL

Shift infrastructure to share corporate assets

Create ecosystem for social enterprises

Net-income

Indirect economic contribution Performance

Business social performance

Social contribution performance

Fundamental Management

Governance

Advancement of Corporate Governance and Management System

Governance Structure Principles and Policies

SK Corporation enacted and announced its 'Corporate Governance Charter' in 2018. Through the charter, SK holdings expanded the disclosure of information on governance, such as shareholder rights, and authority and responsibilities of the BOD and the audit committee, and set forth the strengthened transparency of management. Korean and English versions of the Charter are available at the SK holdings' website.

Advancement of the Governance Structure

In March 2019, SK holdings amended the BOD regulations to allow independent directors to be reappointed as the chair of the BOD and appointed an independent director to chair the BOD. In this way we enhanced the independence and transparency of the BOD and established a governance structure that is suitable for the global investment environment. SK holdings began evaluating the BOD in 2018 using assessment questions developed by an external agency and conducted an overall evaluation of BOD activities for the preceding 1-year period in March 2020. All external directors participated in the BOD evaluation, which covered 5 areas (39 sections in total), including the structure and operation of the BOD and its subcommittees, the results of which are disclosed to the public in the annual report. The results of this year's evaluations were better than previous year's results overall BOD assessment area. Based on the BOD evaluations, the company plans to derive improved ways of operating the BOD and new measures aimed at enhancing the governance structure.

Enhancement of Shareholder-friendly Management System

In 2019, the company declared interim dividends for 2 years in a row. At the shareholders' meeting held in March 2020, the company introduced a new dividend policy which promised a stable level of dividends to shareholders and sent out the CEO's letter to shareholders. By doing so, the company reinforce shareholder value creating social values and returning the fruits of business performance to share holders. which creates social values and returns the fruits of business management to shareholders. Also, the company continued to uphold its commitment to shareholder return through stock repurchases in 2015 and 2019.

Increased Independence and Transparency of BOD

Appointment of Directors

The BOD of SK holdings maintains its independence from major shareholders and management, with independent director occupying more than 50% of the board seats. One independent director was appointed in March 2019, and one executive director was appointed in March 2020, making a BOD composed of four executive directors and five independent director in total.
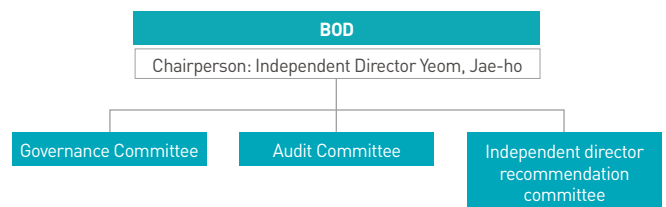The BOD has the authority to make decisions on key management issues related to governance, investment, strategic planing, accounting and financial area. and performs a monitoring and advisory role regarding activities that could have a critical impact on the management of the company.

Operating Status of the BOD

As SK holdings practices transparent management, the company is committed to ensuring the independence of the BOD, which runs three committees composed of independent director including the Audit Committee, which audits the company's accounting and its overall business affairs, and the Governance Committee, which reviews the company's major decision- making issues.
SK holdings holds regular BOD meetings once a month and ad hoc meetings as and when required. In 2019, a total of 12 BOD meetings were held to deliberate and vote on 59 items of agenda.
Except in cases where the relevant statues or the BOD has set aside separate rules on voting, the agenda of the BOD shall be approved by a majority vote with a majority attendance of incumbent BOD members. The BOD attendance record for individual directors and their voting records on publicly announced agenda items are disclosed at the company's website and in its annual report.

[As of June 2020]

| BOD-based System Management

Committee	Major Roles	Members
Governance Committee	Realize BOD-centered management principles by offering better protection of shareholders' rights and creating a more transparent governance structure. • Discuss the company's management philosophy and long-term strategies. • Examine related party transactions requiring the board's approval under the Monopoly Regulation and Fair Trade Act and the Commercial Act. • Plans for pursuing social value, social contributions and ethics management. • Risk Management (Information security, financial, climate, business risk, etc.) • In accordance with the BOD regulations, any agenda item selected for BOD deliberation which concerns investment and finance management and could affect shareholder value. • Other matters submitted by the BOD chairman concerning the management of the company because they could have a critical impact on shareholder value.	**5 Independent Director** · Independent Director Jang, Yong-suk (Head of Committee) · Independent Director Ha, Kum-loul · Independent Director Yeom, Jae-ho · Independent Director Lee, Chan-keun · Independent Director Kim, Byung-ho
Audit Committee	Auditing of the company's accounting and business practices • Issues concerning the general meeting of shareholders. • Issues concerning the directors and the BOD. • Issues concerning audits. • Other matters prescribed by the relevant statutes, articles of incorporation, or the BOD.	**3 Independent Director** · Independent Director Kim, Byung-ho (Head of Committee) · Independent Director Lee, Chan-keun · Independent Director Jang, Yong-suk
Independent Director Nomination Committee	Recommend candidates who could be appointed at the shareholders' meeting to serve in the BOD • Recommend candidates for the position of outside (independent) director. • Evaluate the activities of directors and examine the plans for utilizing their talents. • Other necessary matters when recommending candidates for independent director and matters delegated by the BOD.	**2 Independent Director** · Independent Director Ha, Kum-loul (Head of Committee) · Independent Director Jang, Yong-suk **1 executive director** · CEO Jang, Dong-hyun

Appointment of Directors

Directors are appointed by vote at the general meeting of shareholders in accordance with the Commercial Law and the Articles of Incorporation. Candidates for Executive directors are nominated by the Board of Directors and presented on the agenda of the general meeting of shareholders. For independent directors, they are nominated by the independent director recommendation committee which recommends qualifying candidates according to the laws applicable to the shareholder meeting by considering the expertise and independence of each candidate according to strict criteria. Confirmed candidates are appointed as independent directors at the shareholder meeting based on the final decision of the shareholder meeting of the BOD. When appointing directors, we consider whether the individual qualifications and capabilities of the candidates are aligned with the company's management philosophy and growth strategy. We have defined a complete SKILL Set for the BOD members and have been strengthening their expertise to enable the BOD to contribute to the company's long-term growth and development goals.

Performance Evaluation and Remuneration of Directors

Directors are remunerated within the threshold of the director remuneration approved by the annual shareholders meeting according to the laws. For the management board, a stock option is given in correlation to the remuneration to improve corporate values. In order to guarantee the independence of the independent directors, the company does not provide any additional incentives other than the basic wages. Each director's responsibilities and expertise and the company's business activities are reflected within the permitted range of a director's remuneration. The amount of remuneration accorded to a director is finalized at the shareholder's meeting after the BOD has reviewed the maximum limit on such remuneration, in accordance with the legal regulations, and the amount of remuneration, for which the method of calculation is disclosed in the annual business report.

| Characteristics of the BOD

Independence	· Policies have been adopted to ensure the independence of the BOD. · The same person must not be appointed to both the CEO and BOD Chairman positions at the same time. · The percentage of external directors in the BOD must be maintained at 50% or above (currently 56%). · Appoint independent directors who are not in special relationships with the management board · Directors may not serve as unlimited liability partners or directors of other companies in the same industry without the BOD's approval. · The voting rights of directors who are in a special relationship on matters requiring voting by the BOD are restricted. · Monitoring of the BOD's independence has been strengthened by creating a support organization for the audit committee.
Expertise	· Policies have been adopted to strengthen the expertise of the BOD. · The BOD is composed of directors with expertise or experience working in corporate management, macro economy, M&A, risk management, communication, international relations (Geopolitics), globality, sustainability management, social values, and information security management. · Recommendation and appointment of BOD director candidates so that the qualifications and capabilities of directors and the skill set of the entire BOD can contribute to the company's long-term growth and development.
Efficiency	· Temporary BOD meetings may be held as and when required. To guarantee the participation of directors, the directors may participate in voting via telecommunication media that simultaneously transmit the voices of all directors without requiring their attendance in person. · As part of the social distancing efforts adopted in the fight against COVID19, 6 BOD meetings and 5 subcommittee meetings were held via video conferencing by the end of June 2020.
Diversity	· Our management philosophy and strategic direction is to grow together / with our stakeholders, customers, and society. To abide by this philosophy, the company pursues diversity in the composition of its BOD, including race, gender, age, nationality, qualifications, religion, physical status, and political inclinations.

| Skill Sets and Careers of Directors

Division	Name/DOB	Rank/Position	Area of Expertise	Key Experiences	Appointed	Duration of employment	End of Tenure
Executive Directors	Chey, Tae-won (Male, DEC 1960)	Chairman & CEO	Management·economy, geopolitics, social value, sustainability management	- PhD of Economics in University of Chicago, US - President of SK Innovation - President of SK Hynics	2019.03	4 years	2022.03
	Jang, Dong Hyun (Male, AUG 1963)	President & CEO	Management, M&A, portfolio management, risk management, industry expertise	- Master of Industrial Engineering in SNU - CEO of SK Telecom	2020.03	3 years	2023.03
	Park, Sung Ha (Male, OCT.1965)	President & CEO	Economy, M&A, risk management, ICT expertise, industry expertise	- MIT MBA, US - SKSUPEX Council Strategy Support Team Leader	2020.03	3 months	2023.03
	Cho, Dae Sik (Male, NOV. 1960)	Executive Director	Management, finance, M&A, portfolio management, risk management	- Master of Management, Clark Atlanta University, US - President & CEO of SK holdings	2018.03	5 years	2021.03
Independent Director	Yeom, Jae Ho (Male, JAN. 1955)	Independent Director	Information security management, social value, Geopolitics, Globality, sustainability management	- PhD in Political Studies from Stanford University - Professor of Administration, Korea University - 19th president of Korea University	2019.03	1 year	2022.03
	Ha, Kum Loul (Male, DEC. 1949)	Independent Director	Management, industry expertise, administration, communication, risk management	- A of German Language and Literature in Korea University - Director of SBS Media Holdings - Chief Secretary of President	2018.03	5 years	2021.03
	Lee, Chan Keun (Male, AUG. 1958)	Independent Director	Management, M&A, Globality, Industry expertise, risk management	- Business School of Korea University - Deputy Chairman of Kookmin Bank, CEO, Hana IB Securities	2018.03	2 years	2021.03
	Kim, Byoung Ho (Male, SEP. 1961)	Independent Director	Accounting, finance, M&A Globality, risk management	- A, UC Berkeley in US - Vice-president of Hana Financial Group - President of Hana Bank	2019.03	1 year	2022.03
	Jang, Yong Suk (Male, JUL. 1968)	Independent Director	Information security management, organization, social value, Globality, sustainability management	- PhD in Social Studies from Stanford University, US - (Present) Professor of Administration in Yonsei University Associate Professor Department of Sociology, Korea University	2020.03	3 years	2023.03

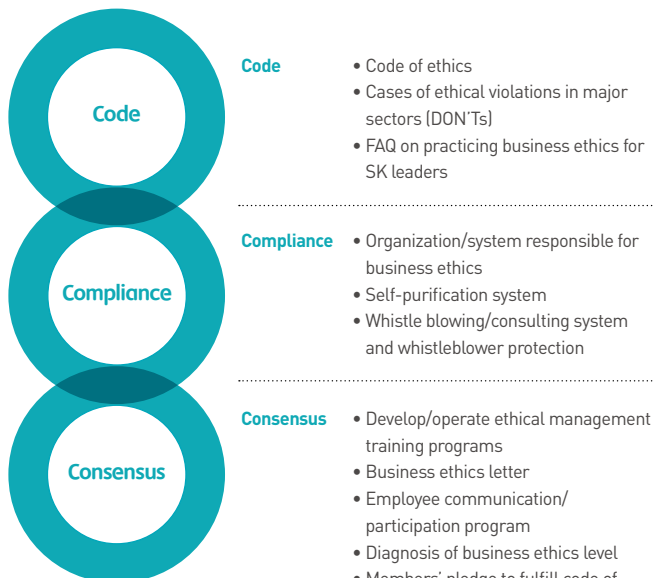* Term of employment includes reappointment

Business Ethics

SK holdings is committed to internalizing ethical management through an SKMS-based ethical management system and a dedicated organization tasked with firmly implanting a culture of ethical management practices and strengthening the self-regulatory system.

Establishing the Business Ethics System

Business Ethics System

SK holdings recognizes the establishment of a business ethics system as a critical prerequisite for ensuring sustainable management of the company. We have reinforced the Code of Conduct with the SKMS (SK Management System) as the foundation of our business ethics activities in our pursuit of happiness for all our stakeholders, and we are internalizing business ethics activities with the emphasis on the 3Cs (Code, Compliance, Consensus).

| 3C's Business Ethics System

Code
- Code of ethics
- Cases of ethical violations in major sectors (DON'Ts)
- FAQ on practicing business ethics for SK leaders

Compliance
- Organization/system responsible for business ethics
- Self-purification system
- Whistle blowing/consulting system and whistleblower protection

Consensus
- Develop/operate ethical management training programs
- Business ethics letter
- Employee communication/ participation program
- Diagnosis of business ethics level
- Members' pledge to fulfill code of ethics

Code

Code of Ethics

SK holdings has enacted the Code of Ethics to create values for diverse groups of Stakeholders, such as clients, employees, shareholders, and business partners.
The SKMS (SK Management System) serves as the foundation of corporate management in fulfilling key roles for social and economic development and corporate management, ultimately contributing to the wellbeing of humanity. SK holdings has institutionalized the Code of Conduct for business ethics with which all employees must comply.
The management standards of the Code of Ethics are classified into ethics for employees, customers, society, and company & shareholders, as well as the protection of whistleblowers.
Where a matter is not stipulated in or covered by the Code of Ethics, one shall behave according to the decision-making principles of 'legal, transparent, and reasonable', and if one is uncertain by self-regulatory judgment, it is stated that one shall follow the advice of the organization leaders or the Business Ethics Department.

| Business Ethics Standards

Division	Business Ethics Practices	Description
Employee	Mutual respect between employees, prohibition of graft and monetary exchanges, the role of leaders.	Prohibition of violations of human rights and discrimination, leading by example, etc.
Customer	Efforts to gain customers' trust, protection of customer information, etc.	Prohibition of graft and entertainment, personal information protection of customers, clients and employees, etc.
Society	Compliance with the laws, prohibition of receiving graft from stakeholders, fair trade with business partners and competitors, etc.	Compliance with the Fair Trade Act and the Improper Solicitation and Graft Act, prohibition of illegal political funding, compliance with environmental laws, etc.
Company· Shareholders	The Company's interests must be considered in any conflict of interest situation, and its assets, information, and business management must be protected.	Prior approval must be obtained for external or government- related activities. Transfer of the company's technologies is prohibited. False reporting and delays in reporting are prohibited.
Whistleblower Protection	Whistle blowing system, whistleblower protection and prohibition of disadvantages, etc.	Whistleblower protection and prohibition of disadvantages and discrimination, etc.
Supplementary Provisions	Rewards and punishment, consulting and advice, interpretation standards, relationship with different company rules, etc.	Consulting and advice of the Business Ethics Department, preference business ethics, etc.

Cases of Ethical Violations in Major (DON'Ts) Sectors

SK holdings compiles a list of ethical management violations (DON'Ts) that could occur during the course of doing business, sorts them into different categories, and shares them with its employees. These Don'ts, classified into unethical acts, security, subcontracting, taxation & fair trade, and reporting & managing, have been prepared to serve as ethical behavioral guidelines in performing one's duties, and provide guidelines for internalizing business ethics among employees.

Division	Cases of Ethical Violations (DON'Ts)
Unethical	23 items including basic etiquette, graft & entertainment & gifts, conflicts of interest, company asset and information protection, etc.
Security	14 items including PC security, information and document management, project security, etc.
Subcontracting	18 items including deciding and adjusting subcontract payments, subcontract payments, failure to issue letter, inspection and result notice, unfair management interference, restriction on subcontracting, etc.
Taxation & Fair Trade	23 items including issued trades, unfair internal trades, unfair corporate actions (collusion), unfair trade activities, etc.
Reporting & Managing	33 items including unreasonable business implementation, false, delayed & partial reporting, negligence in business management, etc.

FAQs on Practicing Business Ethics for SK Leaders

The "autonomous and responsible management support group", which is placed under SK Group's SUPEX council, has established 'FAQs on Practicing Business Ethics for SK Leaders' in a bid to strengthen the culture of leading by example. This list describes useful examples of situations that can occur frequently and the related regulations in a Q&A format designed to enhance employees' awareness and understanding of business ethics.

Division	FAQs on Practicing Business Ethics for SK Leaders
Conflicts of Interest	• Prohibition of conflicts of interest·matters requiring approval. • Anti-graft in purchasing/HR. • Remuneration depending on concurrent office in an investment company. • Reporting of external lectures and pay return.
Company's Asset Protection and Budget Usage	• Criteria for private use of company assets. • Cautions for using and charging company budget. • Prohibition of personal sponsorship/advertisement/donation to specific organizations. • Prohibition of transfer of company benefits to others. • Spending of personal expenses for personal items aside from itinerary • Simplification of formalities related to business trips, etc.
Gift/Graft	• Cases in which graft is prohibited or permitted. • Processing of expensive gifts from overseas partners. • Criteria for exchanges of gifts between employees, etc.

Compliance

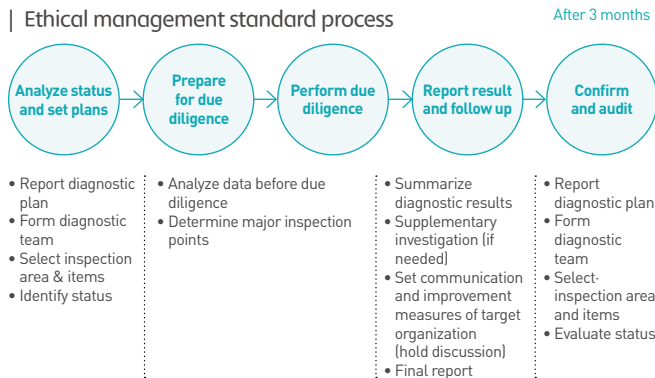### Organization Responsible for Business Ethics

Through the Ethical Management Team of the Happiness Leading Center, which reports directly to the CEO, SK holdings is pursuing many different activities with the aim of promoting a corporate culture of sound business ethics among its employees. In addition to our efforts to internalize business ethics through the business ethics diagnosis system, self- regulatory system, and reporting system, we are focusing on improving employees' ethics awareness through education and campaigns. SK holdings has also created an ethical diagnosis and support system for its domestic and overseas subsidiaries through which it is promoting the growth of a culture of ethical management practices.

Self-Regulatory System for Business Ethics (Risk Evaluation & Business Ethics Auditing)

SK holdings runs an ethical management diagnostic process at each of its business sites.
It conducts an annual inspection of risks in four major areas: HR, purchasing, business partners, and costs. Such evaluations are conducted based on a checklist according to the characteristics of each business, and matters verified by the management diagnosis and reporting channels are systematically managed under regular audits.

| Ethical management standard process

After 3 months

Analyze status and set plans	Prepare for due diligence	Perform due diligence	Report result and follow up	Confirm and audit
• Report diagnostic plan • Form diagnostic team • Select inspection area & items • Identify status	• Analyze data before due diligence • Determine major inspection points	• Summarize diagnostic results • Supplementary investigation (if needed) • Set communication and improvement measures of target organization (hold discussion) • Final report	• Report diagnostic plan • Form diagnostic team • Select· inspection area and items • Evaluate status	

Whistleblowing System for Violations of Business Ethics

SK holdings operates an ethical management reporting system which can be used not only by employees but by all stakeholders who have a relationship with the company to report unethical behaviors. We are strengthening our "self- purification" system in a bid to further internalize business ethics by operating various reporting channels. Anyone can report a breach of ethics using the business ethics website (https://ethics.sk.co.kr/Eng/Main.aspx), and the identity of the reporter and the content will be kept strictly confidential.
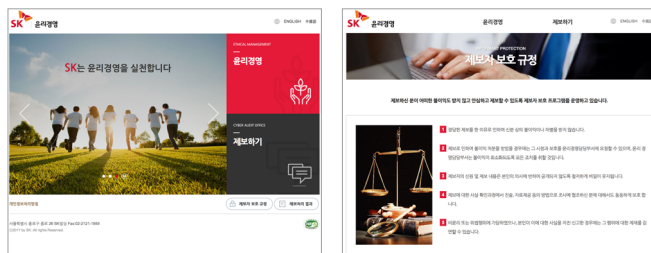
- Report online (https://ethics.sk.co.kr/Eng/Report/OnlineReportIN.aspx)
- Phone (02-6400-6262), fax (02-6400-0613), e-mail (ethics@sk.com)
- Customer complaints (https://ethics.sk.co.kr/Eng/Report/Complaint.aspx)

Violations of Discipline and Measures Taken at Business Sites

In 2019, SK holdings uncovered 9 discipline violations which resulted in 1 dismissal, 1 suspension, 3 salary reductions, and 4 warnings. The use of abusive language between employees and illegal subcontracts were the major types of violations. When disclosing examples of unethical behaviors by the employees, SK holdings complied with the 'Personal Information Protection Guidelines' set by the Ministry of Employment and Labor and made sure that personal information was not included. Hence, through the public sharing of information in the form of 'Company Notices', 'Violation Examples (DON'Ts)' and 'Ethical Management Letters', the company is striving to prevent similar cases from recurring in the future.

| 2019 Risk Evaluation of Violations of Discipline at Business Sites

| No. Total Business Sites	No. Business Sites Conducting Risk Evaluations for Violations of Discipline	Completion Rate of Risk Evaluations For Violations of Discipline
4	4	100%

Consensus

Solidifying the Business Ethics Culture

SK holdings engages in many kinds of activities aimed at increasing the adoption of ethical management practices by its employees. To reinforce employees' awareness of ethics in business management, the company runs compulsory 'Ethical Management Online Training' for its employees on an annual basis. This program is renewed each year with the latest information on ethics management trends and cases reported by subsidiaries. The program for 2019 highlighted the issue of workplace bullying, a matter serious enough to compel the government to pass a law in July. The company provided educational training on workplace bullying to all employees and subsidiary workers, promoting a sense of duty among employees to practice ethical management at work. In addition, by conducting an 'Ethical Management Survey' on the level of ethical management and requiring all employees to sign a pledge on ethical management, the company is striving to put into practice ethical management and establish management based on personal responsibility when it comes to honoring the principles of ethical management.

| Business Ethics Training
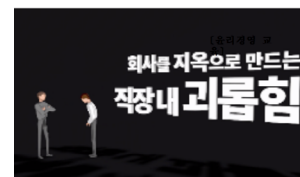
| Business Ethics Letter
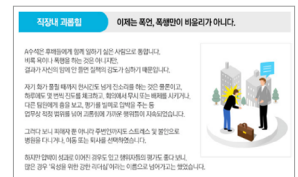
Ethical Management Surveys of business partners(suppliers & subcontractors)

In March 2020, SK holdings conducted the first 'Ethical Management Survey' of its supplier companies with the aim of averting the risks in trading (violation of laws and unethical business practices) with supplier companies and strengthening their ethics awareness.
The survey was conducted anonymously using an external professional survey system. The survey covered such topics as verbal abuse/abuse of power, graft, infringements of information/asset rights, fairness at each stage of a trade transaction, and reporting channels. The results showed that SK holdings' ethical management is generally viewed in a positive light.
SK holdings will strive to create a joyous cooperative environment with its partner companies through continuous ethics management survey. It will expand access to reporting and try to increase the level of ethical management by its

Safety, Health, Environment (SHE)

To establish a system of safety, health, and environment (SHE), which are the foundations of employees' and stakeholders' happiness, and to identify and prevent in advance risks to safety, health and the environment that arise during our business activities, SK holdings is augmenting the SHE management system.

Establishing the SHE System

SHE Management System

In relation to SHE, SK holdings has built a SHE management system to share the group's values and operating principles. We aim to set up the SHE operating system, foster SHE capacity, and cultivate a SHE culture in order to manage business risks and minimize damages in the event of potential accidents.

SHE Values
Secure sustainability and place SHE management on a level of the society's trust and support to ultimately pursue happiness of stakeholders.

SHE Principle
Set company's SHE risk management priorities as the protection of human life, conservation of the environment, and protection of the company's assets, services, and reputation.

SHE Operating System

As a set of policy guidelines and rules for SHE management, the SHE operating system was built to reflect the business and the management environment of SK holdings. The SHE operating system is run to enable organic operation between elements based on the items to be managed.
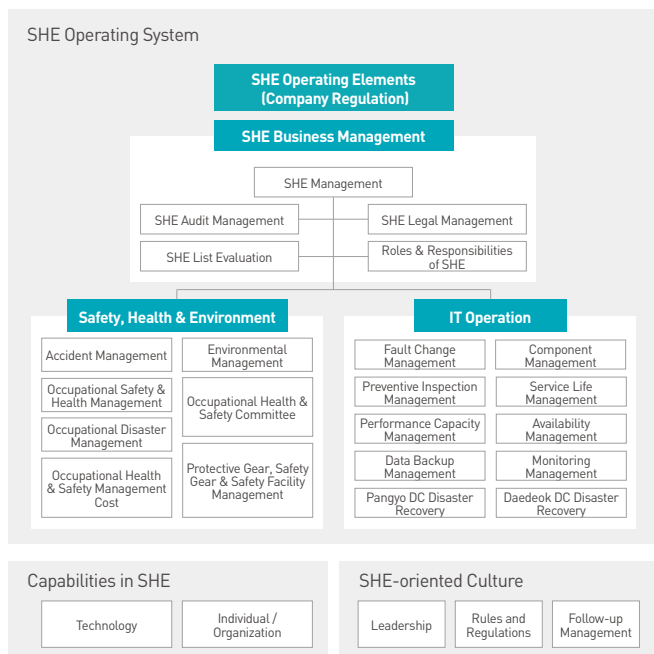
Cultivating the SHE Culture

The establishment of the SHE management system is a key requirement for internalizing SHE management in the company's organizational culture. SK holdings must clearly define the roles of leaders and employees in SHE management activities. The company conducts periodic SHE inspections and is taking the lead in creating a companywide SHE culture by, for example, promoting the adoption of SHE management through rewards and disciplinary actions.

Roles of a Leader
- SHE vision & practice: Goal management, resource investment
- Selection & concentration: High risk management, follow-up measures for accidents/failures, constant improvement of the SHE operating system.

Roles of a Member
- Understanding the SHE management system : Standards, processes, and applicable laws, etc.
- Field practice
- Constant improvement of customs/habits

SHE Council

Through the SHE Council, SK holdings periodically examines its operating system and system-related issues and holds a meeting of its occupational health & safety committee on a regular basis. In 2019, the committee was convened twice, and the company-wide SHE targets and the occupational disaster status was reviewed every quarter. In 2019, the SHE strategic directions of SK Group and the SHE accident and ICT failure sharing system were established and disclosed to the employees. In 2020, the company issued a guide booklet on the SHE operation process with the aim of fostering the employees' SHE mindset and thereby deepening the internalization of SHE.

| SHE Management

SHE Operating System

SHE Operating Elements (Company Regulation)

SHE Business Management

SHE Management

SHE Audit Management | SHE Legal Management

SHE List Evaluation | Roles & Responsibilities of SHE

Safety, Health & Environment
- Accident Management
- Environmental Management
- Occupational Safety & Health Management
- Occupational Health & Safety Committee
- Occupational Disaster Management
- Occupational Health & Safety Management Cost
- Protective Gear, Safety Gear & Safety Facility Management

IT Operation
- Fault Change Management
- Component Management
- Preventive Inspection Management
- Service Life Management
- Performance Capacity Management
- Availability Management
- Data Backup Management
- Monitoring Management
- Pangyo DC Disaster Recovery
- Daedeok DC Disaster Recovery

Capabilities in SHE
- Technology
- Individual / Organization

SHE-oriented Culture
- Leadership
- Rules and Regulations
- Follow-up Management

SHE Policies of SK holdings

Based on its human-oriented business philosophy, SK holdings pursues safety, health and environment as a top priority in all stages of business, improves the quality of its services based on its accumulated technology and experience, and contributes to the sustainable development of humanity.

To practice the above, each member shall fulfill his or her responsibilities and obligations in SHE management including the following :

- **Compliance with the SHE related laws**
  Observe SHE related domestic and international agreements and constantly improve the level of SHE management by upgrading the SHE operating system.

- **Hazard prevention management**
  Identify, evaluate and improve SHE related risks in all product and service processes from planning and purchasing through design and development to maintenance.

- **Reinforcement of capacity for accident response**
  Provide SHE education and training that is actively participated in by all employees and business partners, and minimize damages resulting from emergency situations by organizing a prompt and systematic response.

- **Transparent stakeholder communication**
  Set up concrete SHE goals and clearly disclose performance to build an exemplary corporate reputation regarding SHE management throughout society and industry.

- **SHE with the community**
  Recognize corporate social responsibility to minimize the discharge of pollutants and actively participating in improving SHE in the community.

Strengthening SHE Inspection Activities

SHE Assessment System

Using the SHE management system, SK holdings has improved the effectiveness of SHE management and SHE culture by, for instance, tackling the problem of underreporting and non-reporting of accidents and violations of the rules and has established measures for dealing with inadequate implementation.

To prevent the recurrence of similar accidents, the company operates an assessment system that identifies the fundamental causes of major accidents and regulation violations, evaluates the appropriateness of countermeasures, and checks whether SHE management is being practiced properly. In addition, we have strengthened the SHE activities of our subsidiaries and business partners in order to identify occupational safety hazards in all business sectors during the production and management processes in advance

| Subsidiaries' SHE Assessment Items

Division	Assessment Items
Occupational Health System	• Formation of an occupational health organization. • Appointment of occupational health managers. • Appointment or commission of safety managers. • Appointment or commission of health managers. • Status of the occupational safety & health committee.
Occupational Health Activities	• Safety education status • Safety inspection status • Field worker education status • Commission status of safety education & diagnosis
Occupational Accidents	• No. of critical accidents

SHE Self-Checking System

SK holdings has introduced the SHE Self-Checking System with which employees at its worksites can check the SHE risk factors associated with their particular jobs and then take corrective measures on their own when necessary.

SHE Self Check list

1) Safety & Health Risks

Health, Safety, Office Environment, Electronic & Office Equipment, Occupational Safety & Health Management System   Yes / No

(Health) Are there emergency measures for efficient use in the event of an emergency situation?
(Safety) Are there responsive manuals in place for emergency situations?
(Office) Are temperature, air and noise in office environment appropriate for workers?
(Electronic & Office Equipment) Is office equipment placed with consideration of safe passages and circulation?

2) Environmental Effect

Energy, Wastes, Noise, Vibration, Atmosphere, Water Quality, Environment Management System   Yes / No

(Wastes) Are waste disposal companies systematically managed
(Atmosphere) Do the tasks generate scattering dust?
(Water Quality) Is there an environmental technician properly appointed and utilized?
(Environmental Management System) Are environmental influence evaluations on new businesses properly running?

3) Awareness of SHE Management Activities

SHE Management System, SHE Accident Sharing System, Emergency Response, Locations & Directions for Fire Extinguishers, etc.   Yes / No

(SHE Management System) Is there active participation of employees in SHE management activities?
(SHE Accident Sharing System) Are the employees clearly aware of their roles in the event of an accident?
(Emergency Response) Are the employees aware of locations of emergency exits and evacuation methods in the event of an emergency?

### SHE Accident Sharing System

SK holdings divided SHE accidents into 3 major sectors – personal injury, environmental pollution/property loss, and IT accidents, which are then classified as critical accidents (group sharing) and general accidents (internal sharing) depending on their importance in order to secure a prompt response system by strengthening the Group's SHE management.

In May 2020, 'Significant Physical Loss' accident was added to the SHE accident standard so that, in the event of an accident (including physical losses that could seriously impact SK holdings and customer business, claims for damages due to service interruption or production disruptions, etc.), the information about the accident is shared/reported to all the relevant departments. This step has improved the quality of the emergency response management system.

| SHE Accident Sharing Principles

- In the event of an accident, all employees must share and report the details to the organization and the superior who has authority to handle the accident.
- As sharing and reporting accidents is a basic mandatory duty, noncompliance could result in the imposition of sanctions or penalties in accordance with the company regulations.

Area	Subject	Major Accident (shared at the group level)	Regular Accident (shared at the company level)
Personal Injury	Employees, business partners' employees	• A work-related accident resulting in a fatality. • 2 or more injuries the effects of which last for more than 3 months.	• Work-related injury or illness requiring at least 3 days of rest.
Environmental Pollution/ Property Loss	HQ, Pangyo, Daeduk and external worksites	• Chemical leakages, maritime/river pollution. • Considerable damages expected from fire, explosion or leaks. • Physical damages that are expected to have a considerable impact on business.	• Environmental pollution related accidents for which administrative measures could be taken. • Fire, explosion, leak accidents that cause only light damages.
IT Accident/ Trouble	External/ Internal Business	• Accidents that have a critical influence on customer services, such as IT failures and security breaches/physical damages caused by service interruptions or production disruptions. • Malfunctions reported by government and related organizations.	• IT breakdown with a severity level of 2 or higher.

Accident Information Sharing System for Personal Injuries, Environmental and Physical Losse
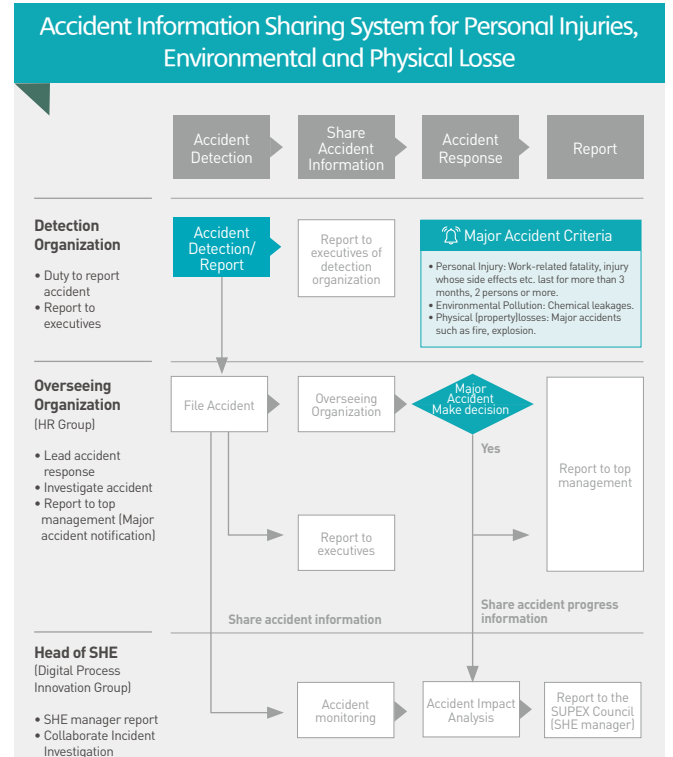
Improved Stability in Service Provisioning

Service Interruption (Failure) Response Strategy

SK holdings has established the Failure Management Guidelines, with which it manages and controls the process of filing, evaluating, analyzing, and resolving failures. The guidelines are designed to enable the company to restore abnormal service functions as soon as possible and minimize their impact on business in order to maintain the maximum level of service quality and availability. These guidelines are updated regularly. In addition, the company has established a process for operating and managing changes to services, which includes contingency plans for all aspects of service operation and service changes. Through this process, the company is able to proactively respond to business disruptions.

IT Accident (Failure) Information Sharing System
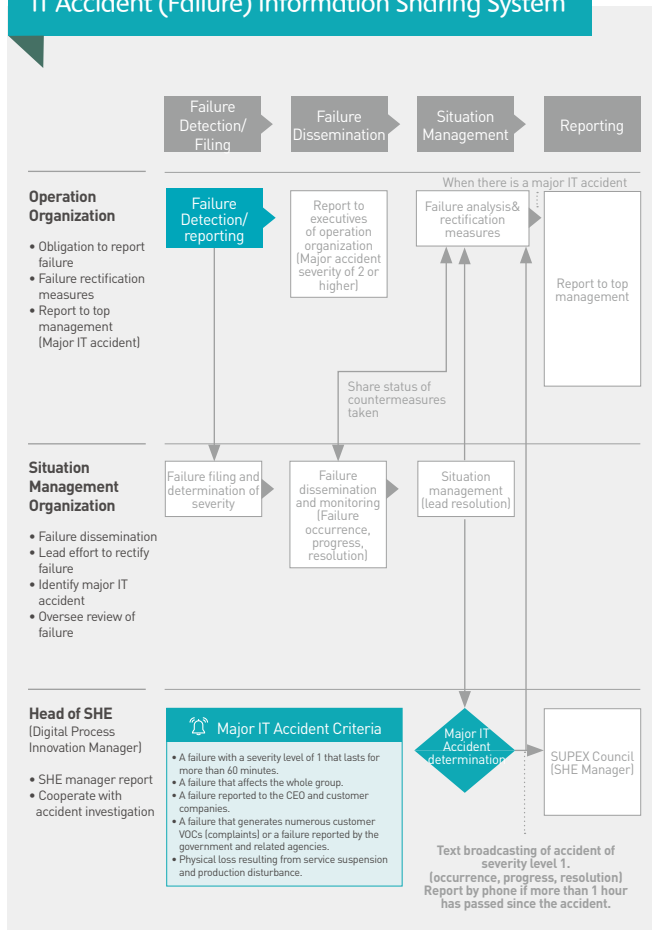
Establishment of Principles for Preventing Service Failures

In order to provide high-quality IT services to customers and strengthen its ability to respond to service failures, SK holdings in 2019 created its set of Service Golden Rules (SGR) for preventing IT service failures.

SGR is made up of principles and specific rules that must be followed by employees to ensure trouble-free IT services. In 2020, SGR was expanded from 6 major principles to 7 major principles. SGR applies to employees and suppliers who are involved in the operation of IT/DT services and if a violation of SGR results in service failure, the employee and supplier could be penalized. In the future, we at SK holdings are planning to increase the availability of service and continually improve customer satisfaction through SGR.

The 7 SGR Principles

1 Select preventive inspection targets and conduct regular inspections.
2 During changes, comply with the change processes such as prior approval.
3 Set back-up targets and cycles, and regularly perform and inspect the results.
4 Depending on the importance of a customer's business, define and manage the monitoring targets and major performance indicators.
5 When aware of failures, immediately spread and take measures.
  After the closure of a case, establish and implement preventive measures against recurrence.
6 Observe the working principles and always supervise when working with business partners.
7 Comply with the security processes, such as security vulnerability inspections, for new, changed, or terminated subscriptions.

Improved Non–Interruptions in Operation

In order to ensure the continuity of its IT services in the event of a disaster, SK holdings is strengthening its non-interrupted service operation by providing rapid and effective response procedures for accidents at basic facilities in its disaster recovery guidelines. As part of its business continuity plan, the company has set up and runs a disaster recovery (DR) center. By conducting annual disaster simulation exercises in Pangyo and Daedeok data centers, we check the DR conversion work procedures and rectify the deficiencies. When needed, these exercises are also performed extemporaneously.

Through the center, we try to prepare for every type of interruption to the services we provide to our customers that could be caused by a manmade or natural disaster. To detect potential risks and be able to handle them in advance, we are building a rapid response system that is capable of identifying risks using a monitoring tool tailored to a specific area and transmitting an alarm to the service manager.

Furthermore, an automation tool is used to monitor the daily inspection of services and - depending on the importance of a job - regular inspections are carried out 1~4 times a year as part of the company's service failure prevention efforts.

Service Interruption Risk Management

SK holdings manages risks systematically in order to pre-emptively prevent the types of risks caused by interruptions of software and IT services for customers. The risks caused by service interruptions could be technical flaws, programing flaws, cyberattacks, climate events, and problems arising from a natural disaster striking a host facility.

We keep track of the number of failures in the services provided to customers by sorting them on the basis of the duration of service suspension.

Service suspension duration includes planned work stoppages for regular inspections, repair&maintenance and etc, in addition to stoppages caused by service failures.

Through such detailed risk management, it is possible to estimate risk loss and duration of service suspension. The cost of loss varies according to the importance and characteristics of the service concerned. The failure duration time is estimated using the failure target time described in the service level agreement (SLA). If a loss is incurred, employees are required to pay the penalty specified in the SLA.

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Strengthening OSH (Occupational Safety and Health) Management of Employees

Expanded Health Management Support for Employees

In 2020, SK holdings created the Medical Expense Support Program through which employees could be subsidized for the costs of obtaining medical care for themselves and their family members and furthermore improve the way they and their family members manage their health. In 2020, the company is scheduled to pay KRW 1 million in annual medical expenses, and it will also introduce an improved medical checkup program based on age.

In 2019, the company introduced a special health checkup program for employees who are exposed to hazardous elements while at work due to the nature of their jobs. This program will further reinforce employee health management and create an even safer working environment.
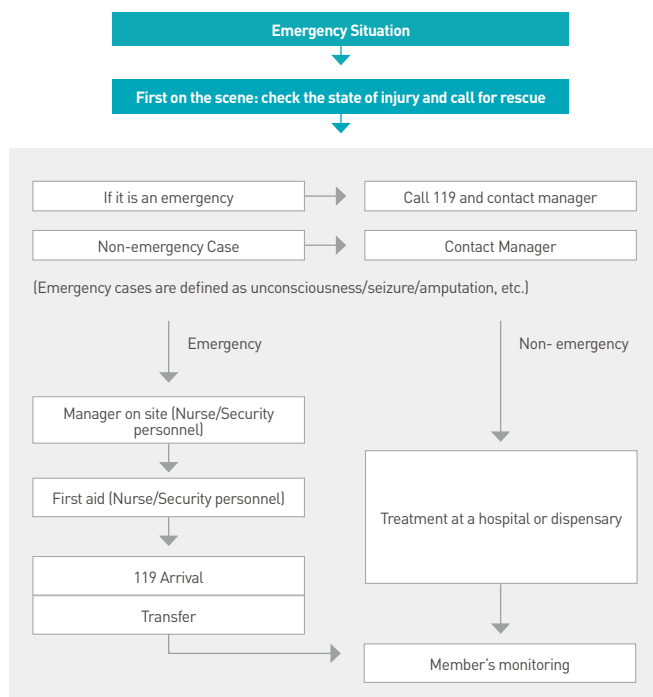
The company also provides health-care support services for improving the quality of life. One example of this is the expanded 'Vitamin Day', a health/mental counseling and team building event for supplier companies and full-time employees at external workplaces.

Response System for Emergency Patients

SK holdings has created an emergency patient response system for responding immediately to emergency situations (unconsciousness, seizures, amputation accidents, etc.). A process has been set up for immediately dispatching security personnel with the proper training who can provide medical care to injured employees, even on weekends or at night. For this purpose, we appointed one member of our security personnel to remain on duty 24 hours a day, 365 days a year and trained this employee in first aid and CPR. This person has since passed on the knowledge to another 30 members of the security personnel through internal dissemination sessions.

The CPR training sessions given in 2018 were valid for 2 years. In 2020, we are planning to provide the training to not only security personnel but also to facility management staff.

| Response Flow in an Emergency Situation

Emergency Situation

First on the scene: check the state of injury and call for rescue

If it is an emergency	→	Call 119 and contact manager
Non-emergency Case	→	Contact Manager

(Emergency cases are defined as unconsciousness/seizure/amputation, etc.)

Emergency

- Manager on site (Nurse/Security personnel)
- First aid (Nurse/Security personnel)
- 119 Arrival
- Transfer

Non- emergency

- Treatment at a hospital or dispensary

- Member's monitoring

Implementing Inspection of Fire Safety

SK holdings is strengthening its safety management activities based on special investigations of fire safety, and fire safety inspections of external sites. The special investigation is a governmental safety inspection of large buildings in the country and is being conducted to prevent massive disasters and protect human lives. In the first and second halves of 2019, the Gyeonggi-do Fire Service and Bundang Fire Station jointly carried out onsite inspections (separate inspections in the 4 areas of fire, electricity, construction, gas) of occupational worksites. The inspection of SK holdings' worksites revealed no infringements and no areas in need of improvement, and the company was recognized as an outstanding worksite. Furthermore, SK holdings has established a worksite fire safety inspection system for the safety of employees who work at external worksites beyond the company's headquarters. With this system in place, employees can inspect the safety or their workplaces on their own using a self-diagnostic checklist and, when necessary, request the assistance of fire safety experts in conducting a fire safety inspection.

Emergency Drills

Rapid response ability in an emergency disaster situation can minimize the loss of human life and physical/property damages, which is the reason why SK holdings conducts annual emergency evacuation drills. In 2019, the company conducted virtual training under the hypothetical scenario in which a fire is ignited by welding work at the construction site of the Pangyo Campus Data Center. The training taught the participants how to evacuate the site and how to put out the fire using fire extinguishers on the assumption that the emergency situation (fire) occurred on a weekend or a national holiday. Held under the supervision of the Pangyo 119 Safety Center, the training involved 147 people mostly from partner companies with offices in the data center and our own emergency response center. In the future, we plan to regularly conduct such drills so that we can respond more quickly to emergency fire situations.

Strengthening Hygiene and Safety in the Working Environment

SK holdings cleaned all of the office chairs in the Jeongja office building and the Pangyo Campus Data Center to allow the employees to work happily in a clean and comfortable environment.

In addition, to create a clean and hygienic working environment for employees toiling away at external worksites, the company performs 'whole site cleaning' which includes cleaning, dusting off chairs, fumigation, and disinfecting at 11 worksites recommended by each business division. We will carry out this cleaning program every year to maintain the hygiene of our workplaces at acceptably high levels.
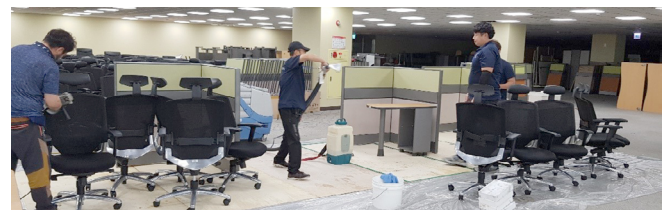
Reduction and Efficiency of Energy & Resources

Eco-friendly Data Center

SK holdings is reducing its energy consumption by operating an ecofriendly data center that utilizes IT technologies. The Daedeok Data Center has constantly improved energy efficiency by optimizing operations and investing in facilities, and has maintained the Green Data Center (GDC) certificate ever since it obtained the first certification in 2013.

The Green Data Center certification is a program aimed at saving energy by increasing the efficiency of electric power consumption and the Data Center of SK holding is recognized for its numerous efforts in saving energy and preserving the environment. In this regard, Pangyo Data Center boldly adopted renewable energy sources such as solar power generators and geothermal heat pumps at its design and construction stages, thus laying the foundations for an eco-friendly data center. We are maximizing energy efficiency by deploying high-efficiency facilities like modular uninterruptible power supplies (UPS) and free cooling refrigerating machines.

Energy Usage Reduction at Data Center

Expansion of Pangyo Data Center is to be completed by the second half of 2020 in order to meet the diverse requirements of its customers by analyzing DC trends and to respond to the rapidly changing IT environment.

The data center also decided to follow the global trend towards the adoption of environmentally friendly policies and to improve energy efficiency by setting its PUE target to 1.3, which is significantly lower than the global average of 1.5. To achieve this objective, it has adopted high-efficiency solutions and facilities to minimize the loss of electric power and secured a system for monitoring and managing greenhouse gas emissions in real time. The adoption of a containment structure in order to eliminate energy loss caused by the mixing of cold/hot air in the computer room has actually minimized wasted energy. The data readings from temperature sensors attached to racks are collected and analyzed to remotely control the air conditioners, thereby avoiding any unnecessary consumption of electricity.

In 2019, all of the fluorescent lighting at the data center was replaced by LED lighting, thus enabling the data center to save some 1,032 MWh of electricity per year, which translates into around KRW 105 million of electricity cost savings.

Maximizing Data Center Efficiency

By securing a flexible infrastructure with which it can respond to current IT trends and customer needs, SK holdings has established an environment for the stable operation of cloud services and the rapid ramp of the services.

Through its global top-tier level of data center facilities and operational competency, the company is able to protect the critical IT assets of customers and provide an optimum environment for IT operation with stable electricity, air conditioning and security services.

In addition, through Data Center Infrastructure Management (DCIM), the company monitors major infrastructure facilities in the data center in real time to prevent risks that may arise in the event of an emergency. The company also runs optimized operational processes and automated environments with which it is improving the efficiency and reliability of data center operations.

Eco-friendly Offices

SK holdings is successfully conserving energy and reducing greenhouse gas emissons by building eco-friendly offices through the introduction of high-efficiency facilities and improvements in facility operating methods. In 2019, the company reduced the usage rates of heat and electricity by optimizing the heating and air-conditioning of its builidings. The company saved about KRW 100 milion worth of energy by carrying out activities to reduce hear and electricity consumption.

The company is contributing to reducing environmental pollution and saving energy by converting old company vehicles into eco-friendly (hybrid) vehicles.

Securing & Fostering Talents

SK holdings has established a human resources development system and is building an implementation system in which employees, the key protagonists of sustainable management in this era of change and innovation, can voluntarily and eagerly exercise their individual abilities. The company is pursuing the strategic development of digital transformation (DT) competencies for the acceleration of DT-based business models and expanding support for strengthening its ability to develop these competencies.

HR Fostering System

Strategic development of DT technology competencies

SK holding aims to accelerate the introduction of innovations to its business models (BM). To that end, the company is dedicated to developing human talents who possess advanced digital technology skills. For the strategic development of such talents, the company runs a focused training program on digital transformation technologies comprising of different educational targets for each skill level.

In 2019, the company trained 416 employees with level-2 skills (and hence capable of working by themselves) through intensive coursework combining theory and practical training. It trained 125 employees with level-3 skills through mentoring by experts. Furthermore, through a review board, 4 employees with level-4 (the highest caliber experts recognized in the market) were selected, and they are currently being managed as a pool of experts who can provide tailored growth support.

The company wants to increase its pool of DT technology experts by turning its entire technology delivery personnel into DT experts by 2021. In the future, the company will develop and rely on experts through the company's pipeline and increase strategic training with a segmented curriculum for each of the company's business – a curriculum that accommodates the needs of each business and that can teach the key competencies.

Reinforcing Capacity based on the IDP (Individual Development Program)

In order to help employees further develop their skills, SK holdings is augmenting its IDP-based employee development system. This system can determine a person's competency levels through "self-profiling". The competency data is used as input data when creating competency development plans for both individuals and teams, and needs-based training programs. In 2019, 1-on-1 interviews between supervisors and employees were conducted in order to establish the IDP. Upon completion of the IDP and with the employees putting their plans into action, a data-based Plan-Do-See system was firmly put into place.

In 2020, the employees have now begun to voluntarily develop and implement competency development plans that match their career goals through the IDP by themselves. Indeed, thanks to the IDP, the foundation for developing employee competencies is getting even stronger. The company is also making concerted efforts to establish a culture conducive to learning through individual learning accounts, which are aimed at strengthening our ability to develop employee competencies, and "Growth Day," which was launched to ensure that some working time is set aside for learning. Moreover, team leaders, as employees themselves, are required to develop their own IDP and follow through with the plan. In this way, we are encouraging them to assume the role of playing coaches.

| IDP Process   Employees set their competency targets then develop and implement their own personal plan for developing their competencies.
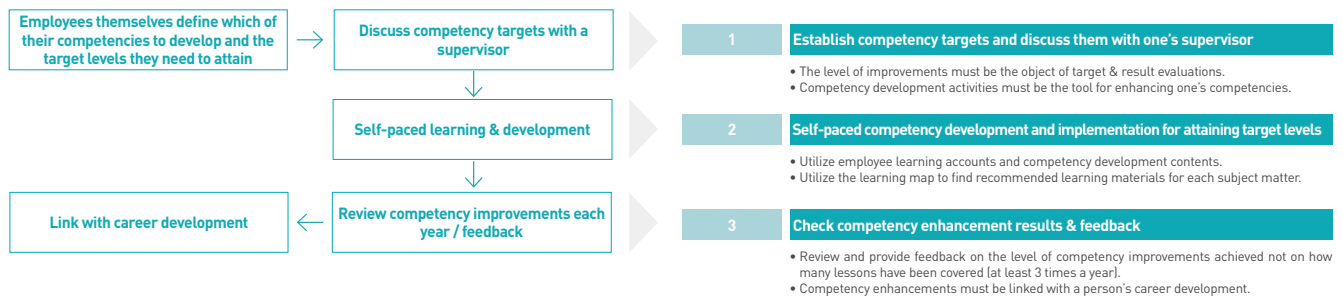
Self-paced Competency Development Based on the IDP

Development of Core Digital Transformation Capabilities

TCL (Tech Collabo Lab)

Any of SK holdings' employees can propose a research theme through the Tech Collabo Lab (TCL system), which was introduced to support the self-initiated development of their core capabilities and skills. The quality of research projects was enhanced in 2019 as the TCL system was connected to business lines in order to promote the innovation of business models for data digitalization and social value generation.

In 2019, 48 research projects were implemented through the TCL system, including ones related to business model innovation, manufacturing, communications, cloud computing, and financial services, with the participation of 254 employees in total. Distinguished cases were recognized more powerfully by granting the related employees with opportunities to participate in seminars overseas. The employees' access was improved by deploying communities that remain open at all times. Practical support has been increased for more active participation by the employees, along with more concentrated R&D opportunities, by introducing the bi-monthly ¨Day of Devotion¨ or ¨Day of Immersion¨.

| TCL Operating Process

Initiation of Research Topics
↓
Online/Offline Small R&D Group Activities
↓
Topic Critique by Sector (Recognition by Sector)
↓
Sharing of Conference Results Companywide (Open Tech Lounge)
↓
Commercialization of Excellent Cases & Support with Link to Internal Ventures

'19년 **Tech Collabo Lab**을 통해 자기주도 연구개발에 참여하실 패기 있는 구성원을 모집합니다!

Tech Collabo Lab은 구성원 자기주도적 연구개발 프로그램으로서, '18년부터 연중 상시, 전 구성원 대상으로 시행되고 있습니다. '19년 TCL은 구성원 참여를 보다 활성화하고, 실질적 지원을 강화하는 방향으로 운영하고자 합니다. 이에 활용 가능한 지원 사항을 아래와 같이 안내드리오니, 구성원 여러분의 적극 참여 바랍니다.

1) Enhanced support for R&D immersion environment.
   - 'Insight Seminar' provided to support ideation by agents
   - 'Devotion Day' programs operated periodically (8 hours per month) to help officially secure hours for R&D projects.
   - Continued support with opportunities for courting required education experts and networking with related themes based on the requirements of individual labs.

2) Enhanced recognition of outstanding cases
   - Output shared, The Open Tech Lounge is held twice a year to elect and fully recognize outstanding cases.
   - Increased opportunities for outstanding teams to participate in overseas seminars.

GSP (Global Expertise Sharing Program)

SK holdings has operated the Global Expertise Sharing Program (GSP), a Global Field Trip Program, since 2015 to enable its employees to explore and apply new ICT technologies to their organizations and functions. The GSP elects and provides opportunities to employees armed with enthusiasm, expertise and capabilities to enhance their global insights and their business and technological experiences. Those who are elected participate in global conferences aligned with their research themes or in the benchmarking of advanced businesses.

In 2019, the number of participants was increased by approx. 50% to increase opportunities for them to enhance their global perspective, in order to drive the Company's growth based on digital technologies. As a result, a more diverse group of employees participated in the program, including teams that shined on the TCL programs. Further, the results of their participation and insights were promulgated and disseminated through companywide seminars. A total of 37 employees working mainly in such areas as AI, Cloud, Big data, and Blockchain participated in the field trips.

| Results of Participation in the 2019 GSP Programs

Technology	areas Conference name
Cloud	• Kubecon+CloudNativeCon Europe (Barcelona) • AWS re:Invent (Las Vegas)
AI	• ACL Conference (Firenze) • Artificial Intelligence Conference (San Jose, London) • 3DV (Quebec) • ODSC Europe (London)
Big Data	• Strata Data Conference (New York)
Blockchain	• Devcon5 (Osaka)
Others	• Dreamforce (San Francisco)

Long-term Intensive Program

In 2018, SK holdings introduced a long-term intensive program' designed to foster employees' technical skills intensively and help them develop into talents equipped with the capabilities required to lead digital transformation projects. In 2019, four employees were elected to foster data scientists intensively. They participated in the Data Scientist courses offered by the NYC Data Science Academy, a global education agency specialized in Big Data, for 10 weeks. The courses were customized to inclusively consider the needs and levels of the SK holdings participants, who, after completing the courses, shared the results and participated in the planning of internal Big Data courses, thereby contributing to improving the data competency of the company's employees.

Fostering Talents of Consilience

Open Lab

SK holdings has operated the Open Lab program since 2013 to foster talents of consilience compatible with the era of the Fourth Industrial Revolution. As a representative knowledge-sharing seminar of SK holdings, Open Lab is provided by inviting instructors equipped with abundant expertise and field experience. It provides direct insight in line with the company's efforts to promote business model innovation and reform.

In 2019, a total of 6,426 employees participated in 16 seminars on use-case-centered themes of "business model" and "work innovation," providing practical insights into business activities. The knowledge-sharing ecosystem was strengthened by broadcasting the seminar programs live on the mobile service to allow the employees of the company serving at external sites and the employees of its partner companies to participate in the seminars. Also, the quality of seminars is enhanced through reaserching employee education satisfaction and gathering opinions of participants.

In 2020, the use case lectures will continue to deliver practical insights on roles and responsibilities via online webinars. At the same time, by introducing insight lectures related to macroscopic changes and trends in business, the environment, and happiness, the employees' consensus, communication and community mindset will be inspired for the stakeholders to practice happiness.
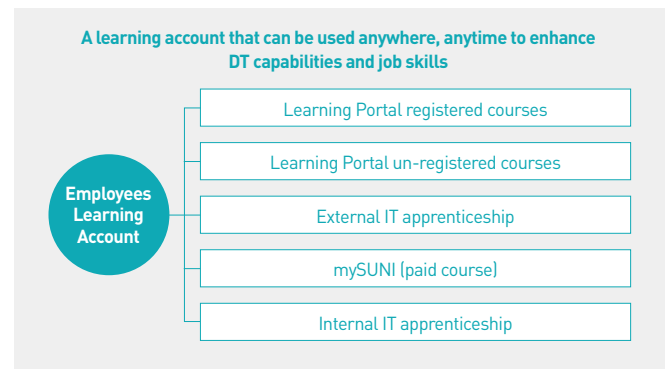
| 2019 Open Lab Programs

Classification	Lecture Themes
BM innovations	• Data & Digitalization • Innovation of machine vision technology using deep learning • Innovation and challenges of AWS for DT • Review of business models for innovation of startups by DT • To design an AI smarter than fund managers • Example of 'Ya-Nolja (Let's play)' Data Lake deployed (feat. AWS) • My Company's DT Story by examples • Growth Hacking • Meeting of Healthcare with Blockchain • Migration know-how for applying DevOps
Work innovation	• Training points for boosting developers' abilities • To utilize the mathematical thinking of global advanced businesses • Law of survival taught by Amazon, USA • Intensive training methods of the world's best talents
Happiness	• What on earth is happiness? • Innovative businesses' strategies for addressing uncertainties

Learning Account

SK holdings newly established the Learning Account initiative in 2020 in a bid to help its employees support their self-initiated development of capabilities. Learning Account is designed to assist employees in developing their capabilities and practicing suitable objectives for themselves under their own initiative. It will pay the net educational expenses to employees who succeed in developing an IDP in 2020. The concerned employees may use the grants to pay fees for using the DT Platform for on-hand training, tuition fees for outside courses or seminars, paid mySUNI courses, online courses uploaded on the Learning Portal (VLS), correspondence reading courses, and so on.

| Establishment of Learning Account for Employees

A learning account that can be used anywhere, anytime to enhance DT capabilities and job skills

Employees Learning Account
- Learning Portal registered courses
- Learning Portal un-registered courses
- External IT apprenticeship
- mySUNI (paid course)
- Internal IT apprenticeship

Growth Day

SK holdings holds "Growth Day" to guarantee the learning hours of its employees. Growth Day utilizes various operational approaches, such as fixed and voluntary models, so that it can be personally designed or customized to the situation of each individual organization. Employees are striving to improve their competency development culture by ensuring that the employees secure sufficient time to develop their skills and grow.

| Growth Day Operating Method

Team-based self-design for utilizing approaches to secure sufficient learning time

Types of setting day or time up	Types of Big-Break	Types of individual autonomy
Hours of learning are ensured for employees by each operating organization	Operation of hours of intensive learning in the form of Big Break for employees engaging in a mid/long-term project	Operation of hours of self-regulated learning for employees who find it difficult to study on the preset hours set for learning

- The business characteristics of each organization are taken into account.
- Different options may be taken in parallel by individual organizations within the same sector.
- Operational methods may be modified when the business environment changes.

Team Leader Fostering Programs

SK holdings has implemented the "Leader Ability Survey" and the "Leader Ability Development Program" to enhance the digital transformation skills of team leaders and to internalize changes in their roles based on changes in internal and external business conditions.

The Leader Ability Survey Program supports the development of leadership ability to enable team leaders to monitor the progress of their individual ability development activities while recognizing areas they need to work on and improve by themselves.

Further, to allow team leaders to selectively study their required ability, the company provides DT Insight Seminars in order to share internal DT assets and related technology trends, and Leadership Clinic courses the pain points of individual leaders.

Capacity Building Programs Through External Collaboration

Industry-Academia Joint Research System

SK holdings has steadily expanded its "Industry-Academy Joint Research" projects to secure the digital transformation capability for innovating future-oriented business models. In 2019, four research projects were performed. Key technologies and capabilities were secured through a joint research program with a university research lab, including technologies for the Deep Learning-based summarizing of Korean language documents and the automatic generation of questions.

SK holdings plans to steadily expand its industry-academia joint research scheme as its efficacy has been proven with various performances, including commercialization and technology internalization.

| 2019 Industry-Academia Joint Research Projects

Research themes	Partner universities
Deep Learning-based summarizing of Korean language documents and automatic generation of questions	Kangwon University
Cerebral hemorrhage detected in Brain CT image	Seoul National University of Science and Technology
Market sensing and Robo Advisor project (Structured data analysis)	KAIST, Hanyang University
Market sensing and Robo Advisor project (Unstructured data analysis)	Korea University

Industry-Academia Scholarships

In 2016 SK holdings launched the "Industry-Academia Scholarship System" for AI and Big Data fields and elected nine 4th Industry-Academia Scholarship grantees. In the year 2019, the company recruited ten Industry-Academia Scholarship grantees. SK holdings plans to concentrate on exploring and securing superior talents in core technologies through its Industry-Academia Scholarship System.

Massive Open Online Course (K-MOOC)

SK holdings has implemented 'K-MOOC' as a channel for securing online education contents to help enhance the digital transformation skills of its employees.

K-MOOC has introduced superior contents (54 courses in DT, infrastructure technologies, and management fields) aligned to the business lines of SK holdings in cooperation with KAIST. It has also directly developed five courses in software engineering based on Cloud Computing that have been reflected in the company's education courses. In addition, the company utilizes quality education contents supplied by renowned foreign universities to enhance the technical skills of its employees.

In 2019, courses on five subjects were opened, and five off-line lectures were also provided for five courses once a year.

SK ICT Tech Summit

SK holdings has led the generation of a high-tech ecosystem that creates social values by securing its competitiveness through technology sharing and collaboration.

The "SK ICT Tech Summit" pursues synergy generation by concentrating the ICT technologies held by the affiliated companies of SK Group and shares technologies with partners, startups, and other external partners. It celebrated its 4th anniversary in 2019.

In 2019, it invited approx. 4,000 attendees, including SK Group employees, partners, startups, and university officials. SK telecom, SK hynix, SK holdings, etc. introduced 98 new technologies while presenting 71 themes in the seven sectors of AI, Big Data, Cloud, IoT, security, media, and industrial technologies.

The number of common R&D zones doubled compared with the previous year, which introduce the 'SK Open API Portal', a platform that provides an integrated technology API. SK holdings introduced scenarios utilizing OK CashBack based on a blockchain jointly developed with its affiliated companies, a blockchain management system, an integrated Group API platform, and a portal for developers.

The SK ICT Tech Summit is being promoted with the aim of turning it into an exchange forum that can create synergy while sharing SK Group ICT capabilities and know-how.
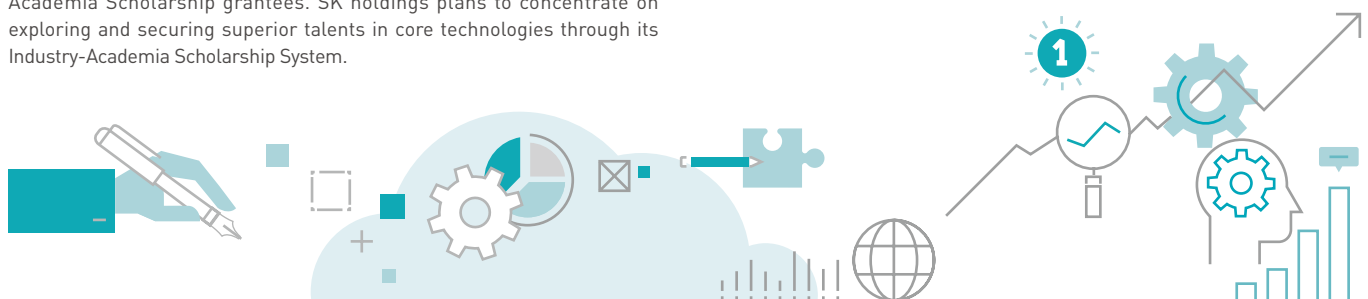
Working Environment & Corporate Culture

SK holdings has increased its efforts to introduce fresh innovations to working methods and develop a corporate culture focused on the happiness of the employees, in order to help them show initiative when performing their duties based on their abilities in a practice-oriented manner, while concentrating on the essentials by making "Deep Change" based on digital transformation as a managerial objective.

Establishing an Innovative Corporate Culture

Employee Participatory Council for Corporate Culture Innovation

SK holdings Management Council has played a pivotal role in developing a corporate culture oriented toward the employees. The Management Council is composed of equal numbers of representatives of the management team and the employees. It discusses diverse agenda items for employees' pursuit of happiness through its periodic meetings.

The 2019 Regular Meeting of the Management Council, attended by members representing the management team and the employees, mainly discussed agenda items concerning the direction of changes for pursuing the employees' happiness and matters of interest to them, including the guarantee of 200 learning hours per year, and the active consumption of annual leave hours. The Management Council actively listens to the voices of the employees and reflects them in the systems and processes. In so doing, it tries to take practical, effective steps to ensure the happiness of all employees.

| Details of 2019 Activities of the Management Council

Classification	Key activities
1st amendment to (Nov. 2019)	• Business performances in 2019, plans for 2020 • Guarantee of 200 learning hours/year (introduced by SK University) • Management Council regulations • Discussion on the management of annual leave • Q&A concerning issues of interest to the employees

Innovating the Way We Work for Deep Changes
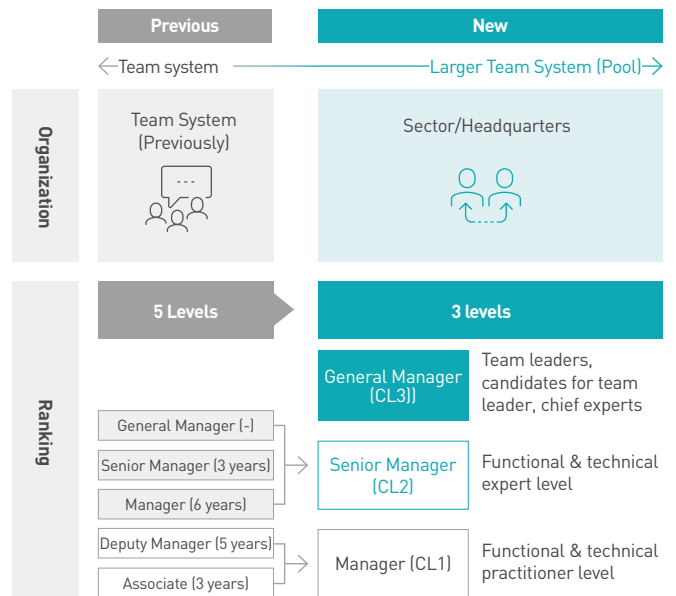
Flexible Organizational Structure

To realize Deep Change, SK holdings has organized and operates a flexible horizontal organization. It has created an environment in which the employees can work horizontally by simplifying the previous seniority- and ranking-centered five- step hierarchy or position system into the three steps of fellow, senior, and principal members.

In 2019, it significantly reduced the number of its decision-making steps by introducing a Flat & Flexible Organization (namely, greater teams). It also operates a flexible organization structure in which leaders are elected by project or task depending on the nature of the tasks based on self-design by the individual teams.

Task-based Ubiquity and Operation of the Management System

SK holdings operates a task-based performance management system that enables routine assessment and appraisal based on employees' actual performance of their duties. In so doing, we have switched from 'human-centered' performance management to 'job-centered' performance management in order to provide compensation based on performance while pursuing maximized sharing and collaboration among peers. Further, following discussions with the employees, the composition of the appraisers has been diversified into team leaders, task or project leaders, taskmates, and peers. The appraisal rate of each appraiser was adjusted through self-design processes. In so doing, business and organizational characteristics are reflected in the appraisal system.

| Organization/Position Structure

Previous	New
← Team system	Larger Team System (Pool) →

Organization

| Team System (Previously) | Sector/Headquarters |

Ranking

| 5 Levels | 3 levels |

General Manager (-) Senior Manager (3 years) Manager (6 years)	General Manager (CL3))	Team leaders, candidates for team leader, chief experts
	Senior Manager (CL2)	Functional & technical expert level
Deputy Manager (5 years) Associate (3 years)	Manager (CL1)	Functional & technical practitioner level

| Performance management of requests made

Year-end appraisal

I can request my year-end appraisal.

• Performance assessment: Weighted values, period performed, changes in duties and other considerations by task are entered.
• Competency assessment: A self-review of one's competency is prepared.

My Task

You may check your task, prepare performance by task, and request assessment.

2019 My Task

• Performance of duties prepared
• Request for appraisal or assessment

Status of requests made

You may assess the tasks of employees for whom you have been appointed as the appraiser.

Tasks I have been asked to assess

• Task appraisal scores granted
• Appraiser comments entered

Those appraised

Development of an Organizational Culture Oriented Toward the Employees' Happiness

A Family-Friendly Company that Supports a Healthy Work-Life Balance (WLB)

SK holdings introduced various practical and supportive WLB policies, such as family care leave, self-directed work, the Mother-to-be program, child scholarship support (aged 5 to university students) and mobile offices, and we constantly strive to improve these programs. As a result, we have been certified as a family-friendly company since 2013.

Programs Implemented Together with the Employees' Family Members

To promote the happiness of all its employees' family members, SK holdings provides good memories of the parents' workplace while communicating between parents and children through the "Family Invitation to Happy Workplace Festival" events and programs. In 2019, it invited approximately 1,100 people, including employees and their family members, on four occasions. It also provided family members with diverse experience programs, including the One-Day Employee Certificate presented to the children, a tour of the company buildings, artist performance, and family photography.

In addition, it provides a coding education program for employees' children, which is designed to deepen their understanding of and raise their pride in their parents' work. In 2019, it provided lectures on humanistic sensibilities combined with ICT technologies under the theme of "I'm a coding artist", in order to provide opportunities to experience coding-combined fine art career paths. A total of 76 3rd and 4th grade elementary schoolchildren successfully completed the program.

Care & Respect for Pregnant Employees

SK holdings runs an institutional program for pregnant employees.
The Mother-To-Be program distributes pink lanyards for ID cards and congratulatory gifts to all pregnant employees. After the birth of a child, birth leave is automatically converted to childcare leave, and working hours are reduced during pregnancy (under 12 weeks and after 36 weeks). In addition, various policies aimed at solving the social problem of low fertility and reducing employees' hardships related to giving birth and child rearing - including elementary childcare leave, in-company daycare centers and infertility leave for married women - are now in place.

Retirement Planning Program

The employees of SK holdings can prepare for a stable retirement with the support of the company. Various retirement programs such as the Career Development and Aptitude Exploration Program, Retirement Pension Policy and Retired Talent Welfare Policy are in place. We deposit a reserve for the retirement allowance for employees with outside financial institutions to pay retirement allowance to retirees either in lump sum or an annual pension, whichever they chose. As of the end of 2019, the accumulated amount of our reserve for retirement allowance comes to 305.4 billion won, out of which 277.4 billion won (i.e. 90.8%) is left to an outside asset management institution for adequate management. Thus, we comply with the statutory criteria for outside reserve valid in 2019.

Improving the Flexible Work Environment

Expansion of Shared Offices for Innovating the Way We Work

SK holdings operates its shared office space as an open horizontal space with the aim of promoting collaboration and communication among the employees. It also switched their work spaces from fixed seating to autonomous seating systems, and further extended the shared office space system to SK U-Tower in 2018 and Pangyo Campus in 2019. In particular, such new types of space were added to the Pangyo Campus after considering the operational characteristics, including the space for developers, a reserved free zone, and task rooms.

In 2019, SK holdings improved the shared office space based on the results of a survey of the employees. The shared office space system was expanded to allow the employees to create a new growth opportunities in their work methods, including the Sound Zone·Phone Room and new hyper-concentrated seating.

Improvement of the MARU environment

SK holdings newly remodeled its annex library "Maru [Floor in Korean]" (formerly Tioom) in 2019. The library was transformed from a conventional reference data room focused on book rental into a new space designed to assist employees with healing and thinking. The library has become a special space for generating a happy culture by improving its concept, interior design, furniture, books, etc. with the active participation and ideas of the employees.

Recruitment of Handicapped Baristas

SK holdings has recruited 26 heavily handicapped people who dreamt of becoming baristas to work at its three in-house cafes. They will grow as partners who create social value as they have been provided with a stable job. SK holdings recruits handicapped people by identifying functions they can perform by themselves, thereby overcoming the preconception that IT businesses should only recruit people who can perform IT duties.

Risk Management

SK holdings operates an executive-level risk management advisory group dedicated to address risks. The group is responsible for establishing a risk management structure for stable business operation, including the integration of its communication channels for risk management centered a Single Point of Contact (SPoC). Furthermore, the group strengthens efforts to instill a culture of autonomous compliance with the trade rules and regulations by running diverse compliance programs.
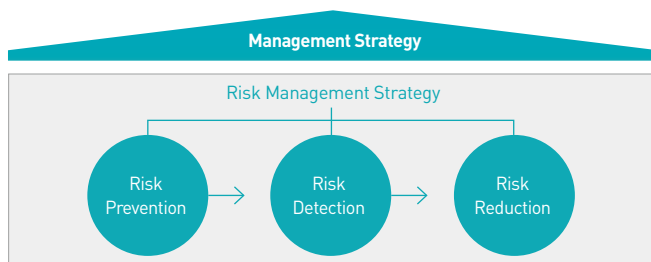
Establishing the Risk Management System
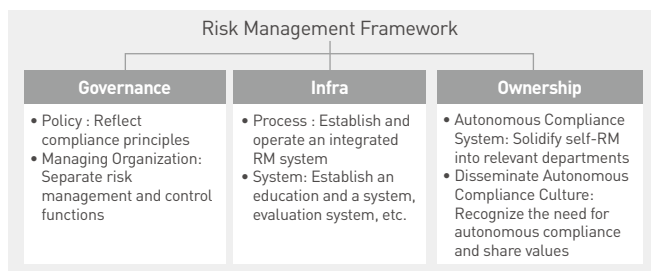
Integrated Risk Management

Through its integrated risk management system, SK holdings identifies and prevents any threats such as incidents, actions and atmospheres that could have a negative influence on our corporate management activities, and minimizes fluctuations in corporate values that could occur due to uncertainties in the internal and external environments.SK holdings proactively detects and controls risks by classifying and defining them. Risks are preemptively grasped and managed by classifying them largely into 4 categories, environment risks responding to mid- and long-term risk management from macroscopic perspective, financial risks(business, currency exchange rate, liquidity, and interest rates), business risks(those related to strategies, competition, clients, and changes in technologies), and operational risks(those related to employees, processes, infrastructure, and security), and by setting up strategies according to them.

Under this risk management framework, SK holdings is establishing comprehensive response measures and policies for the implementation of risk reduction strategies beyond mere responses to risks. We are devising measures to address potential risks by identifying all scenarios that could have an impact on the company and quantifying the influences for preemptive risk prevention. For risks that have already occurred, the company responds appropriately to prevent the recurrence of similar risks through immediate reporting of, analysis/response to, and providing feedback on risks
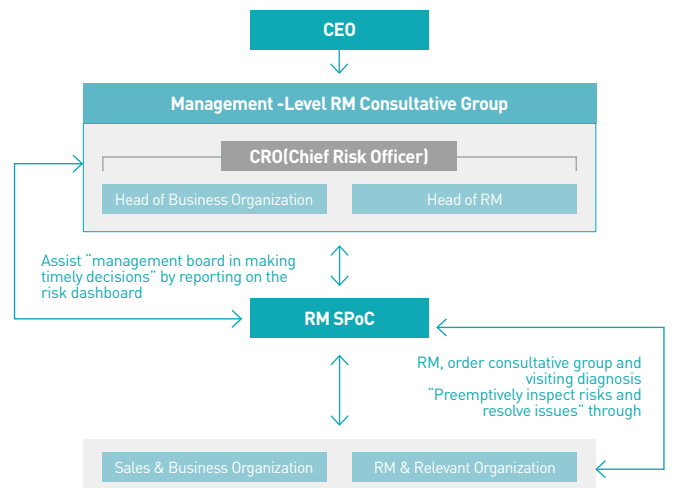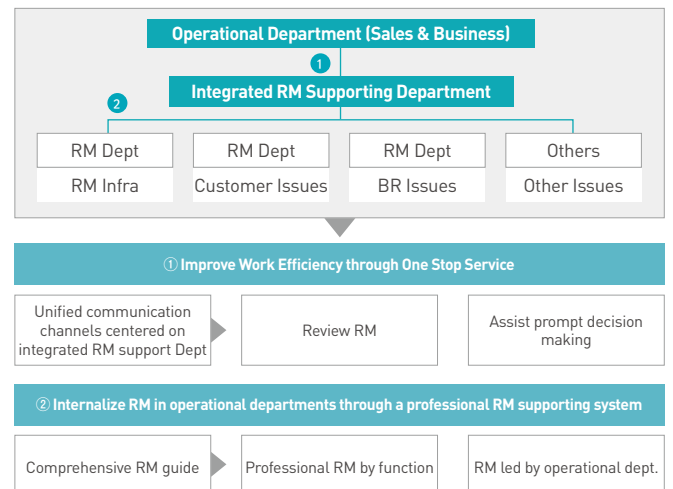
Risk Management System

To ensure operation of prompt risk-responsive system, the company has formed a consultative group responsible for managing company-wide risks, under the leadership of the management board. A system of reporting risk management has been established to enable timely reporting of risks that could have a critical impact or influence on business activities, and there are processes that allow the relevant departments and the risk management department to preemptively inspect risks and share issues in advance. At SK holdings, the managing departments receive professional RM support through a SPoC (Single Point of Contact) during business initiation based on the exclusive RM SPoC system by each business field. RM-related communication channels are integrated to internalize RM, which enables risks to be managed on the basis of prompt and effective decision making.

| Integrated Risk Management System

Management Strategy

Risk Management Strategy

Risk Prevention → Risk Detection → Risk Reduction

Environmental Risks	Financial Risks	Business Risks	Operational Risks
• Macroscopic Environment • Climate change • Laws & Regulations • International Regulations • Disasters	• Market Economy • Price Fluctuations • Liquidity Fluctuations • Credit Fluctuations • Financial Losses	• Strategy Setting • Customer Management • Competitors • Investors • Technological Changes	• Employees • Processes • Infrastructure • Corporate Culture • Security

Risk Management Framework

Governance	Infra	Ownership
• Policy : Reflect compliance principles • Managing Organization: Separate risk management and control functions	• Process : Establish and operate an integrated RM system • System: Establish an education and a system, evaluation system, etc.	• Autonomous Compliance System: Solidify self-RM into relevant departments • Disseminate Autonomous Compliance Culture: Recognize the need for autonomous compliance and share values

| Risk Management Reporting System

CEO

Management -Level RM Consultative Group

CRO(Chief Risk Officer)

| Head of Business Organization | Head of RM |

Assist "management board in making timely decisions" by reporting on the risk dashboard

RM SPoC

RM, order consultative group and visiting diagnosis "Preemptively inspect risks and resolve issues" through

| Sales & Business Organization | RM & Relevant Organization |

| SPoC System

Operational Department (Sales & Business)

①

Integrated RM Supporting Department

②

RM Dept	RM Dept	RM Dept	Others
RM Infra	Customer Issues	BR Issues	Other Issues

① Improve Work Efficiency through One Stop Service

| Unified communication channels centered on integrated RM support Dept | Review RM | Assist prompt decision making |

② Internalize RM in operational departments through a professional RM supporting system

| Comprehensive RM guide | Professional RM by function | RM led by operational dept. |

Enhancing Risk Measurement Models

SK holdings has been enhancing business execution capability by establishing a risk measurement model that determines the possibility of technology realization in connection with the business units.

In 2019, with its area expanded to digital transformation projects, a risk measurement model was established by quantifying the areas of delivery and compliance risks. In so doing, the company preemptively responds to risks while strengthening its ability to resolve risk issues through the enterprise-wide measurement of risks.

Risk Management by Business Step

SK holdings manages risks in each step of business when launching a project or investment of certain size. From identifying potential business opportunities to the closure of project, the business steps are categorized into four stages that include sales, proposal or bidding, contract awarded, and project completion. By reviewing risks and supporting their management in each of the steps, the company is equipped preemptive risk prevention and response system for all business processes.

The project managers control risks using a self-check list for risk management by surveying risks that may arise at each step of the project implementation. The relevant departments continuously monitor the checklist that have been reviewed in the processes of implementing the project to realize an effective risk management. This process, or risk management in each business step, has been adopted at all of our overseas business units as well as the domestic business units.

In 2019, we established a new risk management system optimized to digital transformation, which is different from the existing ITS efforts. In 2020, we have performed PI to establish a next-generation MIS system for transition to DT business risk management process.

We plan to improve our risk management system through preemptive and close control of focused business projects that may affect the economic and social values of the company while simplifying the procedures for risk management and order acceptance consultation by identifying and examining projects or businesses that are low risk.

| Risks to be Reviewed by Business Step and the Scope of Risk Management Support

Sales Step	• Discover potential business opportunities • Review feasibility of business opportunity • Review trade feasibility of subsidiary	RM Training
Proposal & Bidding Step	• Review order strategy and competitiveness • Hedge business performance risk • Select business partners and make proposal payment • Calculate proposal raw cost	Support Autonomous Risk Diagnosis
Order & Contract Step	• Consult contract conditions of client in advance • Contract with client • Contract with business partner • Source manpower to perform business	Risk Monitoring Risk Response
Performance & Completion Step	• Manage business scope and contact of business partner • Identify and take early response to risk • Review business partner and make payment • Review client and collect receivables	Internalize RM

Promotion of Compliance Program (CP) in Fair Trade

SK holdings operates diverse compliance programs to create a culture of autonomous compliance for fair trade regulations. Programs and activities include disseminating CEO letters on autonomous compliance, continuous and systematic education on compliance, publishing letters creating culture of autonomous compliance manager and newsletters on amendments to statutes and systems, and operating a compliance portal for sharing various compliance-related information and supporting the related activities. Since 2018, we conducted compliance education and provided guidance for compliance at project sites by selecting CP Experts comprising of internal experts in fair trade, subcontracting, project management, and various regulatory statutes. In 2019, 22 CP Experts performed various compliance education and field support activities.

In addition, we expanded our activities on compliance activities so that our employees are able to adhere to compliance principles suitable to new business conditions. in addition to the established compliance topics such as regulations on Fair Trade and Subcontracting, examples of risks and action guidelines that can be encountered in the field including demand and leak of technological data, and infringement on open source copyrights as well as the latest trends in legal systems and government policies related to new business areas such as AI, Cloud, and Blockchain are being shared. Also, the compliance activities are expanded to educational programs specialized in regulatory environment is being conducted so that compliance principles suitable for new business environment are complied with. We also publish and distribute CEO letters to reinforce the company's commitment to autonomous compliance and ensure responsible compliance activities are conducted effectively. In addition, autonomous compliance managers report the company's compliance activities to the board twice a year.

SK holdings plans to reinforce the environment for continuous and systematic autonomous compliance of fair trade regulations through real-time sharing of the latest trends of statute amendments and compliance principles concerning new business conditions.

CEO CP Letter

CP Portal Operation

CP Assessment

Letters on fair trade and autonomous compliance

CP Manual

Compliance Education for Employees

Information Security

SK holdings obtained an information security certificate compatible with its position as a global IT company by deploying an information security system. We protect data of our customers and the company by meeting the customers' requirements for information security.

Information Security Rotection Systems

Information Security Policies

SK holdings has developed information security policies and requests adherence by all of our employees to those policies also enacted information security-related guidelines and regulations, and enure security they are actively reflected in our operations. The information security policies, guidelines, and regulations are available to all employees on Hi-SK, a corporate portal system.

Security Policy

Various threats that emerge with the development of IT technologies may seriously affect the information assets of SK holdings, which provides comprehensive IT services to the customers. The information security activities or, information security, has become essential and indispensable to the efforts of SK holdings that strives to provide the best-in- class products as a global IT service leader. Therefore, all SK holdings employees should place priority in developing measures to protect important information assets from internal and external hacking or data leakage by thoroughly considering the various legal, social and ethical repercussions in addition to the possible loss of important information assets and delay or degradation of processes.

Hence, SK holdings information security policies satisfy the following points:

(1) **We protect SK holdings information assets from illegal access or leakage.**
(2) **We maintain the confidentiality, integrity and availability of SK holdings information assets.**
(3) **SK holdings complies with the statutory security requirements related to information security protection.**
(4) **All SK holdings constituents should be able to duly prevent, detect and address accidents by realizing the importance of information security.**
(5) **SK holdings periodically analyzes, inspects and audits risks related to information security.**

SK holdings invests time and resources to comply with the information security policies as well as, establishes and operates an organization that manages information security. The organization is responsible for the development, maintenance, inspection, and education of security regulations, guidelines, and procedures. Information security, however, cannot be conducted by a single organization. It requires the participation and responsibility by all personnel. Therefore, all employees must understand and comply with the declared policies with steady attention is critical in realizing sound information security.

Jun, 10th, 2020
Sung-ha Park, CEO, SK holdings

Information Security organization

SK holdings operates a team dedicated to information security to prevent the security- related compliance issues while preventing any leak of internal information assets. In so doing, it performs an intensive management and monitoring by domain, including enhancement of competitiveness related to business security, enterprise-wide security diagnosis, diagnosis of business security risks.

| Organization chart
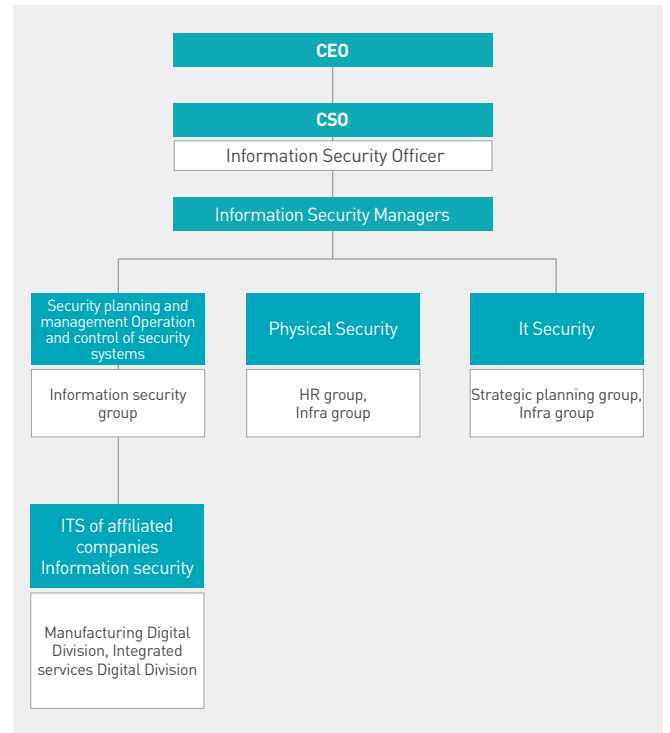
| Key roles of the organization

Prevention and response to infringements
- Operation of security control center, and development of procedures to respond to infringements by type

Data protection and security monitoring
- Encryption of key data, backup storage, and security monitoring

Enhanced security level
- Improvement of security policies, internalization of security competencies, and security PR activities, and enhancement of security level

Verification and certification of information security
- Hacking simulations and vulnerability inspection, maintenance, inspection and response of external certification

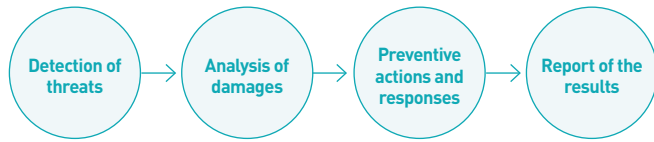# Prevention and Response to Infringements

| Procedures for detection and prevention of infringement threats

(Detection of threats) → (Analysis of damages) → (Preventive actions and responses) → (Report of the results)

Prevention of Infringements

SK holdings operates its security control center 24 hours on 365 days to inspect vulnerabilities and takes actions against security threats. It controls risks by dividing its risk management efforts into monthly response to infringement, activities for prevention and detection of infringement, and others. It prevents security infringement accidents incidents by inspecting all IT vulnerabilities of its affiliated companies and operating preventive measures.

Prevention and inspection of infringement accidents	- Hacking simulations of key systems and inspection of infrastructure vulnerabilities once a year - Hacking simulations of key systems and inspection of infrastructure vulnerabilities performed before starting services of newly invested development systems - Hacking simulations and inspection of infrastructure vulnerabilities of key system performed once a year

Response to Infringements Incidents

SK holdings amended its infringement reporting procedure to modify the reporting guidelines and to ensure that the procedures are aligned with the changes ensuing the organizational reshuffle of January 2019.

We have manualized procedures of responding to infringement incidents by type* for them to be promptly addressed and the severity standards** classifying into four levels are set to determine the extent of dissemination and reporting of them by the type. In addition, we have established a dissemination and reporting system of infringement incident so that it is reported to the CEO in case of a fatal level issue.

Accidents arising on the customers' systems under operation by SK holdings are also reported based on the same procedures. In addition, the company operates procedures for detecting and preventing infringement threats and for responding to infringement accidents by type.

*Types of infringement : attacks on systems, WARM and virus infection, malicious mail messages

** Definition of severity: Fatal → Critical → Minor → Warning

- Fatal : A situation that can affect the company's operational processes and customer services as the recovery is impossible as the system has been destroyed
- Critical : Operational processes are restricted partly as the system has been partly destroyed or an individual server is being attacked continuously
- Minor : No damages have been inflicted on the customer services although the system intrusion has been attempted or the system has failed partly
- Warning : General threats on the Internet that do not affect the system's functionality or the customer service

Reporting of and actions against infringement incidents

SK holdings is equipped with an escalation Process* in which any of our employees can report issues related to information security.

The issues that are defined to be subject to such reporting include a suspected hacking, malicious code, infection with a ransomware, voice fisching, leak of personal information, and discovery of security vulnerabilities. The company has deployed a system whereby any of such issues are reported to the in-house security report center as they arise. Upon verification of information security breach, a disciplinary action is taken based on the internal policy.

* Corporate system (Hi-SK) → Operational support → Information Security Portal → Report or inquiry of security issues

Data Protection and Security monitoring

Data Protection

To check the information security vulnerability of a system that has a data security risk, SK holdings follows its IT system security procedure while enacting IT security control guidelines. Key data are encrypted and data security has been enhanced by backup to address threats to security or infringement of identified data. Recently, the attacks to the web server and malicious mail attacks increased at data security and information systems. The company has preemptively responded to such security attacks by periodically augmenting security.

Security Monitoring

SK holdings has established measures to strengthen its response against infringements to preemptively prevent external intrusion in cidents. Our security monitoring system detects abnormal acts such as malicious codes hidden in systems or users PCs, leak of information, etc. by collecting and analyzing various packets, logs and event data on internal networks. The individual events are analyzed through security audit and network forensic. Improved security measures are developed to prevent their recurrence.

To respond to cyber threats that is increasingly advanced and intellectual, the company monitors new types of threats through Threat Intelligence that provides the latest attack information at home and abroad. Irregularities are detected early and measures are taken to prevent diffusion of damages by analyzing various data and their connectivity.

In 2019, the company upgraded its security monitoring system and strengthened follow-up actions.

| Security Monitoring System

Status of Anti-DOS attacks detected (daily)
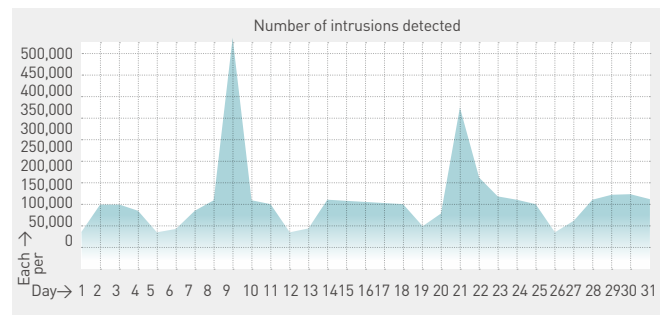
Status of WAF detected (types of attacks)

Extension Filering 37%
Invalid HTTP 9.4%
Invalid URI 0.1%
Unicode Directory Traversal 3.8%
Error Handling 10.7%
Commanding 5.1%
Privacy Input Filtering 11.2%
SQL Injection 1.1%
Request Header Filtering 0.4%
Buffer Overflow 13.8%
Cross Site Scripting 3.8%
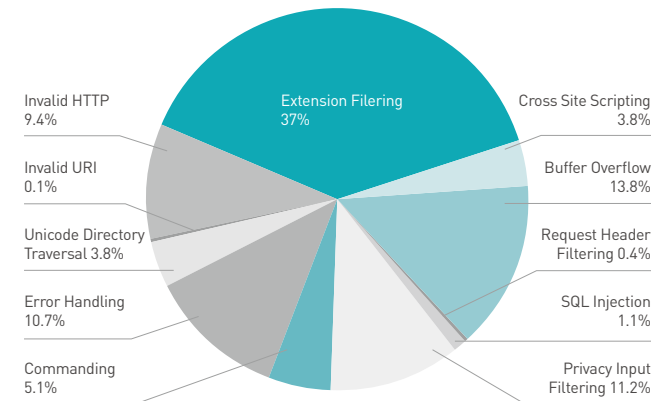
Enhanced Security

Improvement of Security Policies

SK holdings devises areas of improvement of individual policies by listening to and analyzing pain points by conducting questionnaire survey or Focus Group Interview of our employees. In 2020, we modified our security control policies for mail, media, Internet, etc. to promote sharing and collaboration while removing key pain points of our business at an early date. To make up for the relaxed controls, we apply thorough control to changes, including enhanced inspection of abnormal signs and actions against malicious violations.

Internalization of Security Competencies

SK holdings has performed diverse activities to promote the importance of security to our employees and to internalize their security competencies. It has operated basic security education on IT service, enterprise-wide information security training, education for personal information processors and sales officers, and education programs for newly hired or experienced employees. Also, education on information security and personal information protection for all SK employees is being conducted once a year. Furthermore, we regularly conduct education on information security and personal information protection for newly hired employees and officers, and provide secure coding program for IT service operators and developers. To internalize security competencies for Multi-Cloud services, we developed reference models and checklists for security while securing specialized capabilities.
In 2020, we plan to secure and diffuse security support tools for Multi-Cloud services as well as provide education on MS-Azure and Google Cloud Platforms. We will also support the development of our security architecture while examining mandatory compliance issues for the company's digital transformation service, or for migration into the Group Cloud and key projects related to new digital transformation-based business.

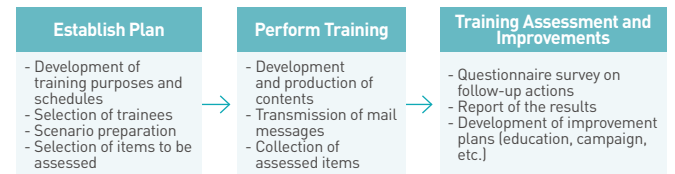### Promoting Security-related Activities

SK holdings enhanced employee awareness of the importance of information security through various promotional activities, including monthly provision of letters and posters on security and security-related news. In 2020, we reinforced security awareness by producing and distributing 'Work from home - smart security life,' as our employees worked from home due to the outbreak of the COVID-19 pandemic. The number of violations has decreased thanks to continued promotional activities, onsite inspection, and active participation by our employees.
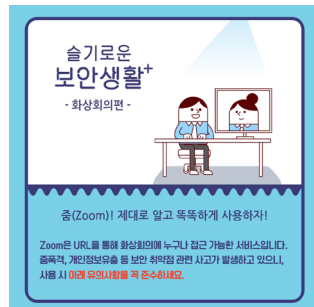
Verification and Certification of Information Security

Security Verification Activities

SK holdings conducts verification activities to ensure the security of our IT infrastructure and management systems. We periodically perform 'hacking simulation training and infrastructure vulnerability inspection' of the company's key systems and newly invested development systems.
To minimize damages by malicious mail messages, we also perform 'simulated training on malicious mail'. We continuously raise employee awareness on security through the training. The results of the simulated training are shared across the company and those who report malicious mail messages are rewarded.

Establish Plan	Perform Training	Training Assessment and Improvements
- Development of training purposes and schedules - Selection of trainees - Scenario preparation - Selection of items to be assessed	- Development and production of contents - Transmission of mail messages - Collection of assessed items	- Questionnaire survey on follow-up actions - Report of the results - Development of improvement plans (education, campaign, etc.)

Information Security Certification

SK holdings has obtained local and international certificates for our information security system - 'Information Security Management System (ISMS)' based on the Korean ICT Network Act and 'ISO27001' certificate of international standard for information security. In September 2019, we successfully went through the audit carried out by the Ministry of Science and ICT based on the Guidelines for Protection of Integrated Information and Communication Facility that checks the physical and technical safety and security of integrated information and network facility. Our key ICT infrastructure facility that is designed to check and prevent cyber infringement was also audited in October 2019.

ISMS certificate
(Hosted by Korea Information Security Agency (KISA)
Obtained in 2013
ISMS-P inspection standards reflected in 2019

ISO27001
(Hosted by BSI Korea)
 Obtained in 2008 Certificate renewed in 2019 ISO27001

R&D

SK holdings strives to become a leading digital and innovative company based on 'data' and 'digitalization'. In particular, we are combining organizational technological capacity based on A.I., blockchain, cloud and big data, and expanding investment portfolio focusing on key capacity in ICT based Digital Transformation (DT).

R&D System

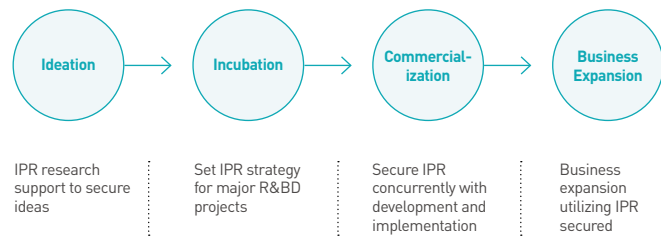### R&D Organization and Manpower

SK holdings launched Digital Tech Center under its Business Model (BM) Innovation Promotion Group by separating its R&D organization from the previous Digital Promotion Group to enhance its BM innovation synergy while augmenting its platform-based business structure. Digital Tech Center consists of DT Technology Strategy Group, Technical Training Group, Platform Group 1, 2 and 3.

R&D Intellectual Property Right Management System

SK holdings provides a sustainable growth by systematically managing and supporting a portfolio of Intellectual Property Rights (IPR).

In 2019, we reassessed 128 registered patents by examining their scope of rights. We also augmented the portfolio of registered patents by selecting those that can be utilized in IPR enforcements.

Further, we supported the transfer of our patented technologies to partner companies for mutual growth. We provided our partner companies with royalty-free licenses on patented technologies by publishing 52 patented technologies on our purchase information system.

In 2020, we developed our own solutions by enhancing our intellectual property rights while augmenting our IPR management system by deploying an in-house system for managing IPRs.

DT Technology Strategy Group	- Technical road map and digital PLM system developed and applied to introduce technology-based governance - Control tower of technology investment for technical collaboration with affiliated companies - ECO partnership developed and applied to promote or augment technology portfolio - Deployment of an enterprise-wide system for integration and sharing of DT assets
Tech. Training Group	- Training for enhancing business competencies in digital technologies (constituents, customer and partner companies, etc.) - Planning and implementation of training customized to business models - User experience consulting and business coaching in close contact - Securing of training P/F and practical hands-on training provided
Platform1 Group	- Identify and capitalize businesses based on AI, data analytics and machine/deep learning (M/L, D/L) - Pending issues at industrial sites are resolved through analytics and business value enhanced - AI data platform (AccuInsight+) developed and applied to external industrial sites
Platform2 Group	- Blockchain (ChainZ) developed, business model explored, implemented, and all other related activities - Application Framework (NEXCORE) developed, provide business and technical support
Platform3 Group	- Development and application of applied solutions and services - Research and development of Deep learning, AI core model engines - Design of Cloud infrastructure and Multi-Cloud integration platform architecture - Design of applications optimized to Cloud environment and its platform service

| Phased IPR Supports in R&D Implementation

Ideation	Incubation	Commercialization	Business Expansion
IPR research support to secure ideas	Set IPR strategy for major R&BD projects	Secure IPR concurrently with development and implementation	Business expansion utilizing IPR secured

| Patent Applications & Registrations

Business Division	Patent Applications/ Registrations
AI	3
Blockchain	3
Cloud	2
Finance·Strategy	4
Solutions	18
Manufacturing	35
Communications	24
Integrated service	1
Existing business models	75
Total	165

Strengthening Digital Transformation Capacity

SK holdings defines digital transformation (DT) technological sectors such as cloud, big data, A.I., and blockchain as key R&D sectors, and expands R&D investment portfolio reflecting technological changes and market needs.

SK Digital Platform
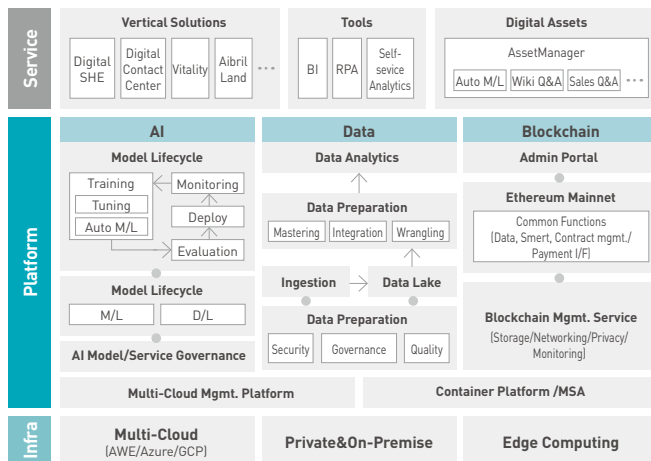
AI (Artificial Intelligence)

SK holdings has created services in diverse sectors utilizing AI, including medicine, manufacturing, law, market, and finance.
Based on an AI platform solution consisting of AI Studio, AI Runtime, and AI Model, we offer Aibril that provides most advanced technologies for natural Korean language and AIDEN, a vision solution for object recognition and image analysis.

AI Studio

It provides a common environment for essential certification, service registration and data management across the entire range of AI services, including voice, text analytics, Chatbot, and Digital SHE. The users may improve the performance of AI services by assessing the performance of models generated while learning the models through AI Studio.
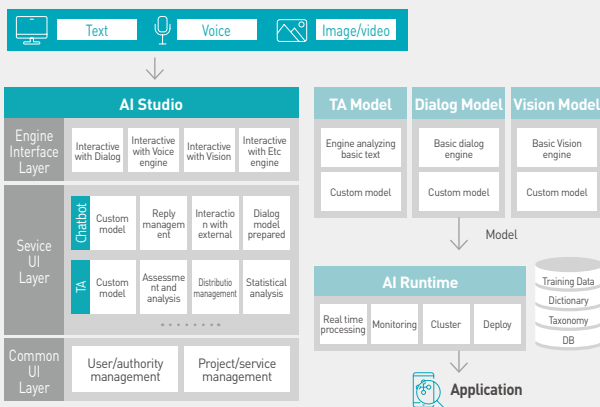
AI Runtime

It provides an environment that distributes and operates verified models to upgrade their performance in a stable manner through AI Studio and AI Model.
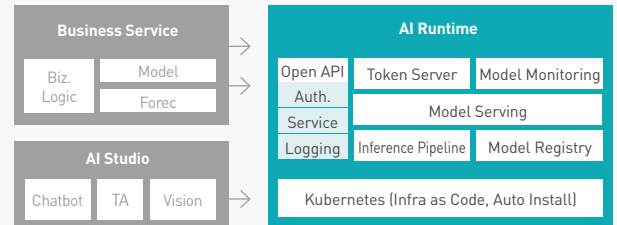
AI Model

Serving as the company's R&D model based on Deep Learning, it consists of diverse core engine models in the natural language and vision domains and application models.
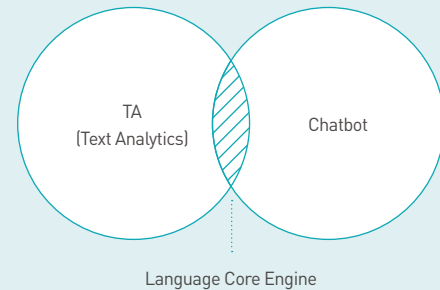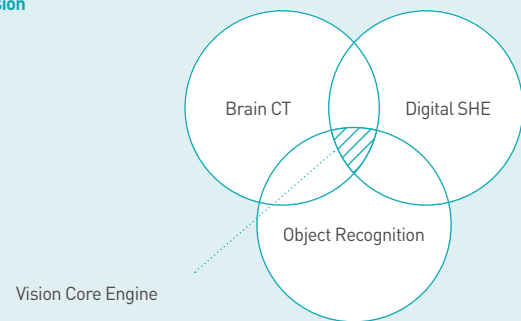
Application models for analysis of natural language, such as TA Category, Entity, Keyword, MRC On-Premise Chatbot solution using a Chatbot model developed in house
A model providing analysis of Brain CT Image and other medical functions
Digital SHE - Vision AI solution for industrial safety (failure of wearing safety helmets, fire, smoke, intrusion, etc.)
Object Recognition - Specific objects recognized which fit the customer's business

Big Data

SK holdings provides big data services with an emphasis on mass data collection, storage, processing, analysis and operation, and develops solutions that combine technologies accumulated from business implementation and latest big data technology.

AccuInsight+ - Big Data Analysis Platform

'AccuInsight+' is a data analysis platform service by SK holdings. It is an integrated service that collects, processes, analyzes, and visualize data, and also provides specialized technical support. AccuInsight+ supports both On-Premise and Cloud Platform services. It runs on Multi Cloud environment as well as CloudZ. In 2020, the platform expanded its support scope. It ensures easy and fast data connection via data API layer, providing high data analysis accuracy while saving time and costs.

Pipeline
A service that supports the development and learning of Data Pipeline and Spark MLlib-based machine learning models (Machine Learning Pipeline) collecting, processing and storing data analyzed in GUI environment.

Modeler
It provides AI Studio, AI Ops and AI Runtime functions that support speedy deployment, learning, operation, and distribution of machine and deep learning models for AI developers, data engineer and scientists.

DCM (Dynamic Cluster Manager)
A service that supports efficient utilization of resources by easily distributing and managing Clusters in diverse environments of On-Premise·Public Cloud

Accuinsight+ functional elements

	① Data Scientist provides independent development environment
Data Science Needs	② Data analysis models converted into assets and continuous renewal enabled
	③ Easy to convert into a selected model operating system

	④ Easy to select Public or Private Cloud Environment
Platform Needs	⑤ Provides platforms utilizing verified open source technologies
	⑥ Pipeline customizing under the customer's environment

Features of AccuInsight+

1) AccuInsight+ supports all servers (Pipeline, Modeler, DCM) required for collection, processing, analysis and utilization of Big data.
2) The users can deploy a flexible service suited to the user's business model by combining various mutually-complementary products in diverse methods.
3) The users can verify and apply values of service application by providing customized education service.
4) It has secured references in diverse business groups, including finance, distribution, and manufacturing.

Fields to apply AccuInsight+

- Enterprise-wide AI platform of primary financial (banking) service sector
- Digital platform for item recommending system of large retailers
- AI platform for detecting manufacturing process abnormalities and for forecasting production quantity

Accuinsight+ Composition elements
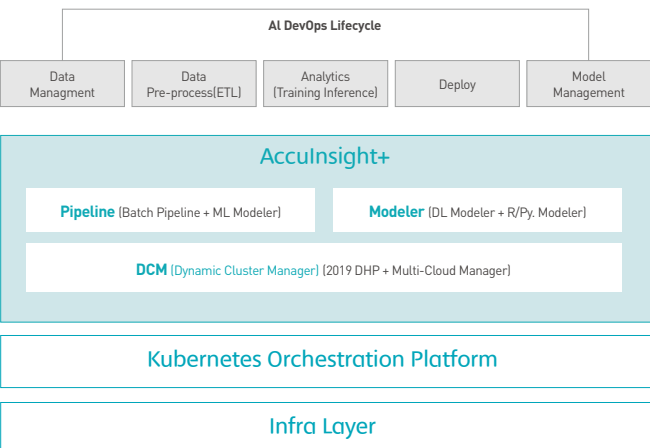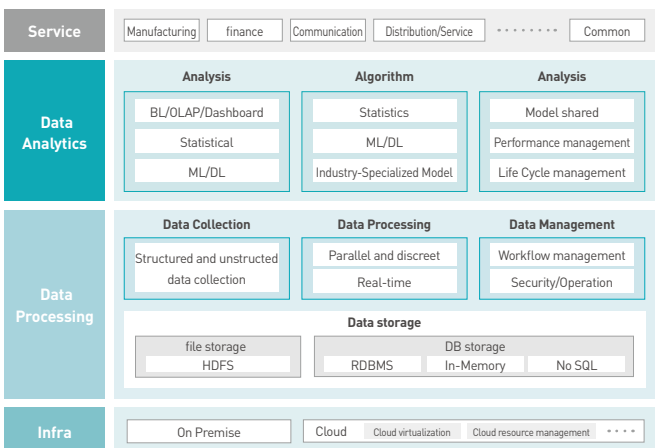
BlockChain

SK holdings provides a social value platform and Blockchain Main Net Service based on 'ChainZ', a Blockchain platform brand. The users can deploy an optimum Blockchain Network by selecting platform and service modules based on their requirements.

Blockchain-based Social Value Platform

SK holdings has a vision to evolve or develop its Blockchain-based societal value platform into a global Blockchain hub by building social and economic ecosystem at home and abroad, starting with the common social value platform deployed for SK Group. It plans to realize a society that grows together by combining transparency, traceability , token economy, and social values by concentrating on areas within the Group with higher feasibility and influence while resolving social issues by preferentially applying the Blockchain technology within the UN sustainable development objectives. Further, it plans to generate a sustainable ecosystem that can be expanded internationally by overseas starting with a corporate social responsibility

Partner for social value Measurement	Local community	Business partner	SK Group	Overseas partners	Social enterprises	Donated

unicef | CSES Center for Social value Enhancement Studies | SK holdings | Community Chest of Korea | UNITED NATIONS

Social value platform

Donation service (Change in a warm manner)
- In 2019, the feasibility of Food for Hunger and Blockchain-based donation platform service was verified
- In 2020, plans to apply 'Fruits of Love' campaign, distribution and sponsorship programs in a trial manner.
- Tracking, reconcilement, and management of donation of coins issued

Donation campaign	Distribution and sponsor management	Cloud funding	SV Wallet

따뜻하게 ChainZ **Blockchain-based donation platform**

Certification or authenication	Issuance of donation coins	coin Tracking	Payment by remittance	Reconcilement of donated funds	Blockchain Monitoring

Blockchain main-net service (ChainZ for Ethereum)
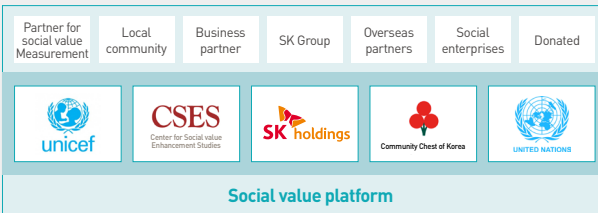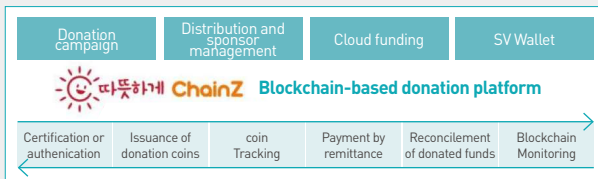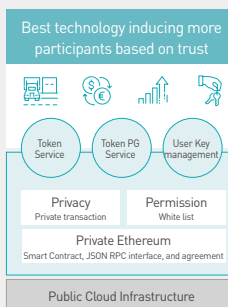
Enterprise Blockchain main-net based on Ethereum that has the greatest Blockchain ecosystem. It is a service with improved security, or by controlling access to network while guaranteeing privacy. Further, it also provides utility services essential to the development of Blockchain- based services. It provides an environment for speedy development of diverse business services utilizing such utility services as token service, personal key recovery service, data traceability, document service, provider management service, and event monitoring

Best technology inducing more participants based on trust

Token Service	Token PG Service	User Key management

Privacy Private transaction	Permission White list

Private Ethereum
Smart Contract, JSON RPC interface, and agreement

Public Cloud Infrastructure

Cloud

'Cloud Z', the cloud business brand of SK holdings has access to cloud centers worldwide and their resources anytime, and can reduce company's operational expenses by providing cloud services such as IaaS (Infra as a Service), PaaS (Platform as a Service) and SaaS (Software as a Service) that meet all customer needs and an integrated IT service that combines ICT new tech elements.

SK MCMP service system

SK MCMP (Multi-Cloud Management Platform) service system is an integrated Cloud management system suited to the customer's Enterprise IT system. It is being developed for multi-hybrid services.
It provides a total Cloud management value optimized to support diversecustomer environments and external enterprises.

MCMP functions

Cloud Biz. Mgmt.	Multi-Cloud Ops	Automation and intelligent service
• Product Mgmt. • Service Billing • Security Account	• Request Management • Monitoring & Alert • Governance & Policy • Container·Cluster Mgmt.	• Operation Automation • Cost Optimization • AI·Data Ops

MCMP configuration and service
- Consist of total 14 services, supports integration of services and independent services

SK MCMP configuration	SK MCMP service

Integrated Control Plane

Cloud Management
9 Process & Governance Polices | 6 Multi-Cloud integration | 2 3 Cloud IaaS & PaaS Monitoring/Alert

Cloud Analytics
1 3 Service Quality Analytics (Ticket/MTTA) | 7 Cloud Service Cost Optimizer

Cloud Management
10 11 Container Mgmt. Platform | 12 Backing Service | 13 Templates & Bolierplates

1 4 8 Integrated Service Desk, Service Management, Automation Toolkit

14 SK Multi-Cloud Managed Service

SK MCMP service:
1. Support Portal
2. ZMON
3. Z CARE Alert
4. Z Admin
5. Z Manager
6. Z Bill
7. Z Cost Optimizer
8. Z Bip
9. Z Process
10. Z CP
11. Z CP MCM
12. Z CP Backing Service
13. Modernization Framework
14. Managed Service Catalog

- End-to-End integration platform ranging from request, error, and change management and monitoring required for Cloud Managed Service to Cloud merchandise management, billing, and cost optimization
- Container Management Platform (Z CP) that can control identically irrespective of Container·Kubernetes types
- Modernization Framework and Backing Service that facilitates Container-based Micro service realization
- Cloud Z service portal (https://support.cloudz.co.kr)

Promotion of MCMP advancement

- Tool optimizing the operation for Premium MSP
  It supports the optimum operation through automation and expansion of objects of multi Cloud integrated services by integrating essential functions for the operation of Enterprise Cloud.
- Securing and gradual upgrade of functions for competitive advantage
  It secures functions for intelligent services for creating business value while upgrading basic functions required for business and enhancing automation functions for Managed services.

Cloud Z CP

'Cloud Z CP(Container Platform)' service is a platform service that inclusively provides diverse functions required for the enterprise customers that wish to modernize systems and applications based on Container service.
In particular, it manages the life cycle of Kubernetes services (EKS, AKS, GKE) that is provided on Multi-Cloud. It provides services that facilitates development and enhances operational efficiency.

Z CP key functions

Multi-Cluster Mgr.	Development	Operational
• EKS, AKS, GKE Provisioning & Life-Cycle Mgmt. • Multi-Cluster Usage Monitoring	• CI/CD Pipeline • Service Catalog • Kubernetes Dashboard & Console	• Container Monitoring & Logging • Istionn-based Sservice Flow Control • Incident Tracing

Z CP concept

Z CP differentiating functions - MCM
Z CP's MCM (Multi-Cluster Management) generates container services (EKS, AKS, GKE) of AWS, Azure and GCP Cloud as the basis for automation tools. Being a service managing the life cycle, it enhances the operational efficiency by easily creating and managing the container services in diverse Cloud environment. It provides differentiated functions unique to ZCP that can be easily applied to an enterprise that desires to modernize processes based on container services.

Digital Labs for X'

'Digital Labs for X' is a customized education program for innovation of digital transformation of SK holdings that solves field issues together. New technological architecture needs to be introduced for digital transformation, including Blockchain, Cloud, AI·Data, and UX. Technologies suitable to the business nature and characteristics of the organization and the application method should be verified first. To that end, Digital Labs for X supports the internalization of new technological capacity and the innovation of core businesses.

Digital Labs for X program

Customized Training	Digital Labs for X is a basic curriculum for specialists of digital labs. It covers the planning, design, operation and assessment in a course based on the customer's requirements.
Mini-Project type coaching	The current customer issues are analyzed → services are planned → and scenarios are developed to realize services directly.
Blockchain Labs	It provides a course officially certified by ConsenSys, a global Blockchain company ranging from the concept of Blockchain to the development of Smart Contract and DApp.
Cloud Labs	It provides a program optimized for enhancement of skills by sector-specialist instructors from courses for understanding the basic concept of Cloud to the hands-on developer courses.
Data·AI Labs	It is an education program focusing on practice, which can derive business insight while resolving pending issues related to analysis and processing of large volumes of data using a data platform.
UX Labs	This program consists of basic courses ranging from UX basics, research methodology, and theories of prototyping skills to workshop courses for project problem solving to decision making.

● Coming Soon

Competition held

SK holdings organized the '1st Competition of Machine Learning Based Data Analysis' to provide participants with a hands-on and practical experience on valuable Digital Transformation technologies. The competition was held in two segments - one for experts and the other for amateurs. One expert and six amateurs won prizes. The winners and the participants exchanged knowledge while the employees learned know-how. The company plans to further enhance the exchange of knowledge for its employees by extending such events to all program areas in the future.

Quality & Service Management

SK holdings expanded its operation focused on creating customer values by resolving customer pain points with digital technology. We operate a high level service management system based on Service Level Agreement (SLA) to provide services suited to the customer's requirements. We a lso communicate with our customers through diverse channels.

Integrated Quality Innovation System

Service Level Agreement (SLA)

We operates a Services Level Agreement (SLA) system to enhance customer service satisfaction by preemptively surveying and removing potential problems with the SLA system. The SLA defines the objective and responsibilities of IT services between service providers and the customers, and is used to quantitatively measure, evaluate and manage the served that is provided. It is an agreement that outlines the level of service so that the contract is managed through mutual inspection of the performance of the IT service and cooperation between the two parties. We developed Service Level Management System (SLMS), which reflects specific standards of the IT Service Infrastructure Framework ITIL (IT Infrastructure Library) and are realizing excellence in service management. The company provides the SLMS services so that the customers may monitor the service level by the impact of errors of service interruption and surveying and managing the service performance and penalty cost through the SLMS.

Operation of SLA-based Credit/Earn back policy

For each SLA forged with customers, we operate an SLA-based Credit/Earn back policy. Credit is the penalty amount the company is required to pay to customers when the service performance falls below the target. The Credit policy s an incentive for us to improve our service level. Separately, once the credit is paid to customer, the Earn back policy enables the return of the credit back to the company when we reach the expected service level through the service level improvement. SK holdings strives to enhance our service level through diverse reviews of service improvement efforts meeting the customer requirements for enhancing the stability of our services.

Operating Process of SLA (Service Level Agreement)

Service levels at SK holdings are managed based on the 7-step process consisting of enacting SLA (structure designing, drafting, consulting & agreement), constructing the service level management system, sending to the operating body, monitoring, reporting, servicing and revising SLA. In the SLA enactment step, customer requestsn are collected to design the SLA structure, details are confirmed and agreed on through consulting, and 'SLM methodology' is developed and operated. Then, the service level management system is designed, and the SLA system is used so that management items are measured and goals are agreed upon. After servicing, major issues are identified through SL reporting, and service evaluation meetings are held on a monthly basis for review with customers.
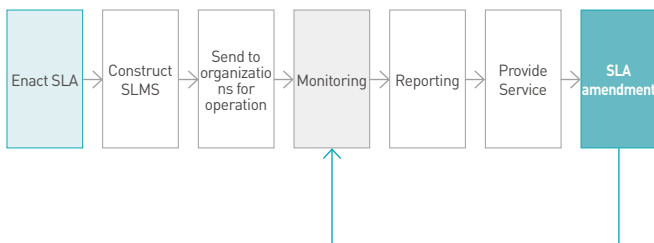
Optimizing the Process(PI) for DT/ITS

SK holdings continuously innovates its processes by reflecting the improvement areas raised by our customers and constituents to preemptively respond to changes in the digital transformation of the IT infrastructure. Thus, we embarked on the actual system development by completing the development of the DT/ITS integrated operations management structure through optimization of the operational processes in 2018. In April 2019, we launched our ServiceFlow system.

The ServiceFlow system eliminated inefficiencies in the existing operational method that were causing disruption to processes by incessantly connecting the entire ITS operational processes. In other words, as processes from customer request to the execution of the SLA signing are all connected, customer requests (Tickets) are tracked is fully completed.

The ServiceFlow system has enabled collaboration with external Cloud vendors by connecting Cloud operational processes as a sub-processes of the ITS operation. This measure is to maintain system consistency from the perspective of the customers and operators. In addition, the company not only enhanced its delivery competitiveness, but also improved operational quality and differentiated customers services by introducing work management processes that enable flexible response to any possible changes in organization and work methods in the future.

| ServiceFLOW System
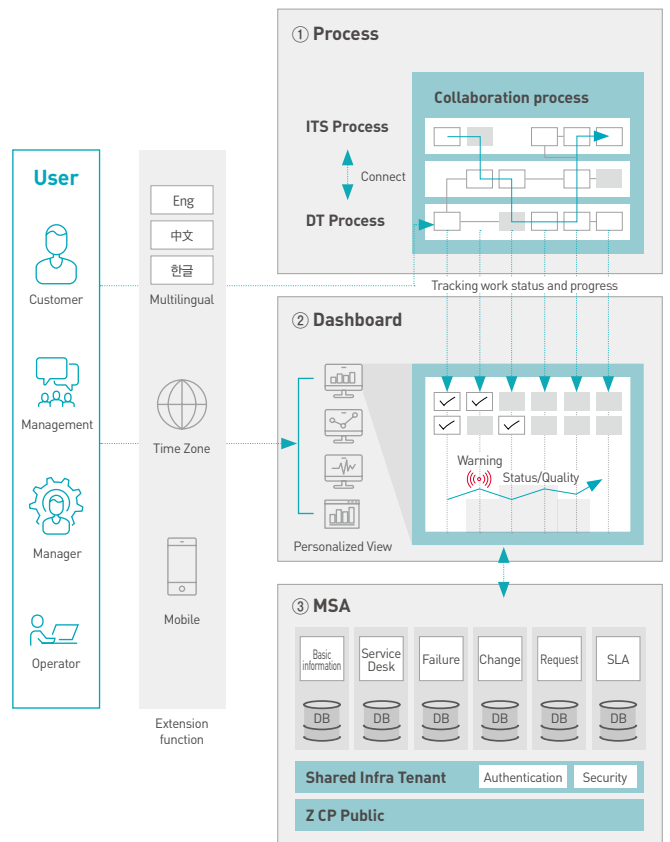
Enhanced Management Activities Reflecting Needs Of the Stakeholders

IT customer satisfaction level survey

Since 1999, SK holdings has conducted survey on IT services satisfaction of end-users at our partner companies in an effort to enhance the service quality. Efforts to improve the quality of service have been made by taking unsatisfactory elements identified and analyzed in the satisfaction survey into consideration for SK holdings to offer high-quality services.

In 2019, the survey was conducted on 1,353 customers (1,172 persons online; 181 face-to- face) through a specialized agency. We also conducted an online survey of 500 competitors for comparative analysis.

The total customer satisfaction score of SK holding increased 0.2 points(increase compared to the previous year) to 75.7 points, 4.3 points higher than the competition. Overall customers' IT service satisfaction level showed a score higher than the competition in all quality assessments. In particular, the quality of the company's user support ranked to be the best among the six quality areas. However, the network access and response speed needs more improvement than any other areas in the network quality with low satisfaction level shown in the area.

SK holdings raised the service standard by identifying areas of improvement through sharing analysis results and VOCs with business units.

In-Depth Interview (IDI) conducted

SK holdings conducts in-depth interviews with its customers to listen to the service they experience and their voices on improvement from the viewpoint of the operators. We assess a the comprehensive quality level and related issues, which are incorporated into enterprise-wide improvement plans to report to the management team and to share with the business units.

We interviewed our customers and its constituents to assess our IT service level in connection with the overall assessment of IT service, service support systems, service operation quality, and new business support. The result of the interviews revealed that the satisfaction with the IT service stability was high but many respondents noted that our support systems were insufficient for operational expenses, customer contact point, test environment, and global business. Upon completion of the IDIs, we embarked on an enterprise-wide measure to address the key weaknesses expressed by the voice of customers.

Activities to Enhance Ceustomer IT/DT Insight

We are promoting our customer IT/DT (Digital Transformation) Insight through diverse activities, including participation in ICT Committee under SK Group SUPEX Pursuit Council as well as, its DT Sub-Ccommittees, CIO Council, and IT Planning Team Leaders Council meetings.

- DT Sub-Committee

DT Sub-Committee continues to spearhead customer digital transformation, focusing on customers' business model innovation. With the development of digial technologies, we were able to redefine stakeholders and customers as well as share and converge assets and data. Business model innovation begins by generating new values based on the new digital technologies. Platforms are instrumental in creating new values by accelerating convergence of stakeholders. The company's DT Sub-Committee concentrates on 'Design of Business Models Based on Stakeholder Participation Platforms' that reflect characteristics of our customers. The DT Sub-Committee holds its meetings bi-monthly (five times a year). Meeting agendas include the content of clients' platform business models, digital technologies utilized on platforms, and plans for operating DT sessions of Yicheon Forum.

- CIO Council

CIO Council is an advisory body under the DT Sub-Committee that supports decision making while sharing IT/ICT pending issues with the goal of accelerating customer business model innovation based on Digitalization and Data. CIO Council consists of CIOs at 17 partner companies. Its meetings are held bi-monthly (five times a year). In 2019, the Council members shared best case studies ons business model innovation projects based on digital transformation, including AI and IoT, by vising Company S, a global IT business invested by SK holdings, through Global ICT Insight Program.

- IT Planning Team Leaders Council

IT Planning Team Leaders Council analyzes the latest IT/DT trends and the status of projects of SK holdings. In 2019, the council discussed plans for SV measurement and promotion of integrated management platforms for social values and customer voices. Its members presented multi-Cloud services, proposed solutions for smart vision, deployment of open-source compliance systems, and systems for monitoring of integrated controls.

| Flow of Reflecting Voice of Customers and Satisfaction Level Survey Outcome

Survey planning · Advance preparation · Physical survey · Analysis of survey outcome · Service improvement
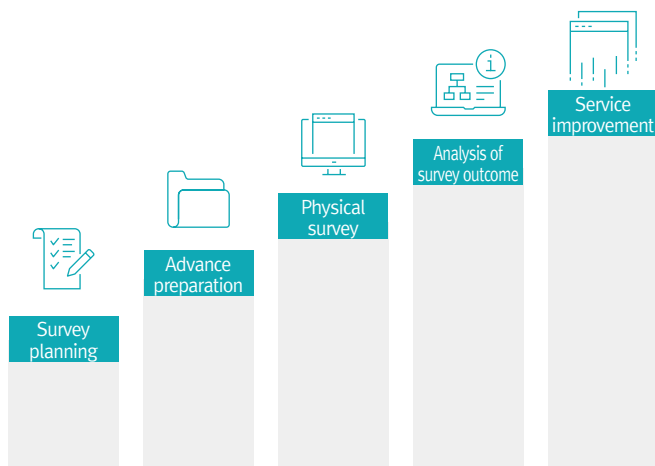
| Organization of Sub-committees/Councils

ICT Committee
DT Sub-Committee
CIO Council
IT Planning Team Leaders Council
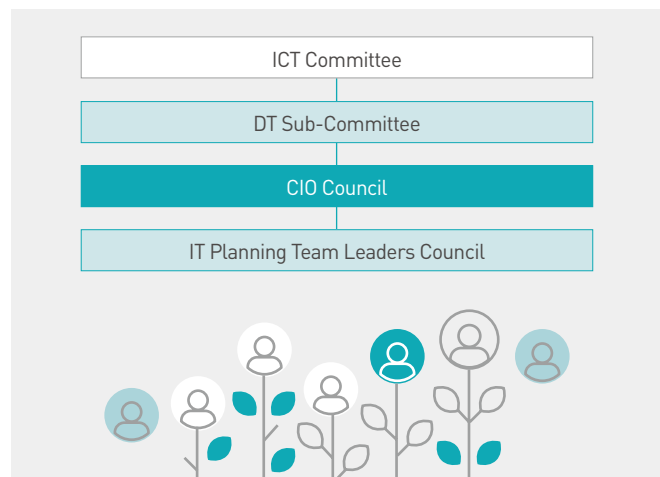
Mutual Growth

SK holdings is committed to creating a fair trade culture based on trust of business partners to fulfill 'happiness of stakeholders', which is the management philosophy of the company, and build partnership that encourages mutual growth by strengthening corporate competitiveness. By acknowledging that the growth of partners leads to our growth, we will strive to empower the entire value-chain of SK holdings based on various support and cooperative measures

Establishing the Implementation System for Mutual Growth

Mutual Growth Policy

SK holindgs exerts steadily to develop a fair transparent relationship with its Business partners based on trust. It has reinvigorated the communication with its Business partners by operating diverse support programs. It contributes to the enhancement of their sustainable management by creating Mutual Growth performance by deploying a long-term mutually cooperative partnership based on a fair trade order established with them.

Organization for Mutual Growth

In order to strengthen the mutual cooperation system with business partners, SK holdings has set up the Mutual Growth Consultative Group. The Mutual Growth Consultative Group consists of the Procurement Group, Ethics Management Team, Corporate Finance Group and Digital Process Innovation Group. It autonomously inspects the compliance of the monthly mutual growth agreement to improve fairness and legality of contracting trades.

Internalizing a Culture that Practices Mutual Growth

SK holdings has internalized the mindset and corporate culture for practicing Mutual Growth by developing and operating diverse programs based on performance of roles by the concerned parties while sharing the common understanding through communication among the stakeholders.

Conversion of the Mutual Growth viewpoints on the existing policies and institutions into the viewpoint of "Mutual Growth Culture" "by strengthening the competitiveness on the long-term perspective"
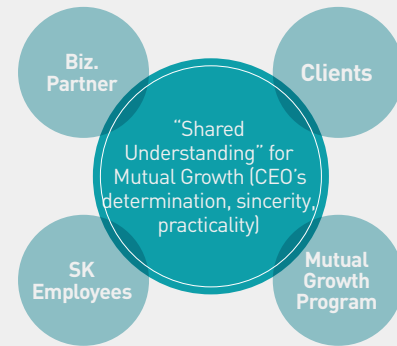
Outcome of Pursuing Mutual Growth

The Mutual Growth Committee quantifies the level of mutual growth of the company and publishes the annual mutual growth evaluation results. SK holdings received the 'Excellent' Grade for 5 consecutive years since 2014, which is the highest grade for mutual growth.

Rordmap and Direction of Mutual Growth
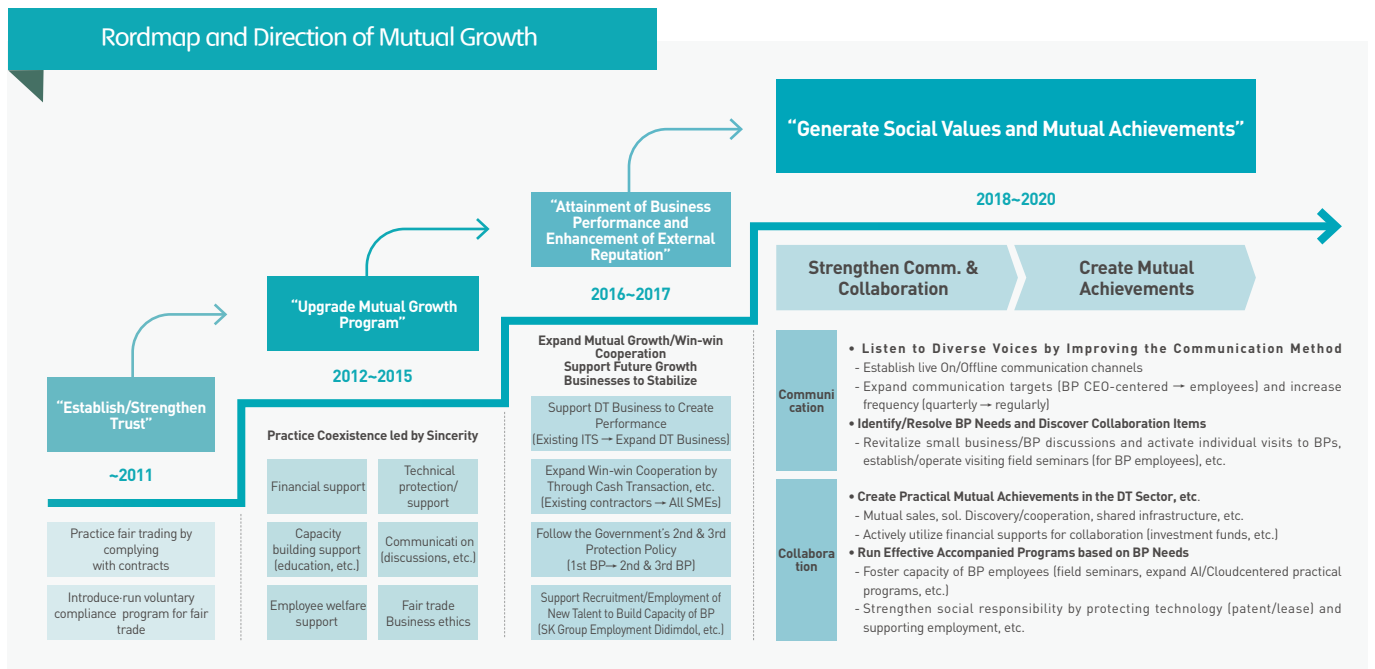
SK holdings Mutual Growth Growth Programs

"Stengthening competitiveness of SK Holdings and partner companies" by
operating programs that can provide practical assistance to partner companies

Financial support

- Operate win-win growth fund and network loan
- Provide direct loan system
- Contribute funding in win-win growth investment

Technical support and protection

- Development methodology, provision of patented technologies
- Joint R&D and marketing
- Performance sharing system
- Tech escrow system

Education and training support

- Education and training support
  - SK Group courses
  - SK holdings internal courses
  - External IT specialist courses

Business support

- Sharing of business information in advance
- Joint market advancement
- Management counseling

Communication vitalized

- Regular meetings with business partners
- Visit to individual partner companies
- Operation of online grievance center

Sharing of welfare and benefits

- Link to outside service providers
  - Group liability insurance, health checkups and Mutual aid service

Fair trade and ethical management

- Compliance with four major rules for fair trade
- Utilize standard sub-contracting contracts
- Operation of ethical management system
  - Preemptive RM, enhancement of ethical management

Continuous development of programs

- Based on the real voice of the partner companies,
  - Improve and enhance existing programs
  - Continuous development of new programs

Promoting Communication

Engaging Business Partners

Through active engagement with business partners, SK holdings strives to achieve mutual based on enhanced mutual understanding among the partner companies.

Mutual Growth Day is designed to assess the results of the mutual growth activities over a 12-month period, to share business approaches and plans, and to pursue mutual sustainable development with the support of the CEO. It has been held every year since 2015. On 2019 Mutual Growth Day, 'Mutual Growth Prize' was awarded to all 90 partner companies to express gratitude and to further encourage a spirit of collaboration.

Business Partner CEO Seminar is organized every year to discuss with over 100 representatives of partner companies concerning measures to create win-win business results. In 2019, a range of plans for cooperation with the partner companies were discussed as well as the introduction of digitalization that enables the development of sustainable growth models and business innovation based on social values. Participants at the seminar also reinforced the need for building a greater industry ecosystem.

It has also exerted to remove working-level difficulties while encouraging collaboration desire through communication with the CEO or officers of the partner companies by visiting the individual companies under collaboration.

Operation of Online Communication Channel

SK holdings has prepared plans to strengthen the relationship with its business partners based on their input compiled through the operation of the online communication system (purchase information system). Through such communication, the business partners are able to present their proposals on business cooperation and request for settlement for complaints and recommend improvement areas for purchase processes. business partners are able to check the progress or outcome of such proposals and requests for improvement. In addition, they may also obtain various managerial consulting (on accounting, planning, legal affairs, human resources, etc.).

Technical Support & Protection

Providing SK holdings' Patented Technologies

The company provides the royalty-free intellectual property rights to SK holdings' technologies to business partners and startups. Through this, business partners can secure opportunities to advance into new business areas and maximize work efficiency with small resources, while SK holdings can expect profit sharing through performance sharing contracts and the sharing of intellectual property rights with joint patent application.In 2019, SK holdings signed an MOU on free provision of integrated database management solutions based on Cloud service for win-win growth with 10 partner companies. In so doing, the program strengthened the competitiveness and enhanced profitability by deploying data based systems.

Free Transferring of Patent Tech. in 2019: 31 cases
Patent filing support service: 2 cases

Transfer of Patent Tech. of SK holdings (Rights Contract/MOU)
For joint R&D and advancement into market with BPs
BP & Start up
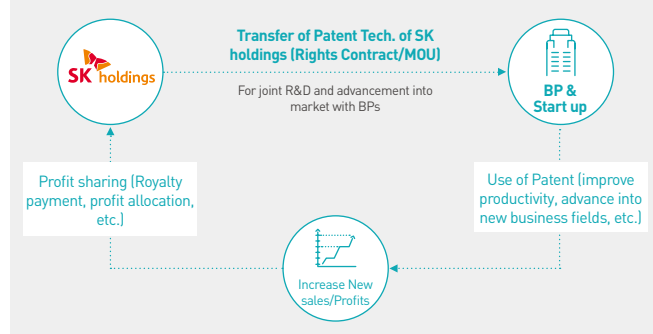Profit sharing (Royalty payment, profit allocation, etc.)
Use of Patent (improve productivity, advance into new business fields, etc.)
Increase New sales/Profits

Joint R&D and Joint Advancement into Market

SK holdings has supported capacity builiding of the business partners by transferring its technologies and business know-how through joint R&D implementation. It has also supported the enhancement of business competitiveness of partner companies by jointly advancing into new global markets.
The business partners expect R&D promotion based on stable sales channels and elimination of issues related to limited resources and environment utilizing the technological, finance and marketing infrastructure of SK holdings. On the other hand, SK holdings is able to generate success by resource saving, new market exploration, and shortened lead time through collaboration with partner companies.

2019 joint R&D projects:10 cases
Joint advancement into new markets: 13 cases

Joint R&D implementation (New business projects,
Preparation for joint market entry (New global markets)
Business partners
New business projects performed (Utilizing Sol., etc.)
• Joint patent application
• Revenue sharing
Utilize/sell R&D solutions Advancement into new markets
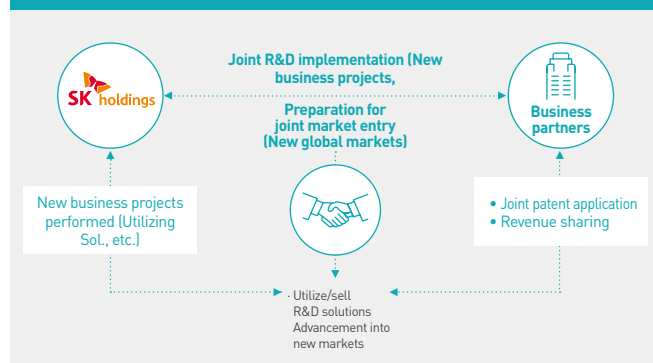
Technical Data Deposit Policy

To protect key technology of business partners, SK holdings and business partners jointly store data in a third party organization to prevent leakage risks of SK holdings' technology. Through this, business partners can prevent technology theft, leakage and loss, and SK holdings can guarantee licenses and R&D stability.

2019 Tech Escrow projects: 56 cases

Bilateral agreement on Tech Escrow
Business partners
Tech data issued when given events arise (conditions for issuance are agreed on in advance)
Tech Escrow Contract
Tech Escrow Contract
Escrow agency
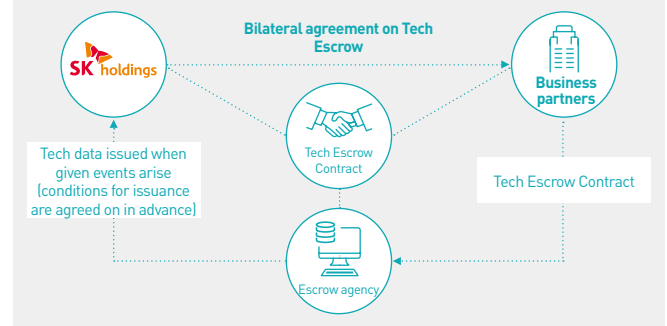
Fair trade and ethical management

To instill a fair business culture, SK holdings has augmented the foundation for win- win growth by deploying an autonomous fair trade compliance system based on four guidelines issued by the Fair Trade Commission (conclusion of written contracts, selection and management of business partners, organization and operation of internal review committees, and issuance and archival of documents).
It has also augmented the compliance of ethical management with its business partners by enacting ethics code and guidelines and action plans for the organization and operation of ethical management systems.

Sharing of welfare and benefit systems

SK holdings supports the pursuit of the happiness of the employees our the partner companies and outsourcing companies by providing a range of welfare and benefit systems on same terms and conditions of its own employees. In particular, the company provides equal conditions as its own employees for group accident insurance, health checkups and funeral services.

Health checkups
Group accident insurance
Mutual aid service
SK employees
Business Partners
• Designate service provider
• Confirm service conditions
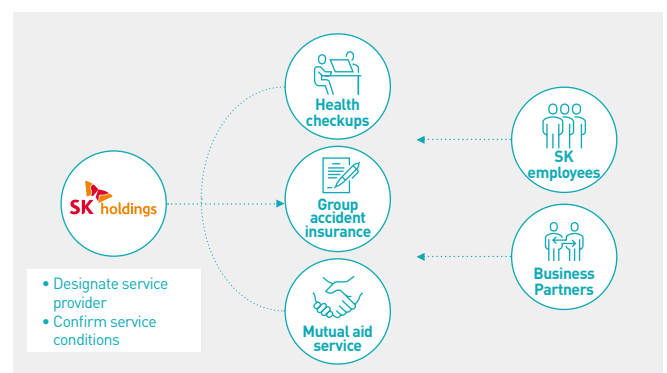
※ BP: Abbreviation or acronym of business partners, referring to strategic, superior and ordinary grade partner companies dealing with SK holdings

Education and Training Support

SK holdings supports the enhancement of business competitiveness of its partner companies in management, marketing, finance, leadership, etc. through SK Mutual Growth Academy, a Group education program. It provides free custom- tailored education for employees of its partner companies based on annual education plans. It has also contributed to the enhancement of business capabilities of partner companies and development of sound IT service market through education courses for enhancing its outsourcing ability.
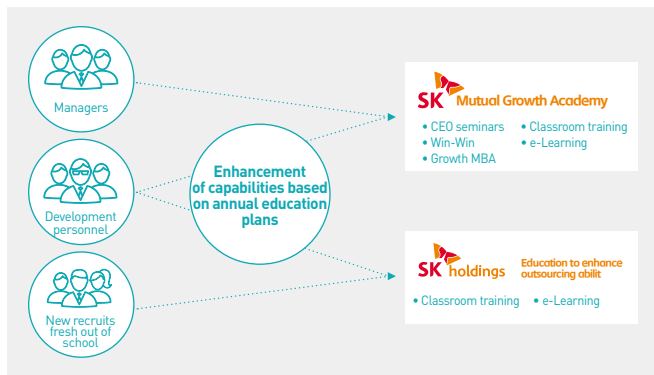
| Status of Education Support in 2019

Classification	Name of education	Detailed programs	Attendees (persons)
SK mutual Growth Academy	**Mutual Growth CEO Seminar**	Specialist lecture (management, humanities, history, etc.)	50
	Mutual Growth MBA	8-Week mini MBA course (including global W/S)	10
	Mutual Growth e-Learning	100 online courses on IT, OA, management, etc.	1,029
SK holdings	**VLS**	66 online courses on IT, Management strategies, etc.	193
	Development of DT (Cloud & Big Data) competencies	-	117
	Support to external education agencies	Multi Campus, Korea HRD, Korea Hewlett-Packard Education Center, Courses supported	24

Financial Support

SK holdings provids a foundation for its partner companies to secure funds at interest rates lower than the market rate by operating win-win growth funds and network loans. We also introduced a payment process oriented to the partner companies so that they can secure cash liquidity carry out planned financial activities.
SK holdings provided approx. 12.8 billion won funds in 2019.
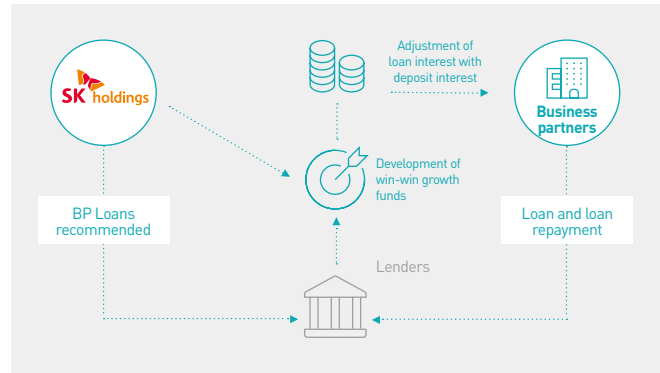
Business Support

SK holdings supports the enhancement of productivity of its partner companies by helping the planned personnel management and fostering a superior workforce in different sectors by sharing the information on business opportunities with the partner companies in advance. In so doing, partner companies are able to secure talented personnel with increased lead time for securing human resources. They are also able to secure business or management stability through the support of HR management. SK holdings has enhanced the competitiveness of business partners through its support in talent acquisition and education programs valuable before starting the projects.

| Advance sharing of business information

Status of Supply Chain

Status on Supply Chain Management

In 2019, SK holdings purchased a range of hardware, software, systems and solution development services amounting to 109.85 billion won through our 1,480 partner companies. Further, SK holdings contributed to the development of the relevant areas with our policy on local procurement for overseas business operations and corporate social responsibility programs.

| Domestic & Overseas Supply Chain Purchase Status

[unit : KRW 100 million]

Classification		2017	2018	2019
Total purchased amount		7,721	8,889	10,985
Hardware/ software	Domestic	3,657	3,840	4,566
	Overseas	180	22	59
Outsourced personnel	Domestic	3,826	5,017	6,279
	Overseas	58	10	81

Selection and Assessment of Business Partners

Selection of Business Partners

SK holdings evaluates business partners based on its review criteria of their financial soundness, business stability and sustainability in order to ensure the fairness and objectivity when selecting business partners. SK holdings emphasize the practice of compliance-based management and social responsibility in management, which are the backbone of the win-win growth by enacting 'Business Partners Code of Conduct' in 2017. Reflecting our committment to building sustainable win-win growth culture, SK holdings request all business partners to agree to the business ethics pledge and compliance with security policies.

Assessment and Management of Business Partners

SK holdings evaluates and manage our business partners in a fair and transparent manner. To instill a culture of sustainable win-win growth through mutual cooperation, SK holdings classifies its partner companies into Strategic, Superior and Ordinary Business Partners and apply differentiated incentives based on their grade.

Systematic BP Management Process for Win-Win Growth

Temporary Supplier
- Companies that fall below the business partner entry standards but have potentials to become business partners (limited transactions permitted, including employment them for certain specified projects only)

Items checked for selection and assessment of business partners
- Transaction record in the past year
- Business performance assessed
- Credit rating
- Certification related to business performance

Selection of business partners

General business partners
- Business partners with a certain level of market competitiveness and financial soundness to maintain regular or general partnerships

Superior business partners
- Business partners with superior business relationship (mutual growth programs are applied with preference)

Strategic business partners
- Business partners with strategic collaborative partnership (top-priority application of collaboration opportunities and mutual growth programs)

Adjustment of business partner grades based on periodic assessment (Every April - June)

85 points   75 point   64 points

Strategic BP   Superior BP   General BP   Temporary BP
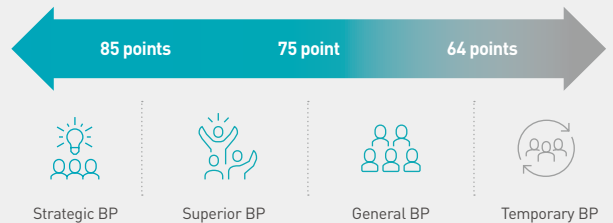
Regular Assessment Items of Business Partners
- Business performance ability
  - transaction performance, business performance records, assessment and number of regular employees, etc.
- Level of partnership with SK holdings
  - Level of support to external business projects
- Assessment of sustainability of partner companies

| Partner companies by type and grade

Classification	Number of partner companies		General		Superior		Strategic	
	'18	'19	'18	'19	'18	'19	'18	'19
Product Purchasing	138	141	108	112	30	29	-	-
Outsourcing	131	125	73	74	53	46	5	5
DT	49	69	49	69	-	-	-	-
Total	318	335	230	255	83	75	5	5
Parties Agreed to Mutual Growth among Business Partners	46	49	19	20	22	24	5	5

Management of Sustainability of Partner Companies

Supply Chain Management

To build a sustainable healthy supply chain, SK holdings enacted a partner company Code of Conduct comprised of four major principles - human rights and labor issues, safety and health, protection environment, and ethical management. The company restricts future transactions with business partners that violate the code and publishes the code on its purchase information system (https://procurement.skcc.com/hdk/bbs/noticeView.do). SK holdings evaluates sustainability management of business partners on a comprehensive level as a measure to prevent sustainability risks in advance.

SK holdings' Purchase Information System

Partner Company Code of Conduct
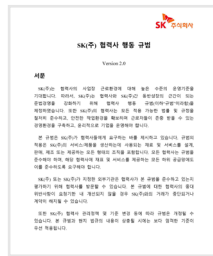
Supply Chain Risk Management Processes

SK holdings established a systematic process for integrated management of supply chain risks, including those related to economy, environment, and society sectors. SK holdings evaluates key sustainability factors as well as business capacity of our business partners and their level of partnership with SK holdings in regular annual assessments. The annual evaluations provide standards to determine continuity of transactions with business partners. It also provides differentiated benefits and supports, depending on evaluation scores.

※ Guidelines for scoring in regular assessment of partner companies:
  Points added (new business, mutual growth, sustainability, practice of CSR, etc.)
  Points deducted (Non-compliance with ethical management and security policies)

| SK holdings supply chain risk management processes

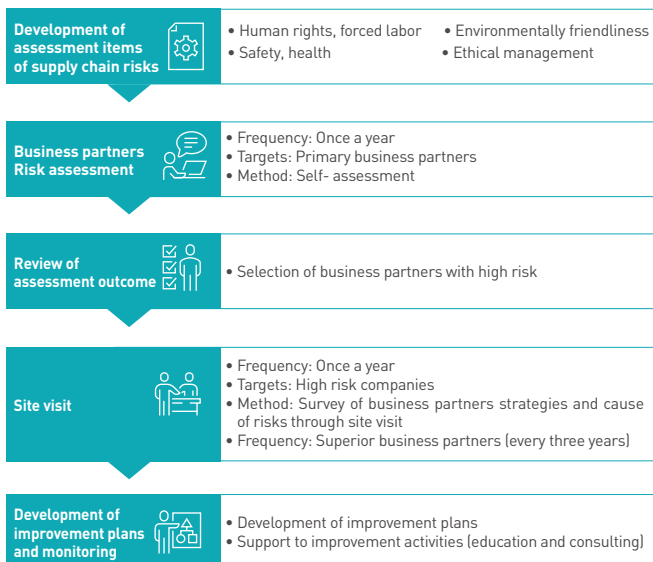| Development of assessment items of supply chain risks | • Human rights, forced labor • Safety, health • Environmentally friendliness • Ethical management |

| Business partners Risk assessment | • Frequency: Once a year • Targets: Primary business partners • Method: Self- assessment |

| Review of assessment outcome | • Selection of business partners with high risk |

| Site visit | • Frequency: Once a year • Targets: High risk companies • Method: Survey of business partners strategies and cause of risks through site visit • Frequency: Superior business partners (every three years) |

| Development of improvement plans and monitoring | • Development of improvement plans • Support to improvement activities (education and consulting) |

Development of Assessment Items to Enhance Sustainability of Supply Chain

To check sustainability risks that may arise at partner companies, SK holdings developed 14 assessment items to enhancing the sustainability of its supply chain, including those related to safety and health.
All SK holdings partner companies, except for temporary business partners, check their sustainability risks that may arise in their supply chain through self diagnosis based on the above assessment items. SK holdings reviews risks of its superior and strategic business partners through site visit every year based on the assessment results.
SK holdings plans to have all of our General, Superior and Strategic partners to perform the self-assessment of their supply chain sustainability by 2023. We also plan to steadily increase site visits for risk management.

Results of Partner Company Sustainability Assessment in 2020

SK holdings assesses the sustainability of Superior and Strategic business partners. The business partners gained excellent results of 89.2 points on average, in human rights and forced labor, safety and health, environment-friendly management, and ethical management. The score rose by 0.2 points from 2019. The ethical management segment, however, is relatively lower (75 points), indicating the need to develop management policies against law violation by their customers and subcontractors and conducting anti-corruption education programs.

| Assessment Items

Classification	Detail Detail	Assessment by item
Human rights and labor	Minor or forced labor	Do they have internal policies for preventing minor or forced labor?
	Compliance with labor standards	Do they have internal policies and processes for following labor standards?
	Employment terms	Do they delivery written documents specifying employment terms?
	Human rights, prohibition of discrimination	Do they have internal policies concerning human rights, prohibition of discrimination?
Safety and health	Safety and health of employees	Do they conduct assessment of workplace safety or education on safety and health related to work?
	Occupational injuries and deaths	Did they have any occupational incidents in last three years?
	Health management	Do they have any program for employees' health management?
	Violation of safety or health related statutes	Did they violate any safety or health related statutes in last three years?
Environment-friendly business management	Violation of environment standards statute	Did they violate any environment standards statute in last three years?
Ethical business management	Prevention of corruption	Do they have an internal policy or conduct any education on prevention of corruption?
	Corporate social responsibility	Do they perform any corporate social responsibility activities (voluntary service, donation, etc.)?
	Customer satisfaction level	Does the company conduct customer satisfaction surveys on the provided services?
	Customers and subcontractors Violated of related statutes	Did they violate any statutes concerning products, service and consumer protection and fail to make payments to subcontractors?
	Protection of customer information, etc.	Do they have any policies or education programs on protection of customer information?

| Key performance indicators

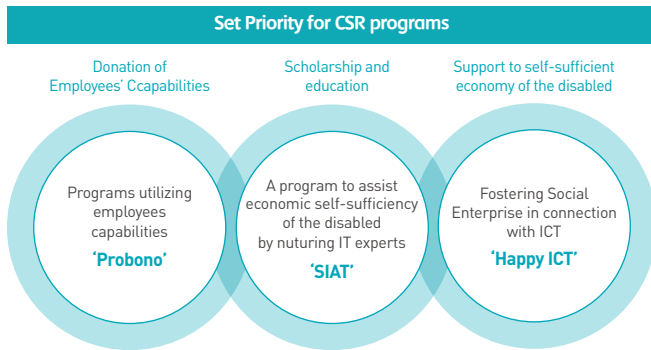| Classification	Objectives	Target year
Ratio of partner companies assessed	1st Business Partner : 100%	2023
Level of sustainable business management of business partners	Over 90 on average	2023
Ratio of partner company assessment workers who took ESG education	100%	2023

Corporate Social Responsibility

SK holdings is committed to solving pressing social issues as a corporate citizen. We create social values by upporting activities to help vulnerable groups through our corporate social responsibility programs.

Corporate social responsibility programs based on DT technologies

SK holdings promote diverse CSR activities based on our DT capacity, including SIAT, Probono, and Happy IT Scholarship programs. In so doing, SK holdings pursue happiness of its stakeholders by resolving social issues.

| Enhanced System to Promote CSR activities using Core Competencies

Set Priority for CSR programs

Donation of Employees' Ccapabilities	Scholarship and education	Support to self-sufficient economy of the disabled
Programs utilizing employees capabilities **'Probono'**	A program to assist economic self-sufficiency of the disabled by nuturing IT experts **'SIAT'**	Fostering Social Enterprise in connection with ICT **'Happy ICT'**

* Information on Probono and SIAT programs are described in the 'Sustainable CSR based on ICT'in the Happiness Essay section.

| Strategy for Creating Social Values

Happiness of stakeholders

Social value creation
Social issue resolution

Social value creation through ICT-based business

Talent donation of specialist skills Happy scholarship, etc.

Related Ecosysteme

Social enterprise
Provision of survival and sustainable growth Creation of innovative social values

Company
Enhance happiness of stakeholders by pursuing balance between SV and EV

Consensus builiding and participation in the company's CSR directions

Support to and recognition of roles as social issue resolving entities

Employees (Probono)
Social contribution using specialist skills

CSR activities supporting happiness of people in vulnerable groups and local communities

Happiness Sharing Bazaar

SK holdings supports the peoplel of marginalized groups during cold winter season by organizing 'SK Group Happiness Sharing Seasonal Program.' In 2019, we held an online Happiness Sharing Bazaar on our 'Haenggarae' site. SK holdings raised donations to support winter heating costs of vulnerable groups through auction of items donated by executives, sales of refurbished PCs, and donations of points accumulated by our employees with their good habits in daily life through 'Haenggarae', including leaving no garbage and use of personal tumblers.

Happy IT scholarship

Since 2004, SK holdings has been operated 'Happy IT scholarship' to support disabled children and youth by raising funds voluntarily donated by employees. The Happy IT scholarship grants are delivered to disabled children or youth who dream to become IT experts. The scholarship is used to support their education expenses, including payment of their tuition and purchase of school essentials. In 2019, a total of KRW 93 million were given to 49 disabled students. We also awarded KRW 3 million of university entrance grants to each of the nine students newly admitted into universities. We also extended scholarships to other students, including high school students and outstanding students who participated in SIAT program.

Sustainable Performance

Economic Performance

Consolidated Financial Statement

(Unit : KRW million)

Division	2017	2018	2019
[Current Assets]	35,199,914	37,128,397	40,029,148
Cash and Cash Equivalents	7,145,842	6,783,035	7,981,755
Inventory Assets	8,178,936	8,992,740	9,138,361
Other Current Assets	19,875,136	21,352,622	22,909,032
[Noncurrent Assets]	74,583,549	82,328,594	91,991,528
Investment in Related and Joint Company	14,629,502	19,218,345	21,894,716
Tangible Assets	41,295,452	39,715,921	42,846,379
Intangible Assets and Sales Rights	12,331,373	16,190,725	14,666,250
Other Noncurrent Assets	6,327,222	7,203,603	12,584,183
Total Assets	109,783,463	119,456,991	132,020,676
[Current Liabilities]	31,368,057	30,007,832	35,563,137
[Noncurrent Liabilities]	32,658,986	38,561,287	44,274,904
Total Liabilities	64,027,043	68,569,119	79,838,041
[Owner's Equity of Dominant firm]	13,660,082	16,627,516	16,685,769
Capital	15,385	15,385	15,385
Other Capital Paid-up	4,112,475	4,631,955	4,074,176
Earned Surplus	9,837,619	12,217,319	12,558,584
Other Capital Components	-305,397	-237,143	37,624
[Nondominant Equity]	32,096,338	34,260,356	35,496,866
Total Capital	45,756,420	50,887,872	52,182,635
Total Liabilities and Capital	109,783,463	119,456,991	132,020,676
No. of Companies Consolidated	288	260	309
	27th period (Jan. 1, 2017~Dec. 31, 2017)	28th period (Jan. 1, 2018~Dec. 31, 2018)	29th period (Jan. 1, 2019~Dec. 31, 2019)
I. Sales Amount	88,879,725	100,161,648	99,264,574
II. Operating Income	5,718,360	4,683,794	3,949,864
III. Net Operating Income after Corporate Tax Deduction	7,461,678	7,558,142	2,776,568
IV. Net Income of Term of Continued Business	5,205,442	5,626,385	1,700,937
V. Net Income of Consolidated Term	5,066,482	6,151,141	1,607,249
Net Income of Owner's Equity of Dominant Firm	1,677,432	2,253,123	717,270
Net Income of Equity of Nondominant Firm	3,389,050	3,898,018	889,979
VI. Earnings per Share of Owner's Equity of Dominant Firm			
Basic Earnings per Share	KRW30,007	KRW40,310	KRW12,917
Basic Earnings per Share of Continued Business	KRW30,876	KRW33,596	KRW13,604

Separate financial statements

(Unit : KRW million)

Division	2017	2018	2019
Operation revenue	2,477,840	2,672,412	3,245,516
Operation expenses	1,608,374	1,611,447	1,764,617
Operating income	869,466	1,060,965	1,480,899
Separated net profit	612,121	1,453,631	1,420,543

Social Performance

Employees

Division	Unit	2017	2018	2019
Total No. of Employees	persons	3,933	4,026	4,138
Male	persons	3,161	3,208	3,273
Female	persons	772	818	865
Total No. of Permanent Employees	persons	3,732	3,782	3,935
Male	persons	3,020	3,018	3,111
Female	persons	712	764	824
Total No. of Contract Workers	persons	132	191	171
Male	persons	114	162	139
Female	persons	18	29	32
No. of Non-employees (Dispatched Workers)	persons	69	53	32
Proportion of Non-employees among Employees	%	1.8	1.3	0.8
Male Non-employees	persons	27	28	23
Female Non-employees	persons	42	25	9
Socially Vulnerable Persons among Employees	persons	138	134	186
Proportion of Socially Vulnerable Persons	%	3.5	3.3	4.5
Disabled Employees	persons	44	48	81
People of National Merit	persons	69	64	80
Foreigners	persons	26	22	25
Ratio of directors / employees with foreign nationality	%	0.7	0.5	0.6
Ratio of employees working outside Korea	%		-	5.3
No. of New Employees	persons	275	317	366
Male	persons	214	203	255
Female	persons	61	114	111
Proportion of New Employees	%	7	8	9
Employment Type – No. of People Employed as New Employees	persons	94	105	132
Employment Type – No. of People Employed as Experienced Employees	persons	181	212	234
Employment by Age (Below 30)	persons	117	136	170
Employment by Age (30 – 50)	persons	148	168	180
Employment by Age (Over 50)	persons	10	13	16
Turnover Rate (Permanent Employees)	%	2.5	3.4	3.3
Male Turnover Rate (%)	%	2	4	3
Female Turnover Rate (%)	%	3	3	1
No. of Turnovers by Age (Below 30)	persons	17	25	18
No. of Turnovers by Age (30 - 50)	persons	74	97	99
No. of Turnovers by Age (Over 50)	persons	4	8	9
No. of Dismissals	persons	3	1	1
No. of retirement	persons	-	-	3

· The employee status was collected by data from the HR division at the end of each year and the data collection standards may differ from those of annual reports.
· Added new ratio for emloyees working outside Korea

Social Performance

Childcare Leave

(Unit : person,%)

Division	2017	2018	2019
Maternity Leave Target (Male)	129	146	96
Maternity Leave Target (Female)	44	53	28
Maternity Leave User (Male)	16	30	24
Maternity Leave User (Female)	56	62	50
Use Rate of Maternity Leave (Male)	12	21	25
Use Rate of Maternity Leave (Female)	127	117	179
Return Rate from Maternity Leave (Male)	74	74	87
Return Rate from Maternity Leave (Female)	77	95	94
12-month Retention Rate after Returning from Maternity Leave (Male)	75	65	56
12-month Retention Rate after Returning from Maternity Leave (Female)	79	87	92

Number of Female Managers

(Unit : person)

Division	2017	2018	2019	Note
Team Leaders	16	16	19	
Executives	2	1	3	
Leaders(senior researchers or higher)	15	377	348	Data was shown in number of persons instead of % starting 2018 →
Ratio of Female employees out of total employees(%)	19	20	21	

Racial and Ethnic Composition(2019)

(Unit : person)

Division	Asian	Black or African American	Hispanic or Latino	White	Other
Management	-	-	-	-	1
Technical	8	-	-	2	3
All others (excluding management and technical positions)	1	-	-	5	5

Training on Human Rights·Anti-corruption

(Unit : person)

Division	2017	2018	2019
Employees trained on anti-corruption policy and process	3,732	3,782	3,935
Proportion of employees trained on anti-corruption policy and process (%)	100	100	100

Percentage of Employees who Completed Business Ethics Training

(Unit : person)

Division	2017	2018	2019
No. of Training Completion	3,732	3,782	3,935
Percentage of Employees that Completed Training (%)	100	100	100

Hours of education and training

(Unit : hour)

Division	2017	2018	2019
Average education hours per person	88	94	87
Average education hours per person (male)	88	93	84
Average education hours per person (female)	88	98	101
Average education hours per person (manager)	98	99	122
Average education hours per person (senior manager)	89	98	81
Average education hours per person (general manager)	22	34	40
Average education hours per person (executive)	2	0.3	5
Rate of participation in education (%)	100	100	100

· Figures exclude employees such as new employees with previous work experiences, employees sent to work overseas and employees on special tasks as regular education and training programs are not applicable to these employees.

Gender Composition in Job Categories(2019)

(Unit : person)

Division	Male	Female	Note
Management	98	3	Advisors, executives
Technical	1,767	385	Relevant to : Technology
All others (excluding management and technical positions)	1,408	477	

New Employee Wage Compared to the Legal Minimum Wage at Local Business Sites

(Unit : %)

Division	2017	2018	2019
New Male Employees	247.0	211.3	196.6
New Female Employees	240	208.5	193.1

· Ratio of new employee wages to minimum wages by gender at major business sites (employees) (2019 Minimum Wages: KRW 8,350 /2018 Minimum Wages: KRW7,530 /2017 Minimum Wages: KRW 6,470)

Basic pay and compensation for female employees compared with male employees

(Unit:%)

Division	2017	2018	2019
General Manager	93.0	94.7	95.9
Senior Manager	90.0	89.6	90.3
Manager	92.0	89.6	90.0

Percentage of Collective Bargaining

(Unit : %)

Division	2017	2018	2019
Labor-Management Council admission rate	95.1	98.7	98.9

No. and rate of employees informed of the organization's anti-corruption policy and procedures

(Unit : person)

Division	2017	2018	2019
The number of BoD members who have informed and been educated	7	7	8
Rate of parartication in education (%)	100	100	100

Total amount of monetary loss incurred due to violation of the law through unfair competition and antimonopoly acts

(unit : KRW 1,000)

Division	2017	2018	2019
Total amount of monetary loss incurred during the report period under the legal procedure associated with antitrust acts	0	0	0

Employees' productivity

(Unit : KRW million)

Division	2017	2018	2019
Per-employee level of contribution to net profit	164	384	361

· Level of contribution to net profit = Net profit divided by total number of regular employees

Investment in Local Communities

(unit : KRW 1,000)

Division	2017	2018	2019	Remarks
Total Voluntary Work of Employees (Hour)	192	344	2,700	Including employees' voluntary service and donation of their talents
Donation by Employees	100,277	113,224	99,650	Total of status of employees' donation
Investment in Local Communities	1,752,629	1,772,715	1,595,186	CSR cost + social contribution cost

· Limited to business sector (C&C) of SK holdings

Ratio of Philanthropic Activities

(Unit : %)

Division	2017	2018	2019	Remarks
Community Investments	68	23	48	Donation in local employment promotion program and community
Commercial Initiatives	8	31	25	Raising brand awareness by supporting scholarship quiz fund, academic research society and university funding
Charitable Donations	24	46	27	Cash and in-kind donations

· Excluding donations made by employees, Limited to business sectors (C&C) of SK holdings

Donations by Employees

(unit : KRW 1,000)

Division		2017	2018	2019
Happiness Scholarship	Fundraising	96,397	94,614	93,950
	Scholarship (per)	54	52	49
Contribution for the help of the elderly and underfed children	Fundraising	3,880	280	-
Forest building donation	Fundraising	-	18,330	-
bazaar	Fundraising	-	-	5,700
Total		100,277	113,224	99,650

Major Donation Expenditures in 2019

(unit : KRW 1,000)

Division	Project Title	Amount
1	Support for SIAT (Smart IT Advanced Training) for the disabled in 2019	19,300
2	Payment of administrative charge on consignment organization of Happiness IT Scholarship	11,065
3	Expense for operation of SIAT in 2020	20,000
4	Purchase of pro bono education-related texts	30,000
5	Support for digital share-talk alliance event	9,890

Annual Expenditure Related with Policy

(unit : KRW 1,000)

Division	2017	2018	2019
Lobby	0	0	0
Political contribution	0	0	0
Membership fees in related organizations	231,740	200,135	211,141

· SK holdings is complying with the political fund act of Korea. According to the political fund act (Chapter 6. Restrictions on contributions), `corporation or organization shall be prohibited from contributing any political funds` is specified

2019 Policy-related expenses

(unit : KRW 1,000)

Division	Project(Organization)	Position	Amount
1	Korea Information Technology Service Industry Association (ITSA)*	Vice Chairman	33,000
2	Korea Software Industry Association (KOSA)**	Vice Chairman	20,000
3	Korea Association of Cloud Industry (KACI))	Director	10,000
4	Federation of Korean Information Industries (FKII)	Director	8,400
5	Federation of Korean Information Industries (KAIT)	Member	3,600

* Korea Information Technology Service Industry (ITSA): Establishes governmental policies related to the IT service industry and participates in IT service policy businesses
** Korea Software Industry Association (KOSA): Promotes the development of the software industry by facilitating growth and utilization

R&D Investment

(Unit : KRW million)

Division	2017	2018	2019
Total R&D Expenses*	36,863	54,780	74,820
Selling, General and Administrative Expenses	21,039	27,332	41,460
Development Expenses	15,824	27,448	33,360
Ratio of R&D expenses to revenue**(%)	2.27	3.26	4.06

*Includes R&D expenses as shown in the annual report.
** Total R&D expenses÷sales×100(sales of ITbusiness)

Government Support Fund

(Unit : KRW million)

Division	2017	2018	2019
Total Support Amount	505	2,615	4,449
Governmental Subsidies	0	0	0
Tax Deductions	505	2,615	4,449

Social Performance

Leakage of Personal Data

Division	2019
No. of data leakages(breach)(including internal leakage, hacking, etc.)	0
No. of personally identifiabe information(PII) leakages	0
Ratio of PII leakage (ratio of PII out of all data leakages)	0%
No. of users whose PII has been breached due to personal data leakage	0

· PII or personally identifiable information includes all information that can be used to identify and track individuals.

Customer Data and User Data

Division	2019
No. of cases where customer data is used for secondary purposes.	0
No. of requests for user data and information from government or law-enforcement agencies	0

Total monetary loss as a result of personal data protection and related legal procedures

(unit : KRW 1,000)

Division	2018	2019
Total monetary loss incurred during the reporting period due to legal proceedings associated with user privacy	0	0

Safety & Health

(Unit : person)

Division	2017	2018	2019
No. of work-related deaths(employees)	0	0	0
No. of work-related deaths(employees of suppliers)	0	0	0
LTIFR*(employees)	0	0	0
LTIFR(employees of suppliers)	0	0	0
OIFR**(employees)	0	0	0
OIFR(employees of suppliers)	0	0	0

* LTIFR : Lost-Time Injuries Frequency Rate
* ** OIFR : Occupational Illness Frequency Rate

No. of complaints with proven violations of customers' personal data protection and loss of customer information

Division	2017	2018	2019
No. of violations and complaints	0	0	0

Violations of laws and regulations in the social and economic spheres

(Unit : KRW)

Division	2017	2018	2019
Amount of major penalities	0	0	0
No. of non-monetary sanctions	0	0	0

Discrimination and corrective measures

Division	2017	2018	2019
No. of discrimination cases	2	0	1

Performance Issue

Suspension of Service

Division	Service	2019	Note
10 to 30 minutes of service suspension	Cloud-based services	13 cases (277 minutes)	No. of cases and hours for service suspension or discruptions involing software or IT services that are provided to customers (Performance issues and disruptions include technical errors, programming errors, cyber attacks, virtual events or problems affecting host facilities due to natural disasters
	All services	48 cases (956 minutes)	
30 minutes or longer of service suspension	Cloud-based services	25 cases (2,773 minutes)	
	All services	120 cases (19,974 minutes)	
Regular inspections and scheduled events	Cloud-based services	4 cases (238 minutes)	ncluding suspension of all software and IT services provided to customers (Total minutes of suspended services that were notified to customers in advance, including maintenance and regular inspections) (Total minutes of suspended services with prior notice)
	All services	16 cases (845 minutes)	
Suspension due to the discrepancy	Cloud-based services	34 cases (2,812 minutes)	Total of software and IT service interruptions provided to customers (Total minutes of suspended due to the unexpected discrepancy
	All services	152 cases (20,085 minutes)	

· The new 2019 indicators were released.

Social Performance

Response to Emerging Risks

SK holdings is taking preemptive responses to long-term risks ni the business fields of the company that are considered critical.

1) Transition risks caused by climate change – Changes in investment portfolio

Transition risks that may occur due to climate changes have emerged as an important issue in the process of reviewing investment portfolio and making long-term investment-related decisions. Transition risks refer to risks occurring in the process of transition to low-carbon economy on the global or national level to cope with climate changes. We at SK Holdings take financial impact that may occur due to climate changes into account when reviewing our current investment portfolio. On a more long-term perspective, we intend to strive to reconfigure our investment portfolio by reflecting financial impact of the sectors emitting a large amount of greenhouse gases. We will also consider business opportunity aspects when reviewing out investment portfolio associated with climate changes.

2) New Technology-based IT Market Change – Redesigning Business Fields

Businesses are paying more attention to new technologies such as AI, Big Data analysis, block chain, cloud, enterprise mobility, IoT, etc. Under such circumstances, it goes without saying that those not equipped with adequate technological prowess and systems are unable to make a foray into new markets. This is especially true in a cloud-based information management market, whose infrastructure has been established. We view changes in the market as risks associated with the need to redesign our business sectors and cope with the changes through promotion of cloud-based business, establishment of digital technology-based infrastructure, and operation of AI-based solutions. We ascertain the impact of digital acceleration on industries and our customers in our effort for innovation of business models and exploration of new business models and increase our investment in development of solutions·services required

Corporate Governance

SK holdings discloses information about corporate governance in a transparent way as follows

1) Independence of the Board of Directors

SK holdings complies with the Commercial Act of the Republic of Korea to incorporate transparent management by organizing and operating an independent Board of Directors (BOD). In this regard, we defined independence of the BOD, and disclose the status of the BOD as follows. We believe that the BOD, consisting of a majority of independent directors

is independent. We also believe that the BOD cannot obtain independent qualifications if the independent director falls under the conditions set forth below. Therefore, we do not appoint anyone who meets the following conditions:

① Directors, executive directors and employees who are engaged ni the regular business of the relevant company, or directors, auditors, executive directors and employees who have engaged in the regular business of the relevant company withint he past two years;

② The principal, his/her spouse, lineal ascendants, and lineal descendants, in cases where the largest shareholder is a natural person;

③ Directors, auditors, executive directors, and employees of the corporation, in cases where the largest shareholder is a corporation;

④ The spouses, lineal ascendants, and lineal descendants of directors, auditors, and executive directors;

⑤ The directors, auditors, executive directors, and employees of a parent company or a subsidiary company of the relevant company;

⑥ Directors, auditors, executive directors, and employees of a corporation which has a significant interesting the relevant company, such as business relations with the company;

⑦ Directors, auditors, executive directors, and employees of another company for which directors, executive directors, and employees of the relevant company serve as directors and executive directors.

In order to ensure fairness and independence when appointing independent directors, we appoint them at the general shareholders' meeting after a rigorous examination by the Independent Director Candidate Recommendation Committee. Directors are elected through the general shareholders' meeting. The candidates for directors to be elected at the general shareholders' meeting are selected by the BOD (executive/non-executive directors) and the Independent directors Candidate Recommendation Committee (independent directors), and submitted to the general shareholders' meeting.

2) Election Ratio of Independent Directors

SK holdings consists the BOD with the aim of having more than 51% of independent directors in the BOD. Currently, our BOD has five independent directors, representing 56% of all directors. This structure contributes to maintaining independence from large shareholders and management.

3) Diversity Policy of the Board of Directors

In order to promote a diverse and non-discriminatory corporate culture, SK holdings is committed to ensuring that all employees, including board members, are not discriminated on the basis of race, gender, disability, religion, or nationality, for all employees including recruitment, compensation, evaluation, promotion, and education and is considering priority form inorities.

4) Efficient Operation of BoD

In 2019, the average participation rate of directors in the board of directors has been 98.25%. The minimum participation rate required for all directors is 51%, and all of the 5 independent director limited other duties to 4 or less. The board of directors of SK holdings regularly and independently evaluates the performance of the board of directors by sharing the execution results of its decisions and committee activities and discussing on areas of improvement. Directors are appointed annually, and at the time of appointment, the appointment case of each director is put to a vote. The pros and cons as well as the proportion are disclosed. The average tenure of directors is 2.7 years, and the number of independent director with industrial experience is four.

5) Performance Compensation of Management

SK holdings efficiently measures the performance of our top management and pays compensation accordingly. Performance compensation uses indicators such as sales, operating profit, debt ratio, cash dividend payout ratio, total share price return, credit rating, growth rate, and sustainability rate, etc. The period for which we pay performance compensation to top management is three years. Moreover, we introduced stock options for executives to directly link corporate value enhancement and compensation in order to maximize the growth of corporate value by building a consensus between management and shareholders.

6) Dual Class Share

Voting rights per 1 share	Votes per share	Amount of Shares	Voting Power
No vote*	0	18,055,950	0
One vote	1	52,304,347	52,304,347
Total	-	70,360,297	52,304,347

* This shares are composed of preferred and Treasury share. So these voting are restricted by law in Korea.

Environmental Performance

Energy Consumption

(Unit : TJ)

Division		2017	2018	2019
Total Energy Consumption (Absolute amount, excluding scope 3)		1,186	1,402	1,318
Gas (LNG)		10	10	2
Electricity		1,155	1,372	1,307
District Heating		21	20	9.24
Total Energy Consumption (Except Absolute Value and Scope 3)	Per KRW 1 billion in revenue	0.465	0.549	0.406
	Per Employee	0.236	0.371	0.335
Gas (LNG)	Per KRW 1 billion in revenue	0.004	0.004	0.001
	Per Employee	0.002	0.003	0.000
Electricity	Per KRW 1 billion in revenue	0.452	0.537	0.403
	Per Employee	0.256	0.363	0.332
District Heating	Per KRW 1 billion in revenue	0.008	0.008	0.003
	Per Employee	0.005	0.005	0.002

Greenhouse Gas Emissions

(Unit : tCO_2e)

Division		2017	2018	2019
Scope1		518	487	88.7
Scope1 Per Emission Intensity	Per KRW 1 billion in revenue	0.203	0.191	0.027
	Per Employee [1]	0.115	0.129	0.023
Scope2		56,834	67,114	63,788
Scope2 Per Emission Intensity	Per KRW 1 billion in revenue	22.253	26.278	19.651
	Per Employee	12.596	17.746	16.210
Scope3		4,910	5,322	5,465
Upstream	Fuel & Energy Excluded from Scopes 1 & 2 [2]	0	0	0
	Transportation & Distribution	7	7	11
	Wastes Generated from Work	9	8	11
	Business Trip	737	702	696
	Commuting Employees	9	8	8
	Leased Assets [3]	2,137	2,114	4,738
Downstream		-	-	-

Water & Wastes

(Unit : Ton)

Division		2017	2018	2019
Water [3]	Total Consumption	125,868	134,017	44,170
	Total Recycled & Reused Water	24,027	15,329	11,930
	Percentage of Recycled & Reused Water (%)	10	11	27
Wastes [3]	General Waste	113	193	61
	Designated Waste	0	0	8
	Recycled Waste	155	134	42
	Disposal & Treatment Cost (KRW)	53,933,500	86,350,000	32,400,000

Return on Environmental Investments

(Unit : KRW)

Division	2016	2017	2018	2019
Capital Investment	334,965,044	16,700,000	19,800,000	25,680,000
Operating Cost	47,067,160	53,933,500	10,031,040	32,400,000
Total Cost	382,032,204	70,633,500	29,831,040	58,080,000
Revenues & Cost Savings due to Environmental Investment	3,387,776,036	10,205,000	22,476,960	209,973,351
Applicable Ratio to Relevant Business Sites (%)	96	94	93	93

1) The 2018 emission figures were adjusted due to the revised number of person.
2) The fuel and energy not included in Scope 1 and 2 were indicated as "0" as the domestic figures are determined by Korea Electric Power Corp., including electricity loss rates.
3) Following the sale of SK's headquarters in Jeongja to SK Hynix in December 2018, the data of the headquarters were excluded from the figures in Scope 1 and 2, and water use and waste figures as well. Instead, the headquarters was classified as a leased asset in Scope 3.

Total Energy Consumption Cost

Total energy consumption	Unit	2016	2017	2018	2019
A. Fossil fuels (coal, oil, natural gas, etc.) purchased and consumed (for energy purposes)	MWh	3,471	2,778	2609	475.26
B. Electricity (non-renewable) purchased	MWh	92,872	120,237	142,799	136,259
C. Steam / heating / cooling and other energy (non-renewable) purchased	MWh	7	5	5	2.57
D. Total renewable energy (solar energy)	MWh	115	119	113	113
E. Total non-renewable energy (electricity and heating & cooling) sold	MWh	0	0	0	0
Total non-renewable energy consumption (A+B+C-E)	MWh	96,350	123,020	145,413	136,736.83
Total costs of energy consumption	KRW	11,263,732,620	14,522,815,480	16,916,292,837	15,480,755,660

Violation of Environmental Laws

(Unit : KRW)

Division	2016	2017	2018	2019
No. of Violations of Laws or Regulations (cases)	0	0	0	0
Amount of Penalties/Fines	0	0	0	0
Environmental Liabilities	0	0	0	0

Environmental Policy of SK holdings

SK holdings carries out various business activities centered on the values of environmental protection and respect for life. Based on our internal regulations on environmental management, we have established a variety of environmental policies to minimize our impact on the environment.

1. Establishing Environmental Policies
SK holdings establishes environmental policies as a part of its major business strategies and considers the environment in its decision-making.

2. Establishing and Operating Internal Regulations on the Environment
SK holdings establishes and operates internal regulations with environmental aspects and provides training on such internal regulations to personnel carrying out related job duties.

3. Scope of Environmental Policies
SK holdings shall apply its environmental policies in all business sites and throughout its business activities from the development of new products and services to distribution, logistics, waste management, and facility maintenance.

4. Environmental Policies for Suppliers
In selecting its business partners, SK holdings shall conduct environmental assessments and select companies with outstanding environmental performance. In this, they will be doing their best to enhance the levels of environmental management. Furthermore, SK holdings shall encourage non-managed business sites, thirdparty manufacturers, joint venture partners, and outsourcing partners to perceive and participate in its environmental policies.

5. Environmental Impact Assessments
SK holdings shall oversee environmental risk assessments related to the company and its business sites. Heads of division and project managers shall conduct environmental impact assessments on their respective work and projects. Prior to undertaking new projects, preparatory on-site inspections and M&A, heads of relevant divisions shall review requirements and legal standards relating to environmental regulations and environmental and ecological protection. In the case where a significant risk is found as a result of an environmental impact assessment, environmental management plans shall be established and implemented accordingly.

6. Measurement and Management of Environmental Performance
SK holdings shall establish environmental indicators and performance targets in accordance with environmental impact assessments, changes in law and stakeholder demands, and designate departments to manage relevant indicators and targets.
•Energy consumption: Gas (LNG), electricity, district heating
• Water consumption: Water supply, recycled water consumption
• GHG emissions: Direct emissions, indirect emissions, other indirect emissions
• Waste generation: Recycled waste, general waste, designated waste, treatment costs
Such environmental performances shall be managed through a systematic process and verified by a third party that has no interest in the company, according to which SK holdings shall undertake consistent inspections and improvement measures.

7. Communication with Stakeholders
In order to ensure transparency in its environmental management, SK holdings shall communicate with stakeholders by requesting relevant departments regarding media organizations, external affairs and so forth, in the case where an environmental issue arises.

Environmental/Social Performance

Environmental & Social Reports

The computed coverage of SK holdings' environmental and social performance data was 93% and 100% respectively.

- Environment : Workplaces of SK Holdings that hire 7% of all permanent employees are leased and not owned directly by SK holdings. Therefore, energy use and greenhouse gas emission data of these workplaces are not included in the total figures.
- Society : Computations are based on all business sites of SK holdings, while some data including donations pertains to the business unit only in which case annotations were added at the bottom of the data.

Division	2017		2018		2019	
	No. of persons	Ratio(%)	No. of persons	Ratio(%)	No. of persons	Ratio(%)
Holding Unit	224	6	249	7	265	7
Business Unit (IT Service, etc.)	3,508	94	3,533	93	3,670	93
Total	3,732	100	3,782	100	3,935	100

* Data on employee status is collected from the data of the HRd epartment at the end of each year and the data collection standards are different from those of business reports.

SK holdings' environmental data has been verified in accordance with the operational guidelines on the Greenhouse Gas and Energy Target Management System and international standards such as the IPCC Guidelines and the ISO 14064 Greenhouse Gas Standards. Other environmental and social information has been verified according to internationally recognized standards such as the AA1000, ISAE 3000. The verification of environmental and social information was carried out by experts belonging to professional verification services in the form of a limited guarantee. All verification was performed independently by an organization that has no interest in SK holdings, and the scope of verification is clearly indicated on the verification statement.

Environmental & Social Performances and Goals

Division	Major Issues	Management Indicator	Units	2019 Goal	Performance			2019 Accomplishment Rate	2020 Goal	2025 Goal
					2017	2018	2019			
Society	Investment and support for employees' competence development	No. of persons to complete new ICT training courses	person	2,500	2,177	1,918	2,598	●	2,630	2,800
	Quality and service management for customer satisfaction	Customer satisfaction rate	%	79	77.5	75.5	75.7	◑	77	80
	Social value creating activities*	Cash value of social business performance	KRW 100 million	600	-	559	817	●	860	1,100
	Social contribution activities based on business characteristics*	Converted cash value of employees' volunteer activities [1]	KRW 1,000	20,000	8,700	15,583	54,779	●	73,158	93,370
	Pursuit of happy corporate culture through employee satisfaction	Employee engagement rate [2]	%	-	-	-	76.6	-	77	79
	Employees' safety, health and environment	LTIFR(Lost Time Injuries Frequency Rate)	%	0	0	0	0	●	0	0
Environment	Energy	Energy consumption (per KRW 1 billion in revenue)	TJ	0.5	0.465	0.549	0.406	●	0.4	0.38
	Carbon(greenhousegas)	Greenhouse gas emission (per KRW 1 billion in revenue)	tCO_2e	24	22.46	26.47	20	●	19	18
	Water	Proportion of recycled water usage to water-intake	%	10	10	11	27	●	28	30
	Eco-friendly products	Proportion of ecofriendly olution to total revenue (Only in cluding IT busness sales)	%	12.5	12.4	12.4	12.9	●	13	20

1) Value of employees' voluntary activities converted into money = Hours of voluntary activities x minimum statutory hourly wage + Hours of donation of talents x their average hourly wage

2) Data for 2019 is to be disclosed due to a change in items for measuring level of immersion concerning employees' happiness

Human Rights Report

SK holdings is dedicated to realizing the value of respect for human rights throughout its entirel management activities based on the Group's founding philosophy: "We will strive to continue to exist and develop through stable operation and growth as a workplace that pursues pursuit happiness of our employees and stakeholders."

SK holdings officially supports and declares its compliance to standards and laws of labor and human rights related international organizations and bodies such as the 'Universal Declaration of Human Rights' and 'UN Guiding Principles on Business and Human Rights; Ruggie Framework, and the 'International Labour Organization Agreement'. Furthermore, the company requests all stakeholders in the value chain such as employees, business partners, community and customers to comply with the above international regulations on human rights and labor.

SK holdings, as a signee of the UN Global Compact, shall be equipped with organization, operating structure, monitoring, measures and internal·external reporting processes according to procedures defined by 10 principles and UN affiliates and human rights implementation principles. For this, the company has set up the following human rights business principles and detailed operating principles to make 'SK holdings where human rights and happiness are guaranteed to all stakeholders' through constant implementation efforts.

Human Rights Principles of SK holdings

1
SK holdings shall respect human rights of all its employees, and guarantee their dignity as human beings.

2
SK holdings shall do its utmost to prevent human rights violations throughout all value chains.

3
SK holdings shall pursue happiness of all stakeholders, and consider human rights aspects of products and services we produce.

4
SK holdings shall strive to fulfill its corporate social responsibilities, to promote the development of local communities, and to respect human rights.

Detailed Principles

Humanitarian Treatment
SK holdings shall respect all its employees as humans, and endeavor not to compromise human rights. If inhumane treatment occurs, we will take strict measures in accordance with the relevant regulations.

Prohibition of Forced Labor
SK holdings shall respect employee's free will. The company shall not force labor against an employee's free will through mental or physical oppression, imprisonment, human trafficking, or slavery. The company also strictly complies with the Labor Standards Act in relation to labor contracts.

Prohibition of Child Labor
SK holdings shall comply with the regulations on child labor, ensure the appropriate procedures and support in accordance with the laws and regulations of minors, and continuously check compliance with laws and regulations

Prohibition of Discrimination
SK holding shall respect the diversity of all employees, and ensure that discrimination does not occur in recruitment, wage, promotion, and other personnel processes for reasons such as gender, race, age, gender identity, academic backgrounds, disability, religion, political orientation, or social status.

Working Hours Compliance
SK holdings shall comply with working hours regulations of relevant regions in terms of regular, overtime, and holiday work. Amendments to laws and regulations shall be managed on an ongoing basis to prevent the occurrence of illegal acts.

Wage and Welfare
SK holdings shall pay more than the minimum wage prescribed in relevant regions along with the payroll statement, and provide compensation for overtime work carried out under mutual agreement between labor and management.

Freedom of Association
SK holdings shall promote sound organizational development through smooth and continuous communication between labor and management.In accordance with labor relations laws and regulations on labor relations in relevant regions, freedom of association shall be guaranteed, and unfair treatment shall not be applied on the grounds of membership, or activities,of trade unions.

Privacy Protection
SK holdings shall protect the personal information of stakeholders including customers in accordance with local laws and regulations to protect human rights of all stakeholders. The company shall not use personal information for any other purpose without the consent of the person concerned.

Local Community
SK holdings shall identify potential impacts on communities near our worksites, listen to feedback of local communities to prevent problems from occurring, and strive for continuous communication.

Human Rights Report

Human Rights Risk Management Process

To prevent and reduce human rights risk defined in the human rights management principles and the detailed operating principles, the company conducts human rights evaluation on business sites and business partners each year. At business sites, surveys of internal employees are conducted to evaluate the compliance to human rights management principles and detailed operating principles. When human rights risks are identified, improvement activities to check and resolve related issues are implemented as part of the human rights protection throughout businesses
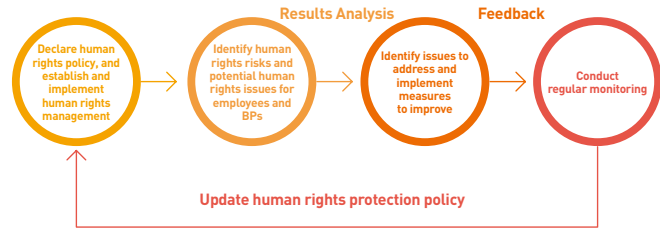

In the 2019 human rights related survey and sustainability management evaluation of business partners, 6 risks in humanitarian treatment, compliance to working hours and protection of personal information have been identified. SK holdings performed identification of risks on relevant matters and provided education for improvement. The main human rights risk was verbal abuse by members and disciplinary action was taken against those involved. In order to prevent recurrence in the future, all employees' ethics management education was conducted by strengthening the "bullying in the workplace- verbal abuse" cases in the company's ethics management education. In addition, we operate "H.App," a mobile platform for communication with employees, and install a grievance box called "SseunSori Dansori" to listen to the opinions of employees and business partners regarding human rights risks and resolve them quickly. The human rights risk evaluation results for the past 3 years are as follows.

Division	2017			2018			2019		
	Ratio of Human Rights Risk Evaluation	No. of Risks Identified	Ratio of Improvement	Ratio of Human Rights Risk Evaluation	No. of Risks Identified	Ratio of Improvement	Ratio of Human Rights Risk Evaluation	No. of Risks Identified	Ratio of Improvement
Employees	100%	2	100%	100%	2	100%	100%	2	100%
BPs	25%	-	-	37%	3	100%	49%	4	100%

| Human Rights Risk Evaluation in 2019

Human Rights Risks	Evaluation Subjects	Scope of Evaluation	No. of risks identified	Corrective Actions
Humanitarian Treatment	Employees, Business Partners	All sites (100%), Major Business Partners (49%)	Employees : 1, Business Partners: 3	100%
Forced Labor	Business Partners	Major Business Partners (49%)		
Child Labor	Business Partners	Major Business Partners (49%)		
Prohibition of Discrimination	Employees, Business Partners	All sites (100%), Major Business Partners (49%)	Employees : 1, Business Partners : 1	100%
Compliance to Working Hours	Employees, Business Partners			
Wages and Employee Benefit	Employees, Business Partners			
Personal Information Protection	Employees	All sites (100%)		
Local Community	Employees	All sites (100%)		

| 2019 Human Rights Risk Evaluation Ratio
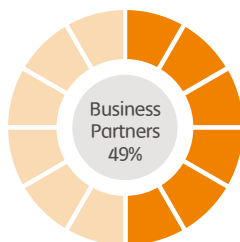
| 2019 Human Rights Risk Improvement Measures

Code of Conduct of Business Partners

Code of Conduct of Business Partners

Preface

SK holdings expects a high level of operation standards to working environment of its business partners. Hence, in order to strengthen the compliance management as the foundation of accompanied growth between business partners and SK holdings, the company enacted the Code of Conduct of Business Partners (hereinafter "Code"). Also, business partners of SK holdings shall strictly observe all applicable laws and regulations, secure a safe working environment, build a business environment that respects employees and run business in an ethical manner. This Code presents what SK holdings expects from its business partners. The Code is applicable to organizations of all forms that design, sell, manufacture or provide ingredients and services used to produce services and products. All business partners shall comply with the Code, and shall demand all subsidiary supply chains that provide ingredients and services to relevant business partners. SK holdings or external institutions designated by SK holdings may visit business partners to assess the compliance status of business partners. In case a critical violation of a business partner on this Code has not been improved within the requested period, the trade with SK holdings may be suspended or the contract may be cancelled.

Also, in accordance with any changes in SK holdings' business partner management policy or standards, this Code may be amended. In case of conflict of this Code and local laws, more strict standards shall prevail.

1. Human Rights and Labor

Business partners shall protect human rights of workers and guarantee their dignity to internationally accepted standards. This shall be applicable to all forms of workers including temporary workers, migrate workers, trainees and dispatched workers. Workers shall be guaranteed for legal service and protection of rights in accordance with local laws.

1-1. Prohibition of Forced Labor

All services shall be voluntary. A company shall not use forced laborers, workers under confinement contract (including confinement for debt servicing), involuntary convict laborers and human trafficking laborers. This includes all acts of moving, employing and transferring social minorities by threatening, forcing, compulsion, kidnapping and committing fraud for the purpose of labor exploitation.

Companies shall not demand for the transfer of government-issued identification cards, passports or work permits for employment condition. Business partners or manpower dispatch companies shall not demand workers for commissions (for job placement, etc.) or surety. Also, they shall document and deliver work conditions in languages understandable by the worker.

1-2. Underage Worker Protection

Use of child labor is strictly prohibited. "Child" means personnel below age 15, the age of completing obligatory education or the minimum legal employment age according to local laws, whichever is the highest.

1-3. Compliance of Working Hours

The weekly working hours shall not exceed the maximum working hours regulated by laws. Moreover, the weekly working hours including any overtime hours may not exceed the working hours set by the Labor Standards Act except in emergency or special situations.

1-4. Wages and Employee Benefits

Wages given to workers shall include minimum wages, overtime compensation and legal employee benefits, and shall comply with local laws and regulations. All overtime services shall be done voluntarily with the agreement of workers, and higher overtime compensations than the hourly wages for regular working hours shall be given according to local laws and regulations.

No pay cuts shall be permitted as sanctions. The wage standards and items of workers shall be provided in languages understandable by workers in a payslip or a document with wage payment details via document or company intranet.

1-5. Humanitarian Treatment

There shall be no harsh and inhumane treatment to workers including sexual harassment, sexual abuse, punishment, mental or physical coercion and abusive language, nor any threats for such treatment. Business partners shall define policies and procedures for guaranteeing humanitarian treatment to workers and fully explain on such policies and procedures.

1-6. Nondiscrimination

Business partners shall take measures to prevent bullying or illegal discrimination over workers. In employment customs including the recruitment process as well as wages, promotion, compensation and education opportunity, business partners shall not discriminate based on race, color, age, gender, sexual orientation, ethnicity, disability, pregnancy, religion, political inclination, union membership and marital status. Except where required by local laws or occupational safety, business partners shall not demand workers or employment candidates for medical checkups that may present grounds for discrimination.

1-7. Freedom of Association

In accordance with the local laws, business partners shall respect workers' rights to organize, and join an employee council or a labor union, and the freedom of association with other workers for group agreement and peaceful assembly, and the rights not to participate in such activities. Also, business partners shall enable their workers and representatives to liberally exchange opinions and difficulties on working conditions and business policies with business partners without concerns about discrimination, revenge, threats or bullying.

Code of Conduct for Suppliers

2. Safety and Health

Business partners shall recognize that activities that guarantee safety and health of workers are essential in all activities in the course of company's businesses. Business partners shall, according to local laws and regulations, strive to build and maintain safe and healthy worksites.

2-1. Occupational Safety

Business partners shall perform proper administrative control, preventive maintenance and consistent safety education to control workers' exposure to potential safety hazards (e.g. electrocution, fire, car accident, falling hazards, etc.). In case hazardous elements cannot be sufficiently controlled by the above mentioned measures, proper personal protective gears shall be provided to workers. Workers shall be able to liberally present their safety concerns to the management board.

2-2. Preparation to Emergency Situations

Potential emergency situations and accidents shall be identified and evaluated in advance. Damage from emergency situation shall be minimized by setting up an emergency situation reporting system, worker notification and evacuation procedures, and by providing emergency drills of workers, evacuation facilities, fire detectors and fire-fighting equipment.

2-3. Body Burden Tasks

Business partners shall identify, evaluate and control workers' exposure to body burden tasks including repetitive manual tasks for a long period, lifting heavy objects, standing and physically exhausting assembly tasks.

2-4. Safety and Health Education

Business partners shall perform proper safety and health education to workers in languages readily used by workers. Safety and health related information shall be published in a well visible area in the worksite.

3. Eco-friendly Management

Business partners shall strive to fully understand and reduce environmental pollutions from business operation and environmental effects from providing products and services to SK holdings. They shall comply with environment related laws and regulations in terms of waste disposal, recycling, controlling industrial water and controlling greenhouse gas and atmospheric emissions.

3-1. Waste Water and Wastes

Business partners shall systematically identify, manage, reduce, dispose and recycle solid wastes (unharmful). Solid wastes shall be identified, monitored, managed and treated according to regulations and then discharged/disposed. Measures to reduce waste water shall be taken, and the treatment efficiency of the waste water treatment process shall be constantly monitored.

3-2. Energy Consumption and Greenhouse Gas Emissions

Business partners shall identify energy consumption and greenhouse gas emissions of the company and business sites in each step. Also, they shall look for cost efficient ways to minimize energy consumption and greenhouse gas emissions while raising energy efficiency.

4. Business Ethics

In operation of business sites, business activities of business partners shall comply with all local laws and regulations, and SK holdings shall demand its business partners to maintain the highest standards of ethics.

4-1. Integrity

In the trade relations with all companies, business partners shall maintain the highest level of integrity. They shall not conduct illegal acts such as all forms of corruption, extortion, embezzlement, bribery, tributes, and gifts including money gifts or other forms of benefits to related personnel for the purpose of affecting the decision making process. Also, they shall not give or receive any means of gaining unjust or improper benefits, and shall practice autonomous compliance to anti- graft law by providing supervision and crackdown on such practices.

4-2. Disclosure

Information on labor affairs, safety and health, environmental management status, business activities, governance structure, financial status and performance of business partners shall be disclosed according to applicable laws and general industrial practices. Any forgery of records or omissions of status and customs in the supply chain shall not be permitted.

4-3. Intellectual Property Protection

Intellectual property rights shall be respected. The transfer of technology or knowhow shall be performed in a manner of protecting intellectual property rights, and information of SK holdings shall be securely protected.

4-4. Personal Information Protection

Business partners shall take reasonable efforts to protect the personal information of all personnel including business partners related with businesses, clients, consumers and employees. Also, they shall comply with the laws related with personal information protection and information security in collecting, storing,processing, transmitting and sharing personal information.

Social Contribution (With UN SDGs)

SDG 3
Good Health and Well-Being

SDGs Guarantee healthy life and improve welfare of all generations

Relation to SK holdings' Businesses
- Promote health of people by operating digital healthcare services based on SK holdings' industrial characteristics such as Vitality and 3A
- Under the influence of COVID-19, national health protection is realized by supporting work platforms using Untouch technology.

Business Goals
- Based on business model innovation, solidify a business model capable of creating both social and economic values

Social & Environmental Goals
- Promote welfare of all generations by successfully introducing projects that can contribute to promote national health

SDG 4
Quality Education

SDGs Guarantee quality education and lifelong learning opportunity

Relation to SK holdings' Businesses
- Foster talents in ICT by providing employment mentoring to the disabled and socially vulnerable groups and contribute to the advancement of the ICT industry
- Contactless support in education and job searching with visual communications system for job related education, tests, and job interviews

Business Goals
- Strengthen the capabilities of the domestic ICT industry based on various activities aimed at fostering ICT workforce
- Provision of stronger support for people to access to education/job training session equally under the situation caused by COVID-19

Social & Environmental Goals
- Offer equal employment opportunity to the disabled and vulnerable groups
- Build ICT capacity in education targets by providing quality education

SDG 8
Decent Work and Economic Growth

SDGs Promote sustainable economic growth and creation of quality jobs

Relation to SK holdings' Businesses
- Create quality jobs by practicing and spreading sustainable business activities such as creation of social values
- Improve company reputation by resolving social issues of insufficient jobs for the disabled and liaising with diverse stakeholders

Business Goals
- Expand performance of the business society generated from product development·production·sales
- Reinforce communications and cooperation with business partners through which shared achievements

Social & Environmental Goals
- Expand indirect contributions to the economy through corporate business activities
- Expand social contribution performance created from social contribution activities in the local community

SDG 10
Reduced Inequalities

SDGs Reduce income inequality within and among countries

Relation to SK holdings' Businesses
- Based on digital based industrial characteristics of SK holdings, provide consulting supports to social companies undergoing difficulties in management

Business Goals
- Improve reputation and expertise of SK holdings within the industry by focusing on social value creation activities based on the professional capacity of employees

Social & Environmental Goals
- Indirectly contribute to resolving social issues approached by Social Enterprises that participated in consultation support (health/medical, environment, improved quality of life, disasters)

Appendix

GRI Standards Index

GRI STANDARDS UNIVERSAL STANDARDS(GRI 100)

Topic	No.	Title	Page(s)	Note
GRI 101 : Foundation				
GRI 102 : Organizational Profile	102-1	Organizatoin.	2	
	102-2	Activities, Representative Brands, Products and Services	10-13	
	102-3	Location of Head Office	Annual Report	
	102-4	Business Region	Annual Report	
	102-5	Characteristics of Ownership Structure and Legal Form	Annual Report	
	102-6	Market Scope	Annual Report	
	102-7	Size of Organization	Annual Report	
	102-8	Information of Employees and Workers	75	
	102-9	Organization's Supply Chain	65-70	
	102-10	Critical Changes in Organization and Supply Chain	65-70	
	102-11	Preventive Principles and Approach	53-54	
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GRI 102 : Strategy	102-14	Statement of Highest Decision Maker	4-7	
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	102-20	Executive's Responsibility on Economic, Environmental and Social Topics	38-39	
	102-21	Stakeholder Consultation on Economic, Environmental and Social Topics	38-39	
	102-22	Composition of Highest Decision Making Organ and Subsidiary Committee	38-39	
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	102-28	Evaluation on Performance of Highest Decision Making Organ	38-39	
	102-29	Roles of Highest Decision Making Organ in Identifying and Managing Economic, Environmental and Social Impact	38-39	
	102-30	Effectiveness of Risk Management Procedures	38-39	
	102-31	Review on Economic, Environmental and Social Topics	25	
	102-32	Roles of Highest Decision Making Organ on Sustainability Report	38-39	
	102-33	Communication on Critical Issues	38-39	
	102-34	Characteristics and No. of Critical Issues	25	
	102-35	Compensation Policy	38-39	
	102-36	Remuneration Decision Process	38-39	
	102-37	Stakeholder Participation on Remuneration Policy	38-39	
	102-38	Total Annual Compensation Ratio	38-39	
	102-39	Proportion of Increase in Total Annual Compensation	38-39	
GRI 102 : Stakeholder Engagement	102-40	List of Stakeholder Groups Related with Organization	18	
	102-41	Group Agreement	98	
	102-42	Identifying and Selecting Stakeholders	24-25	
	102-43	Participation Method of Stakeholders	24-25	
	102-44	Key Subjects and Interests Proposed from Stakeholder Participation	24-25	

GRI STANDARDS UNIVERSAL STANDARDS(GRI 100)

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GRI 102 : Reporting practice	102-45	List of Subsidiary Companies and Joint Companies in Organization's Consolidated Financial Statements	Annual Report	
	102-46	Definition of Boundary Between Reported Content and Topics	2	
	102-47	List of Material Topics	25	
	102-48	Restatement of Information	2	
	102-49	Change in Report	-	
	102-50	Reporting Period	2	
	102-51	Latest Reporting Date	2	
	102-52	Reporting Cycle	2	
	102-53	Inquiries about Report	101	
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	102-56	External Verification	94-96	

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GRI 201 : Economic Performance	201-1	Creation and Distribution of Direct Economic Values	74	Raw material and servie purchasing costs not applicable
	201-3	Pay for Debt of Organization's Defined Benefit Pension Policy	52	
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GRI 202 : Market Presence	202-1	Proportion of New Employee Wages to Local Minimum Wages of Business Site	76	
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	203-2	Material Indirect Economic Ripple Effect and Impact	20-35	
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GRI 305 : Emissions	305-1	Direct Greenhouse Gas Emissions (scope 1)	80-82	
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GRI 306 : Effluents and Waste	306-2	Wastes by Type and Disposal Method	80-82	
GRI 307 : Environmental Compliance	307-1	Environmental Law Violation	80-82	

GRI Standards Index

GRI STANDARDS UNIVERSAL STANDARDS(GRI 400)

Topic	No.	Title	Page(s)	Note
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GRI 403 : Occupational Health and Safety	403-1	Proportion of All Workers Represented by Labor-Company Joint Health & Safety Committee	42-46	
	403-2	Injury Type, Injury Ration, Occupational Disease Ratio, Proportion of Leaves, Absence Rate, No. of Work Related Deaths	42-46, 78	
	403-3	Occupational Disease Ratio or Workers with High Risk of Onset	42-46	
	403-4	Safety and Health Matters under Official Agreement with Labor Union	42-46	
GRI 404 : Training and Education	404-1	Average Training Hours per Employee	76	
	404-2	Employee Capacity Building and Reshuffling Support Program	47-50	
	404-3	Proportion of Employees Receiving Regular Performance and Career Development Reviews	47-50	
GRI 405 : Diversity and Equal Opportunity	405-1	Governance Body and Diversity of Employees	38-39	
	405-2	Proportion of Base Rate and Compensation of Female to Male	76	
GRI 406 : Non-Discrimination	406-1	Discrimination Case and Corrective Measures	78	
GRI 408 : Child Labor	408-1	Sites and Business Partners with High Risk of Child Labor	83-84	
GRI 409 : Forced or Compulsory Labor	409-1	Sites and Business Partners with High Risk of Forced Labor	83-84	
GRI 411 : Rights of Indigenous Peoples	411-1	No. of Violation Cases of Rights of Indigenous People and Measures Taken	-	N/A
GRI 412 : Human Rights Assessment	412-1	Sites under Human Rights Assessment or Human Rights Review	83-84	
	412-2	Employee Education on Business Related Human Rights Policies and Processes	83-84	
GRI 413 : Local Communication	413-1	Community Participation, Impact Analysis and Development Program	30-33, 71	
	413-2	Sites with Critically Negative Impact on Community	-	No site negatively affecting community
GRI 414 : Supplier Social Assessment	414-1	New Business Partners Screened by Social Assessment	65-70	
	414-2	Major Negative Social Impact in Supply Chain and Measures	65-70	
GRI 415 : Public Policy	415-1	Political Donation	77	
GRI 416 : Customer Health and Safety	416-1	Safety & Health Assessment of Product and Service	42-44	
	416-2	Violation of Regulation on Safety & Health Impact of Product and Service	42-44, 78	
GRI 417 : Marketing and Labeling	417-3	Violation of Regulation Related with Marketing Communication	78	
GRI 418 : Customer Privacy	418-1	Violation of Customer's Personal Information Protection and No. of Complaints with Proven Loss of Customer's Information	78	
GRI 419 : Socioeconomic Compliance	419-1	Violation of Social and Economic Laws and Regulations	78	

SASB Index

SK holdings has disclosed in its annual report the Software & IT Services indicators of Technology & Communication according to SASB Industry Standards.

Topic	No.	Title	Page(s)/Data	Note
Environmental Footprint of Hardware Infrastructure	TC-SI-130a.1	(1) Total energy consumed	80p	
		(2) Percentage grid electricity	N/A	N/A
		(3) Percentage renewable*	0.08%	
	TC-SI-130a.2**	(1) Total water withdrawn	100%	
		(2) Total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	100%	
	TC-SI-130a.3	Discussion of the integration of environmental considerations into strategic planning for data center needs	46p	
Personal Data & Freedom of Expression	TC-SI-220a.1	Description of policies and practices relating to behavioral advertising and user privacy	78p	
	TC-SI-220a.2	Number of users whose information is used for secondary purposes	78p	
	TC-SI-220a.3	Total amount of monetary losses as a result of legal proceedings associated with user privacy	78p	
	TC-SI-220a.4	(1) Number of law enforcement requests for user information	78p	
		(2) Number of users whose information was requested	0	
		(3) Percentage resulting in disclosure	0%	
	TC-SI-220a.5	List of countries where core products or services are subject to government-required monitoring, blocking, content filtering, or censoring	N/A	N/A
Data Security	TC-SI-230a.1	(1) Number of data breaches	78p	
		(2) Percentage involving personally identifiable information(PII)	78p	
		(3) Number of users affected	78p	
	TC-SI-230a.2	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards	55p-57p	
Recruiting & Managing a Global, Diverse & Skilled Workforce	TC-SI-330a.1	(1) Percentage of employees that are foreign nationals	75p	
		(2) Percentage of employees that are located offshore	75p	
	TC-SI-330a.2	Employee engagement as a percentage	82p	
	TC-SI-330a.3	(1) Percentage of gender and racial/ethnic group representation for management	76p	% by gender, race and ethnicity
		(2) Percentage of gender and racial/ethnic group representation for technical staff	76p	
		(3) Percentage of gender and racial/ethnic group representation for all other employees	76p	
Intellectual Property Protection & Competitive Behavior	TC-SI-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	76p	
Managing Systemic Risks from Technology Disruptions	TC-SI-550a.1	(1) Number of performance issues	78p	
		(2) Number of service disruptions	78p	
		(3) Number of total customer downtime	78p	
	TC-SI-550a.2	Description of business continuity risks related to disruptions of operations	43p-44p	

* Solar energy
** based on "High or Extremely High" as defined in World Resources Institute's (WRI) Water Risk Atlas tool.

Third Party's Assurance Statement

To the Readers of 2020 SK holdings Sustainability Report:

Foreword

Korea Management Registrar Inc. (hereinafter "KMR") has been requested by of SK holdings Co., Ltd (hereinafter "SK holding") to verify the contents of its 2020 Sustainability Report (hereinafter "the Report"). SK holding is responsible for the collection and presentation of information included in the Report. KMR's responsibility is to carry out assurance engagement on specific data and information in the assurance scope stipulated below.

Scope and standard

SK holding describes its efforts and achievements of the corporate social responsibility activities in the Report. KMR performed a type2, moderate level ofassurance using AA1000AS (2008) and SRV1000 from KMR Global Sustainability Committee as assurance standards. KMR's assurance team (hereinafter"the team") evaluated the adherence to Principles of Inclusivity, Materiality and Responsiveness, and the reliability of the selected GRI Standards indices as below, where professional judgment of the team was exercised as materiality criteria.

The team checked whether the Report has been prepared in accordance with the 'Core Option' of GRI Standards which covers the followings.

• GRI Standards Reporting Principles
• Universal Standards
• Topic Specific Standards

- Management approach of Topic Specific Standards - (Economic Performance: 201-1, 201-3, 201-4
- Market Presence: 202-1
- Indirect Economic Impacts: 203-1, 203-2
- Anti-Corruption: 205-1, 205-2, 205-3
- Energy: 302-1, 302-2, 302-3
- Water: 303-3
- Emissions: 305-1, 305-2, 305-3, 305-4, 305-5 - Effluents and Waste: 306-2
- Environmental Compliance: 307-1
- Employment: 401-1, 401-2, 401-3
- Labor/Management Relations: 402-1

- Occupational Health and Safety: 403-1, 403-2, 403-3, 403-4 - Training and Education: 404-1, 404-2, 404-3
- (Diversity and Equal Opportunity): 405-1, 405-2 - Non-Discrimination: 406-1
- Child Labor: 408-1
- Forced or Compulsory Labor: 409-1
- Rights of Indigenous Peoples: 411-1
- Human Rights Assessment: 412-1, 412-2 - Local Communities: 413-1, 413-2
- Supplier Social Assessment: 414-1, 414-2 - Public Policy: 415-1
- Customer Health and Safety: 416-1, 416-2 - Marketing and Labeling: 417-3
- Customer Privacy: 418-1
- Socioeconomic Compliance: 419-1

This Report excludes a data sand information of joint corporate, contractor etc. which is outside of the organization, i.e. SK holding, among report boundaries.

Our approach

In order to verify the contents of the Report within an agreed scope of assurance in accordance with the assurance standard, the team has carried out an assurance engagement as follows:

• Reviewed overall report
• Reviewed materiality test process and methodology
• Reviewed sustainability management strategies and targets • Reviewed stakeholder engagement activities
• Interviewed people in charge of preparing the Report

Our conclusion

Based on the results we have obtained from material reviews and interviews, we had several discussions with SK holdings on the revision of the Report. We reviewed the Report's final version in order to confirm that our recommendations for improvement and our revisions have been reflected. When reviewing the results of the assurance, the assurance team could not find any inappropriate contents in the Report to the compliance with the principles stipulated below. Nothing has come to our attention that causes us to believe that the data included in the verification scope are not presented appropriately.

Inclusivity
Inclusivity is the participation of stakeholders in developing and achieving an accountable and strategic response to sustainability
- SK holding is developing and maintaining stakeholder communication channels in various forms and levels in order to make a commitment to be responsible for the stakeholders. The assurance team could not find any critical stakeholder SK holding left out during this procedure.

Materiality
Materiality is determining the relevance and significance of an issue to an organization and its stakeholders. A material issue is an issue that will influence the decisions, actions, and performance of an organization or its stakeholders.
- SK holding is determining the materiality of issues found out through stakeholder communication channels through its own materiality evaluation process, and the assurance team could not find any critical issues left out in this process.

Responsiveness
Responsiveness is an organization's response to stakeholder issues that affect its sustainability performance and is realized through decisions, actions, and performance, as well as communication with stakeholders.
- The assurance team could not find any evidence that SK holding's counter measures to critical stakeholder issues were inappropriately recorded in the Report.

We could not find any evidence the Report was not prepared in accordance with the 'Core Option' of GRI standards.

Recommendation for improvement

SK holdings hopes the Report is actively used as a communication tool with stakeholders and we recommend the following for continuous improvements.
-SK holdings identifies 7 different key topics through materiality assessment and writes its achievements and goals in accordance with the company's characteristics. In this regard, it shows outstanding efforts of SK holdings in risk management, core digital transformation capabilities, strategy to pursue happiness of stakeholders (SKMS), and achievements of sustainable management. It is advised to improve readability and understandability of the document making good use of financial data in the future.

Our independence

With the exception of providing third party assurance services, KMR is not involved in any other SK holding's business operations that are aimed at making profit in order to avoid any conflicts of interest and to maintain independence.

June, 25th, 2020
Eun-Ju Hwang | CEO

Greenhouse Gas Verification Report

Introduction

Korea Productivity Center was required to verify '2019 Greenhouse Gas (GHG) emissions Statements (hereinafter 'Statement')', of which reporting years was defined as January 1, 2019 to December 31, 2019, by SK holdings.

Levels of Assurance

Assures that the relevant risks are below acceptable levels during the verification process

Verification Scope

The verification team verified GHG Emissions (Scope 1, 2 ,3) at workplaces of SK holdings in 2019

Verification Criteria

• GHG Energy Target Management Guideline
• IPCC Guideline: 2006, WRI/WBCSD GHG Protocol: 2004
• ISO14064-3:2006 standard

Limitation

· By conducting the verification through the sampling method, there may be latent errors and omissions that the verification team was unable to detect and there were no significant exceptions. Final GHG emissions may include limitations that maya rise due to the application of unspecified standards and methods.

Conclusion

• The verification team confirmed that the 'Statements (2019)' was being reported in accordance with the self-inspection guideline based on the GHG Energy Target Management Guideline and IPCC Guideline
• Appropriate corrective action was taken by SK holdings in accordance with investigation results from the verification team.
• The verification team confirms that the 'Statements (2019)' was being reporting 'appropriately' in accordance with relevant verification standard.
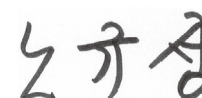
SK holdings	GHG Emissions (tCO$_2$eq)
Direct Emissions (Scope1)	88.7
Indirect Emissions (Scope2)	63,788
Other Indirect Emissions (Scope3)	5,465

Based on the verification, the details of GHG emissions (Scope 3) in SK holdings is as below

SK holdings	GHG Emissions (tCO$_2$eq)
1. Fuel-and energy-related activities (not included in scope1 or scope2)	0
2. Upstream transportation and distribution	11
3. Waste generated in operations	11
4. Business travel	696
5. Employee commuting	8
6. Upstream leased assets	4,738
Total Emissions	5,465

* In order to report the GHG emissions as an integer, the rounded number on the statement might be different from the number on the system with ± 1 ton CO$_2$e

June 2020
Korea Productivity Center
Chairman **Kyoo Sung, Noh**

UN Global Compact / UN SDGs

UN Global Compact

The UN Global Compact (UNGC) is the world's largest voluntary initiative of corporate citizens, stating ten principles in the areas of human rights, labor, the environment, and anti-corruption. The UNGC has corporate participants from over 100 countries around the world. Since joining the UNGC in 2012, SK holdings has faithfully carried out its corporate social responsibilities and observed the 10 principles set forth by the UNGC. By continuing to participate in the initiative and publicly disclosing our performances, we will fulfill our responsibilities as a corporate citizen to build a sustainable society.

COMMUNICATION ON PROGRESS
UN GLOBAL COMPACT

This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

Category	Principles	Page/More Information
Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and.	SK holdings respects all human rights stated in the world human rights declaration adopted by UN.(P.83)
	Principle 2: Make sure that they are not complicit in human rights abuses	
labor	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	SK holdings supports the freedom of association and recognizes collective bargaining rights. (P.83)
	Principle 4: The elimination of all forms of forced and compulsory labour;	SK holdings shall not permit forced labor in all forms. (P.83)
	Principle 5: The effective abolition of child labour; and	SK holdings prohibits child labor. (P.83)
	Principle 6: The elimination of discrimination in respect of employment and occupation.	P. 83
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges;	P. 46
	Principle 8: Undertake initiatives to promote greater environmental responsibility; and	
	Principle 9: Encourage the development and diffusion of environmentally friendly technologies	
Anti-corruption	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	P. 40-41, 54

UN SDGs(Sustainable Development Goals)

The UN Sustainable Development Goals (SDGs) are common goals for the international community to achieve by 2030 with a view to eradicating poverty and attaining sustainable development for all. Adopted by the United Nations in September 2015, the 2030 Agenda for Sustainable Development consists of 17 goals and 169 targets and calls for all countries to work together to build sustainable societies and to tackle the economic, social, and environmental crisis faced by the modern world. SK holdings associates the following goals of the SDGs with our business activities and discloses the outcomes and performances in our Sustainability Reports in a transparent manner.

SUSTAINABLE DEVELOPMENT G⦿ALS

| Category	Principles	Page/More Information
Goal 3	Ensure healthy lives and promote well-being for all at all ages	P. 19, 32-33, 45, 87
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. P	P. 19, 30-31, 87
Goal 5	Achieve gender equality and empower all women and girls.	P. 52
Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	P. 74-75, 87
Goal 10	Reduce income inequality within and among countries	P. 87
Goal 11	Make cities and human settlements inclusive, safe, resilient, and sustainable.	P. 19, 23, 71, 87
Goal 13	Take urgent action to combat climate change and its impacts.	P. 23, 79
Goal 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.	
Goal 17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	P. 10-13

Membership/Awards and Recognition

Membership

Seoul Bar Association	Seongnam Chamber of Commerce	Korea Industrial Technology Association
Korean Bar Association	Korea Software Industry Association (KOSA)	Korea Software Technology Association
Korea Patent Attorneys Association	Federation of Korea Information Industries (FKII)	Consortium of Cloud Computing Research (CCCR)
Korea Engineering & Consulting Association	Korea Association for ICT Promotion (KAIT)	Korea Open Source Software Association (KOSSA)
Korea International Trade Association	Korea Information Technology Service Industry Association (ITSA)	Korea Institute of Information Security and Cryptology (KIISC)
Korea Information and Communication Contractors Association	Korea Association of Cloud Industry	Korea High-tech Safety Industry Association (KOHSIA)
Information & Communication Financial Cooperative	Seoul Economist Club	Korea Software Quality Consultative Group
Korea Electrical Contractors Association	Fair Competition Federation	Korea Alliance of Software Architect
International Contractors Association of Korea	Korea Listed Companies Association	Korea Cardlinx Association
Engineering Guarantee Insurance	Korea IR Service	Korea Fintech Association
Korea Specialty Contractor Financial Cooperative	Korea Employer's Federation	Korea Defense Software Association
Korea Mech. Const. Contractors Association	Gyeonggi Employers Federation	Korea Defense Industry Association
Fire Guarantee	Korea institute of Petroleum Management	Korea Intelligent IoT Association
Korea Fire Safety Association	Intelligent Transport Society of Korea	Korean Nurses Association
Korea Bigdata Society		

Awards and Recognition

No	Title	Awarding Organization	Year
1	Included in DJSI(Dow Jones Sustainability Indices) World for 8 consecutive years and selected as the Industry Leader[Ranked No. 1 in the integrated corporations sector]	S&P Dow Jones Indices / RobecoSAM	2019
2	Rated A in the ESG(Environment, Social, Governance) combined	Korea Corporate Governance Service (KCGS)	
3	Korean Readers' Choice Award(KRCA)	Korea Standards Association (KSA)	
4	Minister of Commerce, Industry and Energy Award at the 2019 Most Loved Korean Companies Awards	Ministry of Commerce, Industry and Energy, Ministry of SMEs and Startups	
5	Incorporated in the DJSI (Dow Jones Sustainability Indices) World for 7 consecutive years [Conglomerate sector]	S&P Dow Jones Indices / RobecoSAM	2018
6	Total A+ Grade in ESG (Environment, Social, Governance)	Korea Corporate Governance Service (KCGS)	
7	Grand prize in ESG excellent company awards	Korea Corporate Governance Service (KCGS)	
8	Highest award in governance structure awards	Korea Corporate Governance Service (KCGS)	
9	The Most Loved Companies in Korea, Government Award, Award by Chairman of Korea Chamber of Commerce and Industry	Ministry of Trade, Industry and Energy, Ministry of SMEs and Startups	
10	Incorporated in the DJSI (Dow Jones Sustainability Indices) World for 6 consecutive years [Conglomerate sector]	S&P Dow Jones Indices / RobecoSAM	2017
11	Total A+ Grade in ESG (Environment, Social, Governance)	Korea Corporate Governance Service (KCGS)	
12	Excellent prize in ESG excellent company awards	Korea Corporate Governance Service (KCGS)	
13	Excellent report in Korean Readers' Choice Awards (KRCA) [Service sector]	Korea Standards Association (KSA)	
14	Prize by President of Korea Standards Association in the Most Loved Companies in Korea	Ministry of SMEs and Startups	
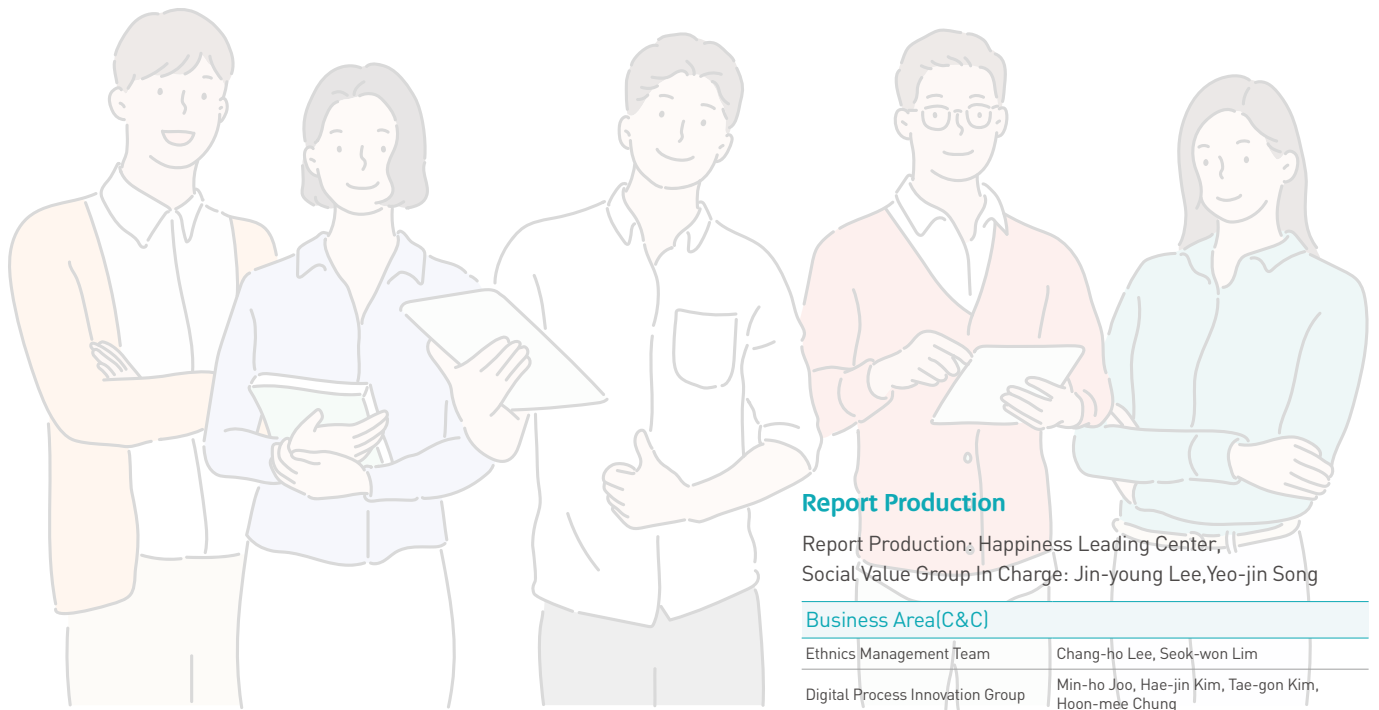
Report Production

Report Production: Happiness Leading Center,
Social Value Group In Charge: Jin-young Lee, Yeo-jin Song

Business Area(C&C)

Ethnics Management Team	Chang-ho Lee, Seok-won Lim
Digital Process Innovation Group	Min-ho Joo, Hae-jin Kim, Tae-gon Kim, Hoon-mee Chung
HR Group	Eun-shil Choi, Hyeon-soo Kim, Jin-woo Kang, Jun-yeon Park, Soon-woo Kwon
Competency Development Group	Young-jee Yoo
Procurement Group	Seung-kee Hong
CPR Group	Min-sung Kim, Jong-hyun Yoon, Tae-jin Kim
DT Technology & Stragegy Group	Gye-wan Lee
Legal Affairs Group	Su-ji Ko
Corporate Finance Group	Joon-hee Cho, Sang-wook Park
Strategic Planning Group	Bum-rae Cho, Jin-woo Lee
Infra Group	Young-seok Na
Information Security Group	Beom-su KIM
Management Support Team	Kyung-soo Lee
BM Innovation Leading General	Ho-yeol Lee, Chang-seok Yoon
Channel Innovation Team	Il-bum Lee
Plant Competency Unit	Byung-soo Kim
Cloud Group	Jang-heon Hong, Jae-moon Hwang, Jean-young Lee
Strategic Business Team	Jai-won Hwang
OSS Business Team	Min-won Kim
Channel&Marketing Group	So-ra Hong, Ho-in Kim
Happiness Leading Group	Sung-joo Han, Tae-hee Han
Social Value Group	Shin-mook Lim, Dong-soon Kwon, Ga-ram Ryu
	Chung-ryong Suh, Hea-joon Park, Chang-rae Jung, Ji-eun Park, Ga-young Lee

Holdings

Chairman's Office	Hen-su Jang, Gyeo-un Jeong
Legal Affairs Division	Sang-min Lee, Seong-pil Hwang
Happiness Design Center	In-san Park, Young-il Jo
HR Division	Cho-hee Jeon
IR Division	Tae-hee Kim
Brand Division	Hyeong-jun Kim, Won-hyung Lee, Sang-rak Lee, Hyo-ju Jang

SK holdings