



SGHDX

SG Holdings Group's Digital Transformation Strategy

SG Holdings Group DX Strategy

INTRODUCTION

Importance of **DX Strategy** in the Logistics Industry

Due to the rapid decrease in the working population associated with the declining birthrate and aging population in Japan, it has become increasingly difficult for the logistics industry to secure the personnel required to maintain logistics as logistics volume increases in the e-commerce market. The SG Holdings Group is promoting automation and labor saving through the utilization of technology to continue the stable provision of social infrastructure in the form of logistics.

Going forward, we will constantly provide optimal solutions for customers by partnering with other companies in the same industry and other industries including start-ups based on an open Group-wide IT infrastructure, promoting further DX through the utilization of technologies such as IoT, AI and robotics, and further evolving total logistics.

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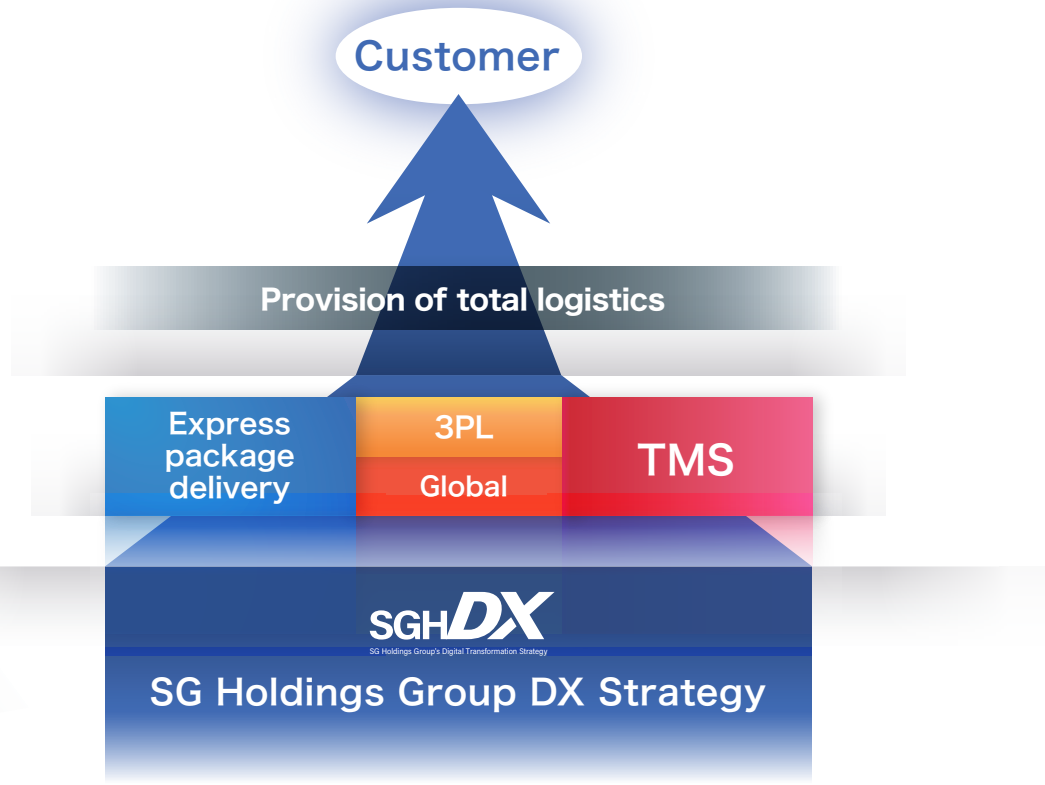
Growth Strategy = DX Strategy

The SG Holdings Group targets the entire logistics industry, and provides solutions for increasing customers' competitive advantages through the strengthening of total logistics functions. We have positioned "DX" as an important strategy in order to achieve the sustained development of this unique business model.

The entire logistics industry is our target



Strengthening of total logistics functions



Source: Japan Association for Logistics and Transport "Logistics in Numbers 2019"; Yano Research Institute Ltd. "Logistics Market 2019"

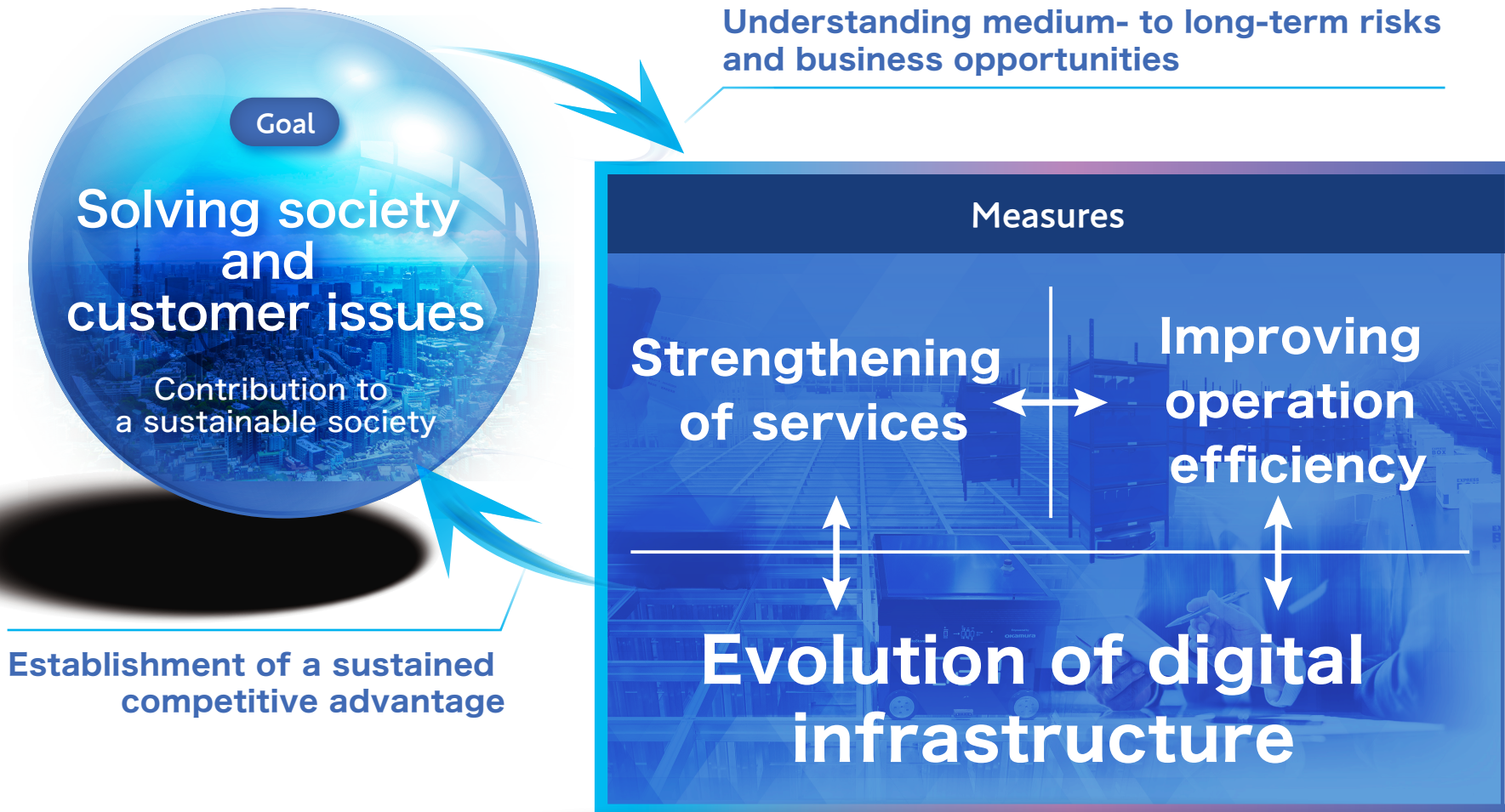
* Entire logistics industry: According to Logistics in Numbers 2019, the total operating revenue of the logistics industry (trucking industry, JR Freight, coastal shipping industry, international shipping industry, harbor transportation industry, air cargo business, transportation business using railways, transportation business using international shipping, transportation business using airways, warehousing industry, truck terminal industry) in FY2017

* Trucking business: According to Logistics in Numbers 2019, the total operating revenue of the trucking business in FY2017

* Express package delivery business: Logistics Market 2019

DX Strategy

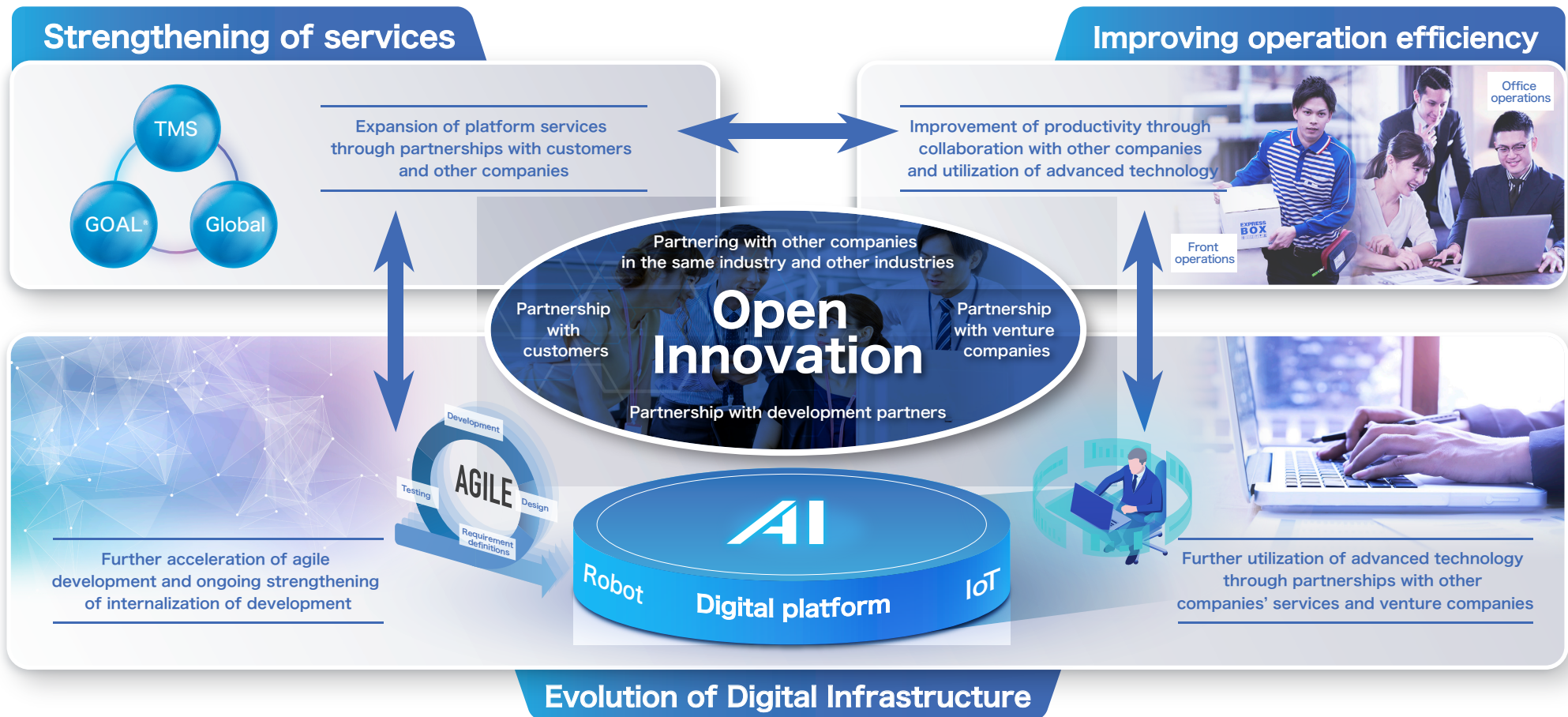
The goal of the SG Holdings Group's DX Strategy is to contribute to the realization of a sustainable society through the resolution of issues faced by society and customers. In order to achieve this goal, we will engage in “evolution of digital infrastructure,” “improving operation efficiency” and “strengthening of services.”



Overview of DX Measures

As mentioned above, DX measures are made up of three measures: **evolution of digital infrastructure, improving operation efficiency and strengthening of services**. In each of these, **we actively conduct open innovation** through partnerships with diverse stakeholders such as customers and development partners, and accelerate and develop initiatives.

Overview of SG Holdings Group's DX Measures

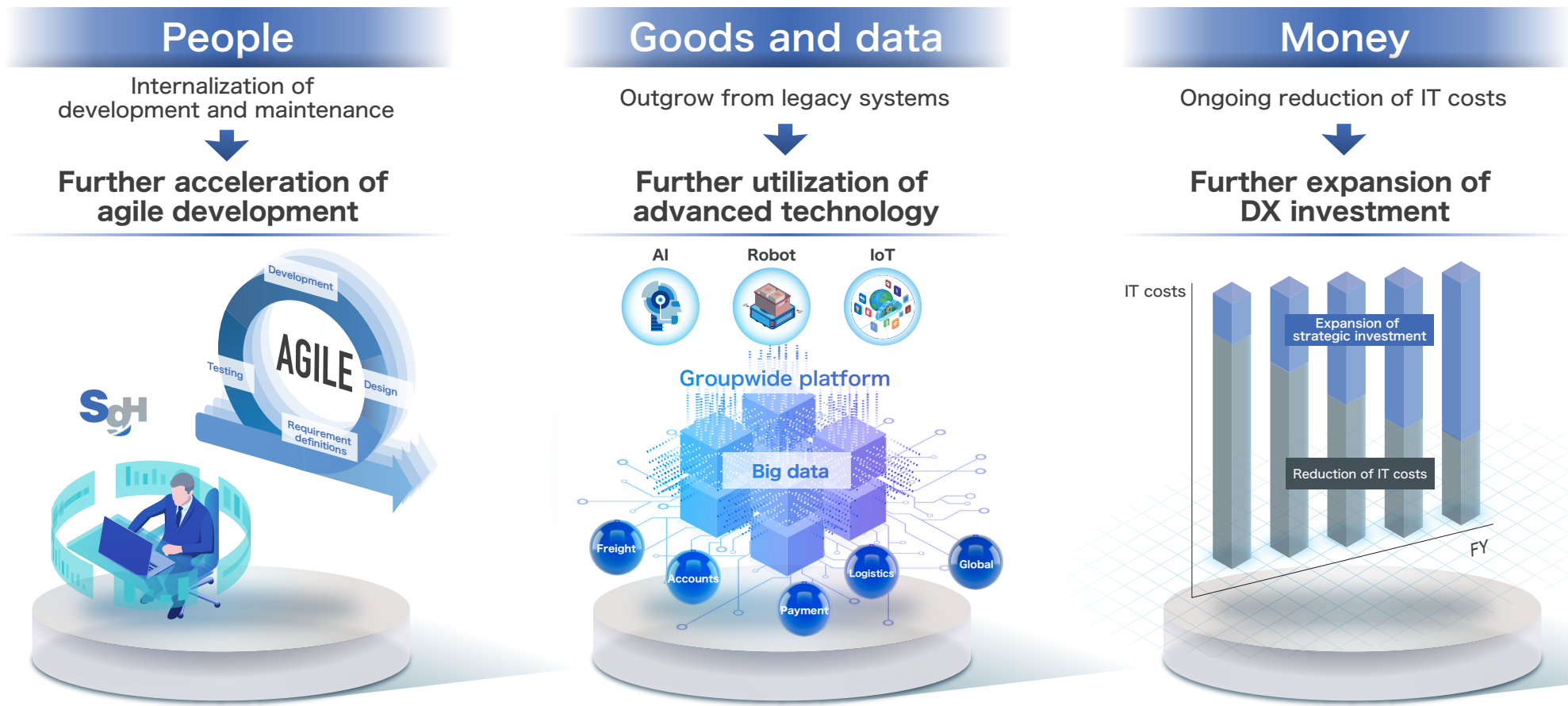


Evolution of Digital Infrastructure

In the “evolution of digital infrastructure,” we will further accelerate DX through agile development, utilization of advanced technology and further expansion into DX investment based on the departure from legacy systems and internalization of development and maintenance that have been achieved until now.



Acceleration of DX through further investment following the outgrow from legacy systems and internalization of production

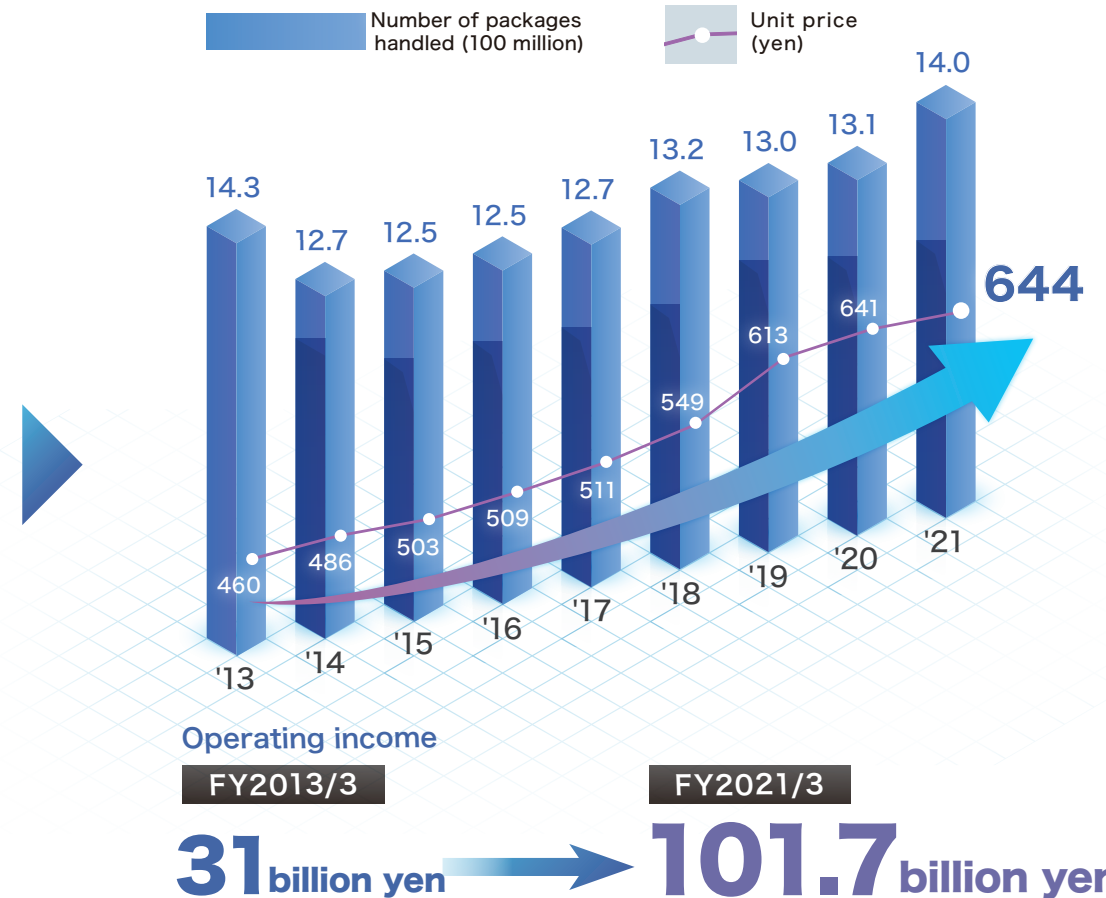
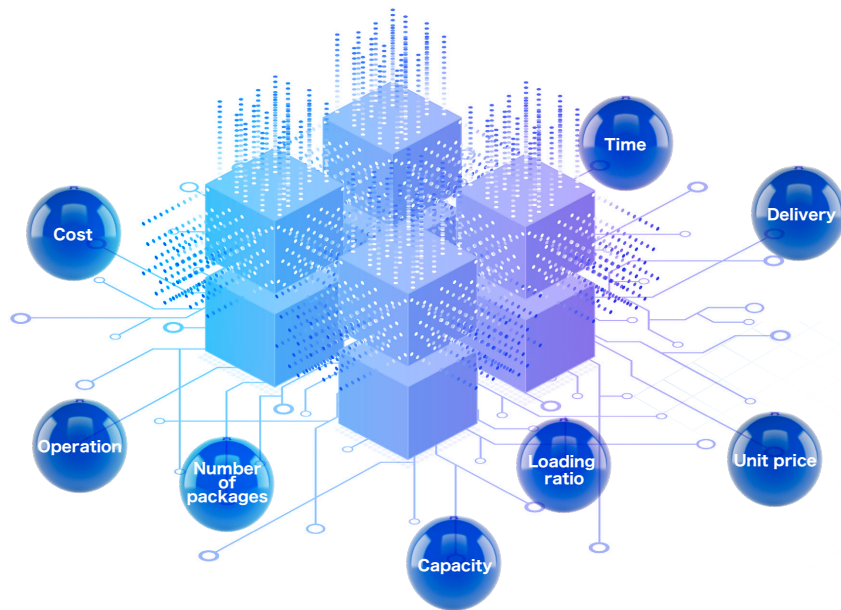


[Case Study] Value through Digital Infrastructure

The Group is using IT to visualize major KPIs such as unit price, number of packages, cost, quality and capacity. This enables profit management of each package. We have achieved stable business growth through the continuation of efforts to receive appropriate freight tariffs based on the visualized profitability of packages.

Realization and effect of data-driven management

Groupwide platform (Big data)



Improving Operation Efficiency

In the “Improving operation efficiency,” we are seeking to **improve efficiency through DX** for logistics operations at the core of the Group such as the Sales Drivers® (SD) of Sagawa Express, and backyard operations supporting these. We will improve **productivity of operations related to logistics** even more than in the past.

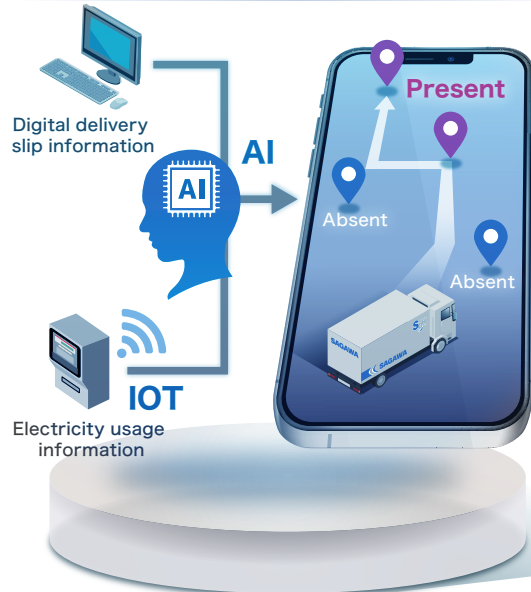


Improvement of productivity through collaboration with other companies and utilization of advanced technology

Driver operations

Partnerships with companies with data and algorithms

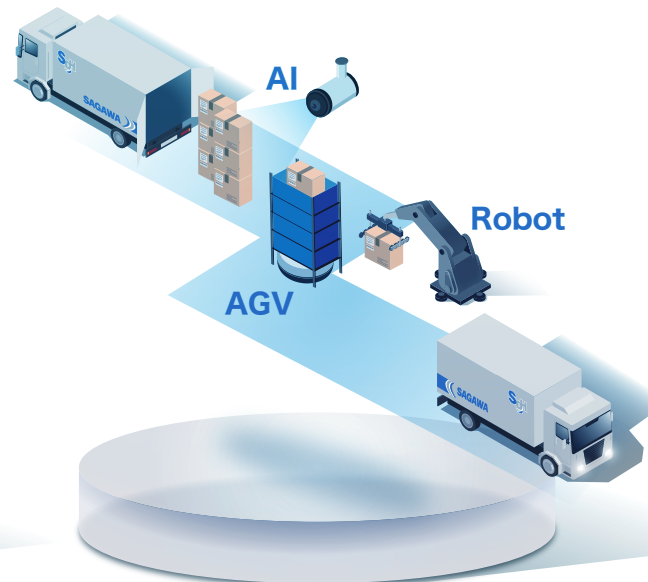
Improvement of productivity of SDs and delivery partners



Warehouse operations

Strengthening of R&D partnerships with venture companies, etc.

Further effective utilization of advanced technology



Office operations

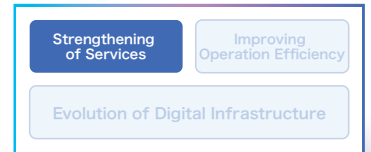
Utilization of AI-OCR, etc. developed in house

Further improvement of efficiency of backyard operations



Strengthening of Services

In “strengthening of services,” we will engage in deeper partnerships not only within the Group but also with customers and other companies in the same industry, **expand logistics “platform” services** and seek to resolve logistics issues. The three pillars of TMS, GOAL® and Global provided as total logistics realize the strengthening of services through **the creation of optimal platforms for each of these.**



Expansion of platform services through partnerships with customers and other companies

TMS

Data linkage with senders and delivery partners



Provision of package and vehicle matching services



GOAL®

Data linkage on warehouse and delivery capacity within industries



Provision of optimal logistics solutions across companies

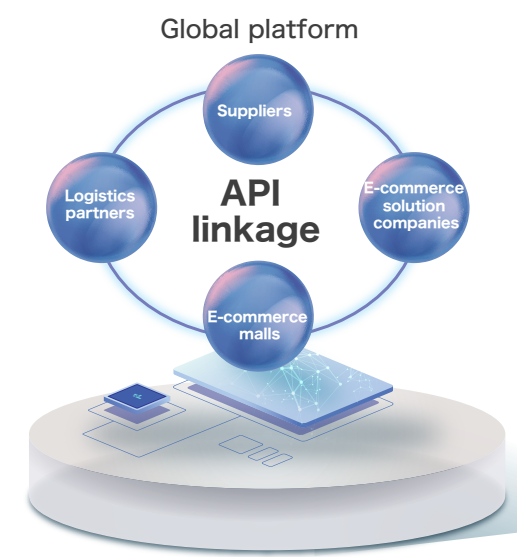


Global

API linkage with companies related to cross-border e-commerce



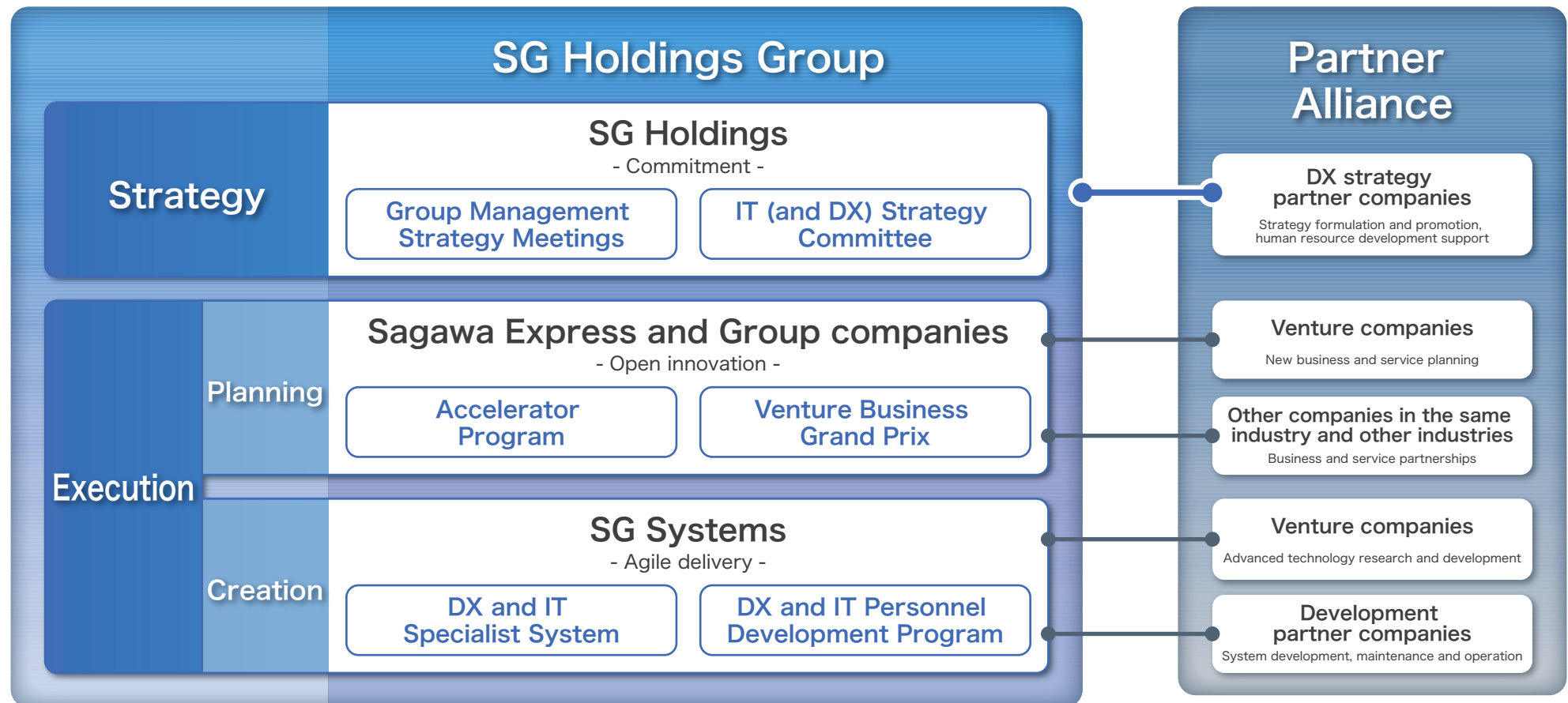
Provision of consistent global services



DX Promotion System

Led by SG Holdings handling the formulation of strategy, we are **promoting DX strategy by partnering with Group companies with strengths in each area** such as Sagawa Express. The system is being created by SG Systems, which has a long track record in the area of logistics x IT. Furthermore, we will actively pursue **alliances with a variety of partners** in both strategy and execution.

SG Holdings Group's DX Promotion System



DX Strategy Roadmap

The SG Holdings Group has **already overcome the “2025 Digital Cliff”** pointed out by the Ministry of Economy, Trade and Industry in 2018, and is engaged in the enhancement, creation and transformation of business. In future, we will also engage in **solving social issues through further promotion of DX strategy.**

