# 2023 DIGITAL TRANFORMATION REPORT

*Removing All Boundaries With The Power Of DX* 





digital transformation into our business to shape future lifestyles. Be it renewable energy initiatives, digitally driven emotional experiences, or community development loved by locals, everything we do is inspired by a desire to encourage the wellbeing of every individual. We will continue to combine our Group's diverse green capabilities to create value for

## Toward a Vibrant Future for All

Our ideal vision for 2030

# **Create Value for the Future**

We resolve social issues through our business activities

and aim for sustainable society and growth together with our stakeholders.

We realize a future where everyone can be themselves and shine vigorously

through the creation of a variety of appealing lifestyles.

Themes to work on for value creation (Materialities)



Create a variety of lifestyles.



Create well-being communities and lifestyles.



Create a sustainable environment.



Create value in the digital era.



Human Capital

Create an organizational climate under which diverse human capital is enlivened.



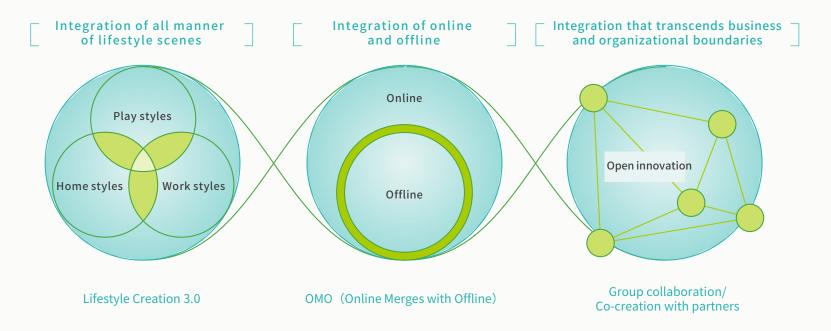
Create governance to accelerate growth.

## The DX Vision of the Tokyu Fudosan Holdings Group

Embracing the concept of digital fusion, we aim to use DX to remove all boundaries present in society.

**`**Digital Fusion

### Removing All Boundaries with the Power of DX



To achieve our vision for 2030, we will promote DX Groupwide, passing on a world full of hope and a rich environment to future generations.

## Four Key Issues in DX



### $\langle$ Country $\rangle$



**(BtoC)** 



**〈BtoB〉** 





Message from the President

# Using the power of DX to co-create value both inside and outside the group, and transforming intangible assets into earning power

In 2021, we established GROUP VISION 2030 as our long-term vision. With WE ARE GREEN serving as the Group's banner, we declared our commitment to shaping a future in which anyone can be themselves and shine with vigor through the creation of attractive and diverse lifestyles. And, as a Group policy to achieve this vision, DX has been positioned as one of the key pillars alongside environmental management.

In May last year, we formulated the Medium-Term Management Plan 2025, and have focused on restructuring our business portfolio to transform the Group.Now that we have reached a certain point, we will tackle value chain reform as the main part of that transformation.

The essence of the Group's value chain is a cycle in which we create services that add value to the customer experience through diverse business operations utilizing tangible assets such as land and space, and creating new businesses by utilizing intellectual assets generated from accumulated know-how and data.We will work harder to reform our awareness, shifting from partial optimization to total optimization, and create a structure and organizational culture that will enable us to achieve value creation from the customer perspective, leveraging our numerous points of contact with customers-one of the Group's key strengths-while at the same time inducing both internal and external business creation.

In value chain reform, the key is utilizing intellectual assets through DX. Our vision is to remove all boundaries with the power of Digital Fusion, and we are working on three key forms of integrations. Integration of all manner of situations in daily life, integration of online and offline, and integration that transcends business and organizational boundaries. This will maximize the value of the Group's unique intangible assets and lead to profitability.

Our company was recently selected as one of the Digital Transformation Stocks 2023 companies recognized by the Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange.

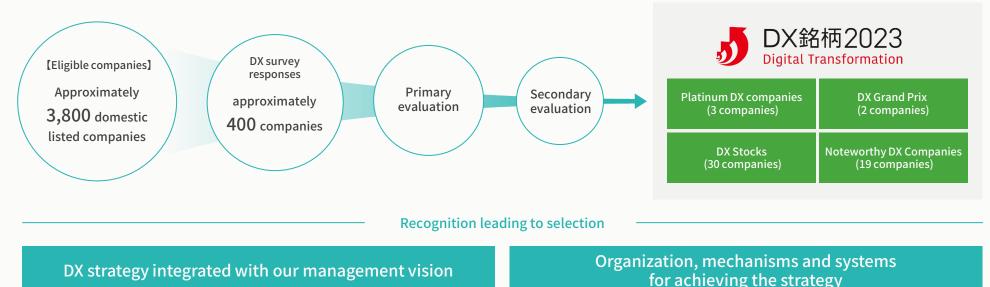
This was in recognition of the information communicated in last year's DX Report, our DX strategy integrated with our management vision, our organization, mechanisms and systems for achieving that strategy, and our deepening of existing businesses and creation of new business models as real-world examples of the utilization of DX.

Going forward, we will seek to maintain our momentum and continue to significantly grow our intellectual assets, including data, other information assets, and business conceptualization capabilities through internal collaboration within the Group and co-creation with partners, while removing every internal and external barrier with the power of DX. Through this, we are turning the breadth of our business operations—a distinctive characteristic of the Group—into a true source of strength.

President & CEO, Tokyu Fudosan Holdings Corporation

## Selection as a Digital Transformation Stock 2023

Tokyu Fudosan Holdings was selected by the Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange as one of this year's Digital Transformation Stock 2023 companies. The Digital Transformation Stock scheme selects companies listed on the Tokyo Stock Exchange that have established internal mechanisms to implement DX leading to increased corporate value, and demonstrated outstanding achievements in the use of DX. Our company was selected in recognition of our DX strategy integrated with our management vision, our organization, mechanisms and systems for achieving that strategy, and other examples of initiatives utilizing digital technologies.



## Examples of initiatives utilizing digital technologies

#### Deepening of existing business model

#### Using digital twins in housing sales

Digital twins are created with high precision, making properties available for viewing on the website at all times, enabling efficient property inspections. This simulation function has been highly appraised by customers. It also contributes to reducing costs and environmental impact involved in operating show homes.



#### Creation of new business models

#### NFT of Ski Resort First-Track Rights

We have utilized NFTs (non-fungible token) to sell the rights for customers to ski on powder snow first thing in the morning as part of the "Value up NISEKO road to 2030" program. The feature of being able to digitally preserve the memory of the experience, together with factors such as affinity with social media and secondary distribution, has enables us to achieve an increase in product value.



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#### Scope of the report

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Tokyu Fudosan Holdings Corporation and Group companies

#### Reporting period

April 1, 2022 - September 30, 2023 (The report includes some information from prior to April 1, 2022 and after September 30, 2023.)

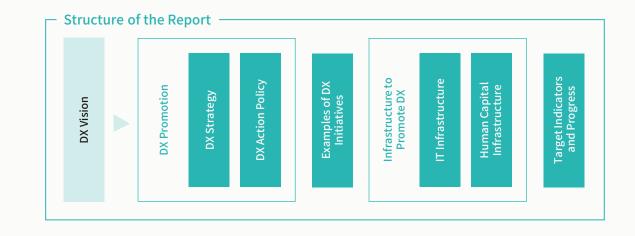
#### Released

November 2023

## Items to note concerning our future outlook

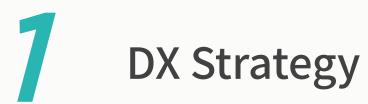
The forecasts and other forward-looking statements in this report are based on currently available information and certain assumptions determined as rational. Consequently, the statements herein do not constitute assurance regarding actual results by the Company.

Actual performance may significantly differ from these forecasts due to various factors in the future.



<sup>-</sup> Examples of DX technology utilization within the Group

## Section





#### Message from the executive officer in charge

## Driving future transformation through strategy and execution with a focus on DX promotion personnel



Tokyu Fudosan Holdings Corporation Representative Director & Executive Vice President (President and Representative Director, TFHD digital Inc.)

#### Hitoshi Uemura

In our long-term vision formulated in May 2021, DX was established as one of our Group policies, and strategic initiatives were launched accordingly. As a common Group-wide framework, our DX action policy was divided into the three categories of Business Processes, Customer Experience (CX), and Innovation, with the aim of establishing a new revenue model by maximizing the value of our assets and human capital. To achieve this shared Group-wide goal, the Medium-Term Management Plans of each Group company consider and implement measures reflecting the business environment and management issues.

Additionally, in order to further accelerate the efforts of each Group company this fiscal year, four key issues in DX have been identified. The four key issues are: enhancing the centrally attracting force of cities, resolving local issues, creating optimal lifestyles, and creating job satisfaction while solving labor shortages. The Group's strengths of a broad range of assets, capability to produce business, a wealth of customer touchpoints, human capital and operational expertise will be enhanced to create unique value through the power of DX.

Human resources who are highly skilled in the field of DX will be indispensable to successfully implement various DX strategies at a high level. In particular, bridge persons—human resources who integrate digital technologies into the business and play a central role in the promotion of projects—are positioned as the cornerstone of DX promotion, and we provide diverse and practical learning opportunities beyond the boundaries of each Group company for their systematic development. In addition, by raising the level of digital literacy of not only bridge persons but also the entire organization, we will work together as a Group to rapidly functional DX.

TFHD digital Inc., which commenced operations in April 2022, is a DX functional company that will provide DX implementation support for the whole Group by developing DX promotion personnel of each Group company and accumulating knowledge internally, while at the same time acquiring high-skilled digital professionals from outside the Group. Since the start of our business, we have created numerous achievements in data utilization, digital marketing, and digital service development. What will be important going forward is to operate a well-balanced cycle of strategy and execution for the entire Group and link them to producing tangible results together with a diverse range of stakeholders.

Embracing the collective power of the Group as our strength, we will maximize the value of assets and human capital with DX, creating innovation and success stories that will light up the future.

## Perception of the business environment

The progress of digital technology has brought significant changes to the contact points with customers in the real estate sector. In the future, we will need to gain a deeper understanding of customers through both offline and online contact points, and strengthen engagement by delivering proposals reflective of their needs. To accomplish this, we recognize it is essential that we strive to create unique intellectual assets that utilize digital technologies and create knowledge and know-how based on an indepth understanding, and leverage the collective strength of the Group to advance business models that are difficult to imitate.

#### The Group's strengths and challenges

Strengths	Breadth of business wings and integrated structure from real estate development to management, operation and brokerage		
Suchguis	Wide-ranging business domain	Extensive points of contact with customer	
Challenges	Evolving into a business model utilizing in of the Group	tellectual assets to pool the capabilities	
Challenges	Demonstrating the Group's collective power	Utilizing the Group's intellectual assets	

#### Changes to the real estate industry brought about by digitalization

Opportunities	<ul> <li>Making existing businesses more sophisticate and efficient</li> <li>Providing innovative services through the utilization of new technologies</li> </ul>
Threats	<ul> <li>Disruption of information asymmetry and homogenization of services through AI</li> <li>Possibility of major changes to the competitive axes of existing businesses</li> </ul>



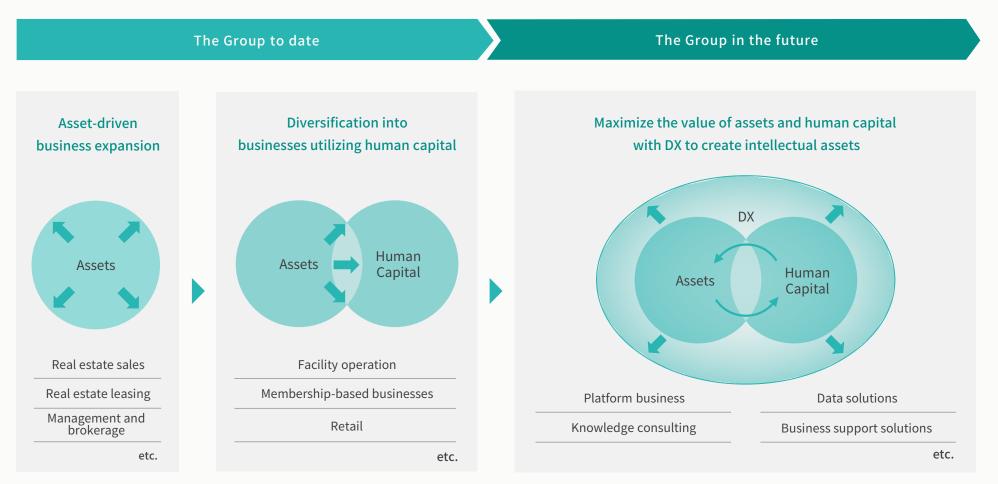
Treat customers as the starting point to connect Group services through DX and create new experiential value

Combing capabilities in gathering information and conceptualizing businesses to create business models that utilize intellectual assets and are hard to imitate

Aim to enhance corporate value by using DX to maximize the collective power of the Group

## Transition and direction of the business model

After its founding in 1953, the Tokyu Fudosan Holdings Group went through a period of business expansion primarily through the real estate business, and since the 1980s has grown through the diversification of business by making use of human capital. As we enter a society with a declining population and face a shrinking workforce, going forward the Group will fuse the boundaries of assets and human capital while aiming to maximize its value with DX and establish new and more unique revenue models. Additionally, based on the intellectual assets generated by these assets and human capital, we will evolve into a comprehensive developer that embraces the utilization of digital technologies as its strength.



## Four key issues and focus areas

In our Medium-Term Management Plan, we outlined the DX goal of establishing a new revenue model by maximizing the value of our assets and human capital. This fiscal year, we formulated four new key issues in DX. Since key issues are also related to city and country, BtoC and BtoB, we have also set focus areas for each issue. Through collaboration among Group companies, we will implement specific initiatives in these focus areas, which will lead to the creation of new services and experiential value, and contribute to future earnings.

	Asset-utilizi	ng business	$\times$	Human capital-utilizing business		
les	〈City〉	<b>〈Country〉</b>	<b>〈BtoC〉</b>		<b>〈BtoB〉</b>	
Priority Issues	Enhancing the centrally attracting force of cities	Resolving local issues		Creating optimal lifestyles	Creating job satisfaction with reducing labor shortages	
Focus Areas	Driving the cycle of creation, sharing, and accumulation	Pursuit of local convenience and experiential value		Provision of personalized services	Creating a knowledge base from property management and operations	
	<ul> <li>Cutting-edge integration and co- creation support that combines real and digital assets</li> <li>Creating a system that encourages community building with experience at its core</li> </ul>	<ul> <li>Creation of seamless local experiences in the fields of transportation and tourism</li> <li>Contribution to improving appeal and sustainable tourism through data utilization</li> </ul>		<ul> <li>Elaborate analysis of data acquired through extensive points of contact with customers</li> <li>Deepen relationships by providing services across businesses</li> </ul>	<ul> <li>Improving efficiency of routine tasks and standardizing worker skills</li> <li>Allocation of resources based on matching of work and skills</li> </ul>	
Contribution to future earnings	•Enhancing area and business value •Gaining revenue through engagement at customer contact points	<ul> <li>Expanding solutions to other regions</li> <li>Securing new business opportunities</li> </ul>	-	<ul> <li>Fostering loyal customers</li> <li>Improving profit margins of existing businesses</li> </ul>	<ul> <li>Building platform businesses</li> <li>Securing new revenue opportunities</li> </ul>	

## Activities of TFHD digital Inc.

TFHD digital Inc. was established in 2022 as a Group functional DX company specializing in DX. It acquires high-skilled digital professionals from outside sources and leverages their capabilities to support DX implementation at each Group company in our group. TFHD digital takes a leading role in implementing common and key themes for the entire Group, and also conducts system and tool development. Through these efforts, it aims to create unique value for the Group by expanding the use of data, creating new standards for business processes, and redesigning services from a customer perspective.

<b>TFHD digital</b> A group of digital experts leading DX in the real estate industry (Wholly owned subsidiary of Tokyu Fudosan Holdings Corporation / Began operating in April 2022)				
	System development for data analysis and utilization	In-house data visualization, BI board production and maintenance, and IoT sensor installation, etc., for group companies. Support for building customer ID and customer data integration infrastructure within the group.		
Acquisition of high-skilled digital professionals	Digital marketing support	Driving visualization of digital marketing efforts at each Group company and supporting the implementation of projects such as sales promotion content using digital media.		
<ul> <li>Business-oriented digital professionals</li> <li>IT-oriented digital professionals</li> </ul>	Development of tools for area management activities	Community planning DX has been implemented in areas such as Minato-ku, Tokyo and Niseko, Hokkaido, utilizing a digital area management tool service to improve convenience for visitors and promote urban circulation.		
	Development of DX promotion personnel	TFHD digital runs a group-wide practical trainee program to give employees of group companies hands-on experience of data utilization through the experience of focusing on and improving their own business processes.		

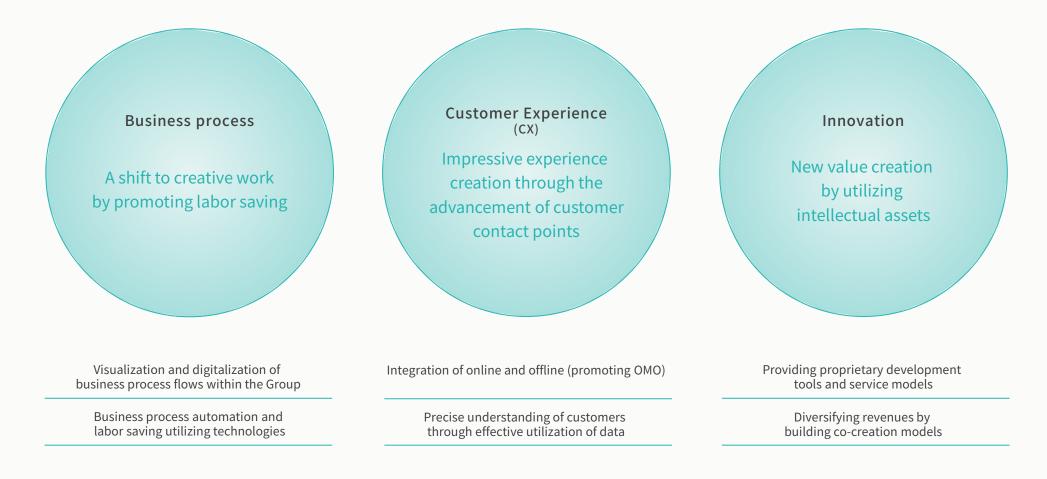
## Section





## **Three action policies**

The Tokyu Fudosan Holdings Group is promoting DX across the three categories of Business processes, CX and Innovation. Under business processes, which is aimed at business reforms, we will fundamentally revise our business processes and make significant improvements to efficiency and sophistication to make the transition to creative business operations. Under CX, which is aimed at transforming customer experiences, we will utilize data to promote online-merge-offline (OMO) and provide customers with moving experiences. Under innovation, which is aimed at building new business models through business reforms, we will employ various means to seize open revenue opportunities that will lead to accelerating growth.



#### [Business process]

## A shift to creative work by promoting labor saving

We will steadily promote the digitization of business and its shift to online, and put innovative work styles into practice.

## Improving productivity through process reforms

We have identified the business activities that are conducive to automation and labor-saving through the use of digital technologies, and are making continuous efforts to reduce person-hours associated with internal work. In addition, in conjunction with revising how business tasks are performed, we aim to develop an environment that lets employees work regardless of time or location, to achieve flexible and high-quality work styles. These business process reforms will lead to superior business operations and improved profit margins thanks to higher productivity. We will also strive to enhance employee motivation, empower them to make the most of these abilities, and transform in-Group resources into creative work.



**Business process** 

СХ

Innovation

## [ CX ]

## Impressive experience creation through the advancement of customer contact points

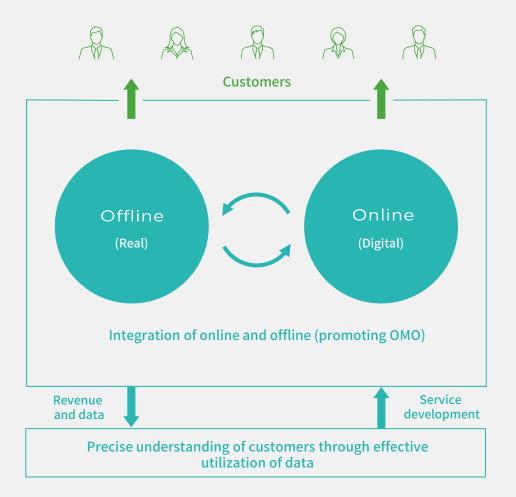
In an age in which customers themselves choose products, services and information, we will embody values that are deeply linked to individuals.

## Creating a true competitive advantage with digital technologies

In a modern digital society, customers select information themselves, and have the expectation of and preference for superior experiences from the products and services they truly want to use. Digital technologies can more deeply connect contact points with customers and create seamless experiences. As a Group that leverages its extensive range of customer contact points as a strength, we will design personalized experiential value and refine it into impressive experiences by seamlessly fusing the real and digital worlds. Then down the road we will create a true competitive advantage and bring about increased revenues through cross-selling and upselling. Creating impressive experiences.



Creating impressive experiences through the provision of personalized services



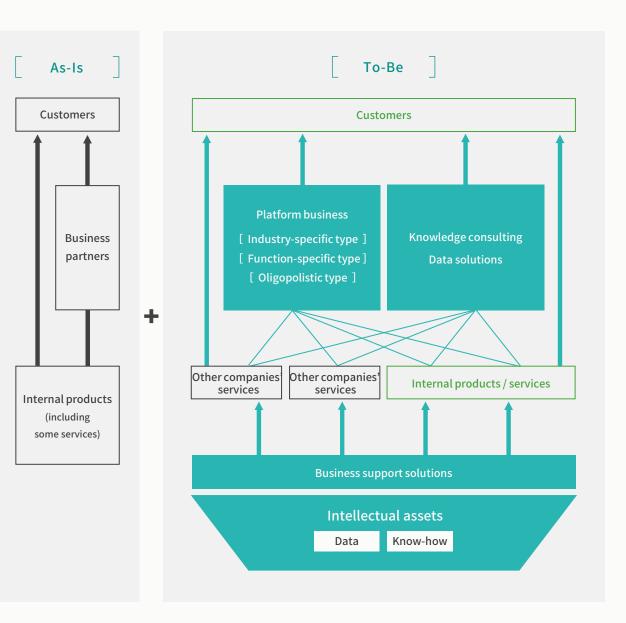
#### [Innovation]

# New value creation by utilizing intellectual assets

Explore and build business models in anticipation of the raging waves of digital transformation that are sure to hit the real estate industry

## Utilize company assets to solve the issues of future society

We will use digital technologies to explore business models that cannot be easily imitated on a priority basis. Specifically, we will convert intangible assets such as the business know-how we have established into value creation tools, and build new business models out of the data the Group is uniquely positioned to amass and combine, and out of other digitized assets. These activities are part of efforts to combine and externally roll out services that utilize intangible assets. Through these activities, we will aim to achieve medium-and-long-term growth by diversifying our revenue sources, lead innovation with the rollout of services for the entire real estate industry, and help provide solutions to issues in future society.



**Business process** 

СХ

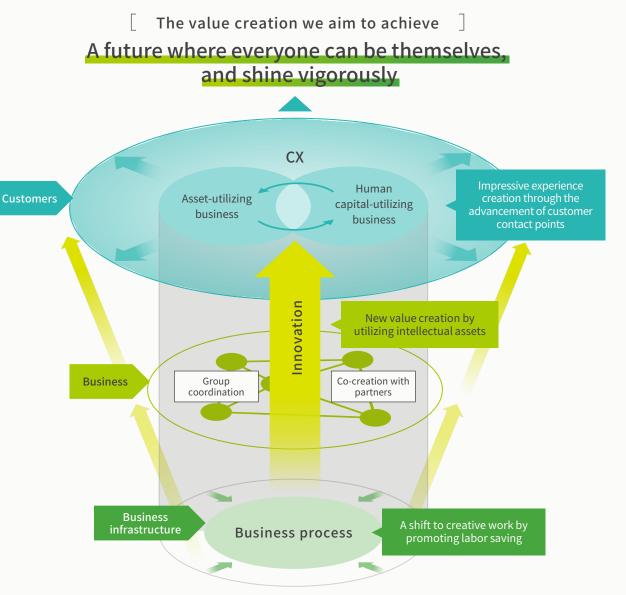
Innovation

## **Overview of value creation through DX**

We will achieve our vision for value creation while linking our three action policies for DX together with one another.

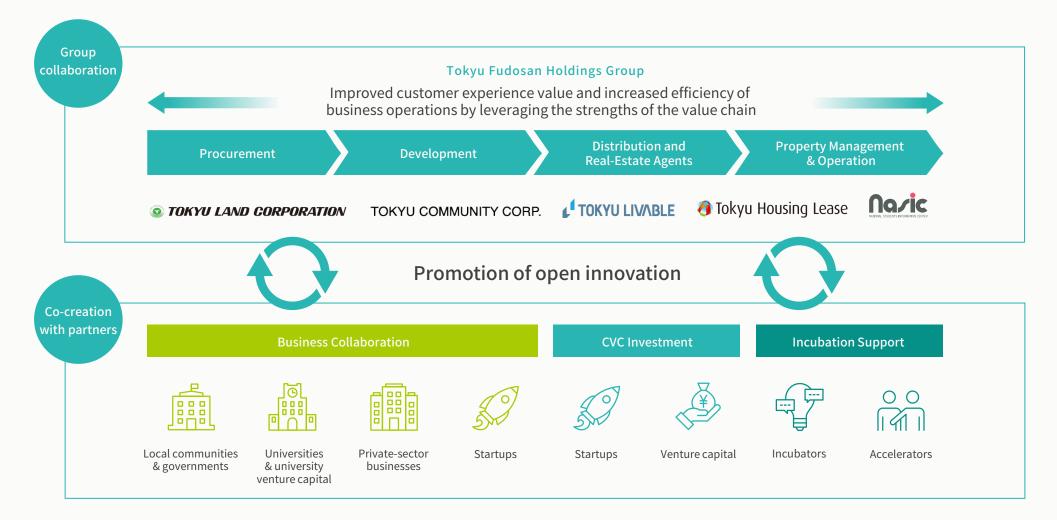
#### Creating new value with business processes, CX and innovation

The role of the value creation to which we aspire comprises three layers. In the base layer of business infrastructure, we work to slim down and rectify business operations and shift to creative work through labor saving promotion, the introduction of digital tools, system integration and the development of IT infrastructure. On top of that, we tap into business opportunities to develop new businesses and services through Group coordination and cocreation with partners. Utilizing the variety of businesses and services created in this way, we will maximize points of contact with customers and aim to create new impressive experiences. Moreover, within this sequence of developments, we will make use of the intellectual asset value accumulated in various locations to advance innovation that will lead to the diversification of revenue resources.



## Group collaboration and Co-creation with partners

The Group's DX efforts are characterized by internal collaboration within the Group and co-creation with partners, leveraging the advantages of the Group's broad-ranging business wings. Group collaboration is intended to enhance customer experience value by strengthening the value chain, and to improve the efficiency of business operations by sharing knowledge and know-how. In co-creation with partners, we aim to create synergies within and outside the Group by implementing open innovation through business collaborations between industry, academia, and government, and partnerships with venture capital and accelerators.



## **Promotion of open innovation**

To achieve co-creation with partners, as stated in the business policy of our long-term vision, we are actively engaged in open innovation through DX. The two core activities in this area are "business collaboration" with local communities, governments, educational and research institutions, and companies, and "CVC investment" in venture companies and startups. We have defined key areas for investment, including the DX field, and will further increase our efforts to create value through open innovation. We have defined key areas for investment, including the DX field, and will further increase our efforts to create value through open innovation.

#### **Business Collaboration**



We are strengthening cooperation with local communities and governments to make effective use of local resources, leveraging intellectual and human resources, and implementing initiatives that utilize data and digital technologies.

Cooperative agreements with local governments Shibuya-ku, Tokyo; Kutchan, Hokkaido



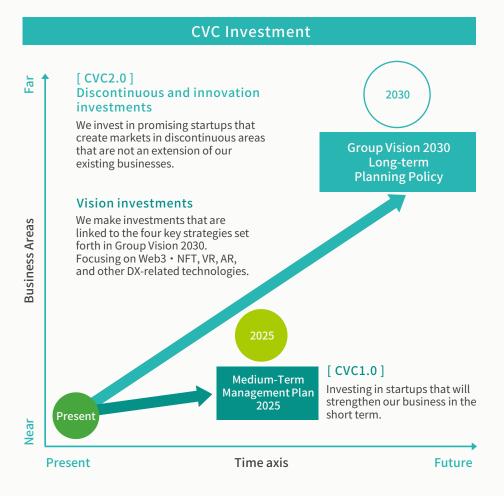
In addition to utilizing university resources to develop new technologies and create new businesses, we also engage in joint research and social experiments and operate programs to produce results beneficial to both industry and academia.

Participation in a Massachusetts Institute of Technology (MIT) industry-academia collaboration program



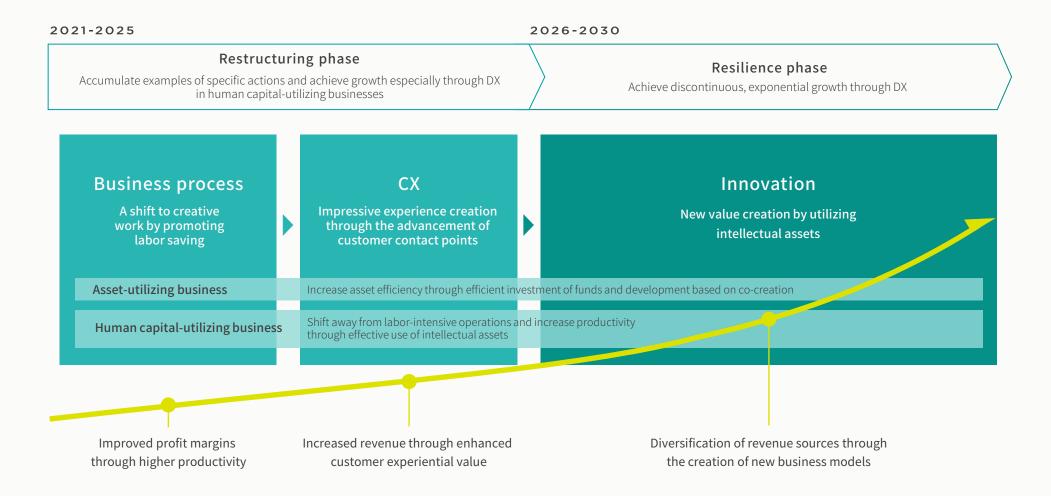
By utilizing the advanced know-how, related technologies and services of both parties, we realize collaborations for new urban development / community planning, such as environmentally advanced cities and solutions to regional issues. Comprehensive business alliance with East Japan Railway Company (JR East)

Preliminary introduction of IOWN in greater Shibuya area in collaboration with NTT Group



## Value creation roadmap to FY2030

The Tokyu Fudosan Holdings Group has positioned the period up to FY2025 as its restructuring phase and the time from FY2026 and beyond as its resilience phase. We will pursue DX-driven value creation by leveraging businesses oriented toward asset utilization and human capital utilization, respectively. During the restructuring phase, we will strive to improve profit margins through labor saving in business processes and boost revenue by improving the experiential value for customers. During the resilience phase, we will work to diversify revenue sources through the creation of new businesses and aim to achieve discontinuous and exponential growth through innovation.



## Section





## Rolling out a digital area management tool service to improve the local experience for visitors TFHD digital

We contribute to resolving local issues by developing services that digitalize points of contact with visitors to the town.

## Urban digital transformation utilizing the Group's know-how

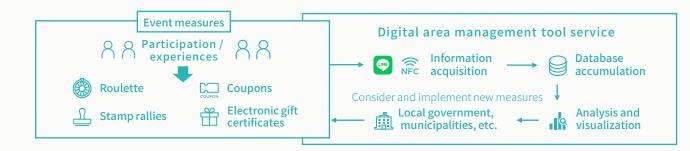
TFHD digital Inc.—which began operations in FY2022—is rolling out a digital area management tool service that combines the Group's accumulated know-how in urban development with digital technology. It is currently being used in multiple facilities and regions. We are implementing solutions to local issues through urban digital transformation by rolling out tools that can be utilized not only by the Group, but also by various local governments and DMOs. In the past, area management has faced problems such as not being able to keep track of the attributes and needs of individual visitors, and the difficulty of building an ongoing relationship because points of contact were limited to when people visit the area. The service utilizes SmartPlate<sup>™</sup> from Aquabit Spirals Inc., a CVC funded by the Group, and can encourage circulation measures based on easy-touse digital points of contact, such as NFC tags or the LINE app (a messaging app that has gained widespread use in Japan). The service acquires information on visitor attributes and behavior, then carries out further data-based measures tailored to individual needs to improve local experience for visitors to an area.

In the case of the town of Matsumae, after the event was held, the number of friends following the town's LINE account exceeded the town's population. In the case of the Niseko area, coupons are distributed to electronic ticket purchasers, and new local arearelated contents are communicated to tourists, while the acquired circulation data is used to formulate subsequent tourism policies.



#### [Case Studies]

- •Takeshiba area, Tokyo Stamp rally for the Shiki Theatre Company's 70th Anniversary Project
- Matsumae area, Hokkaido Distribution of electronic gift certificates via the LINE app at the Matsumae Sakura Festival
- •Kutchan and Niseko areas, Hokkaido Provided an electronic ticketing function for Skybus Niseko



## Giving value to special experiences at resorts through the use of NFTs Tokyu Land Corporation

We create new value by combining real-life experiences with digital technology.



#### Sale of NISEKO Powder Token

Tokyu Land Corporation is working to enhance the value of its resort experiences through the use of digital. The Niseko Tokyu Grand HIRAFU ski resort in Hokkaido has converted "early entry" rights into non-fungible token (NFT) form, and is selling them to customers, enabling them to ride the lifts and ski or snowboard down the resort's freshly powdered slopes first thing in the morning, before they open for business. Focusing on the fact that customers used to line up early in the morning to ski the powder snow, we combined this idea with an NFT to deliver the value of the experience of skiing freely on the slopes before the opening of the resort to other customers. Starting with this initiative, we are proceeding to verify the possibilities and identify issues that may arise when converting something (such as experiences) that has not yet been converted into monetary value into a business.

The difference from a typical NFT is that it is an NFT with an expiration date tied to the experience. The expiration date will allow us to verify the impact on secondary distribution and sales methods, as well as to improve the value of NFTs, which are under consideration for more widespread use. In addition, by linking NFTs with a unique local experience, we were able to visualize customer attachment to Niseko, develop a new customer base, achieve very effective PR, and create a new point of contact with fans.

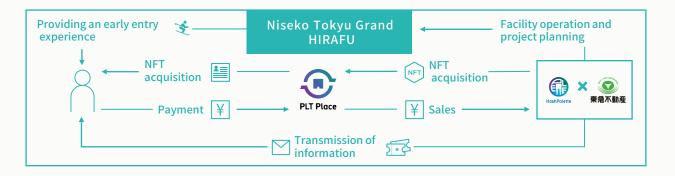
## Expanding digital applications to further enhance customer experience value

As part of the Value up NISEKO: Road to 2030 program, Tokyu Land Corporation will implement not only the development of the hard aspects of Niseko by 2030, but also the development of human experience aspects so that guests from around the world will want to visit Niseko again and again. In 2022, we also signed a comprehensive partnership agreement with the town of Kutchan, and are working with the local government to attract tourists, aiming to increase the overall value of the town by contributing to revenue generation, regional development, and increasing the number of stakeholders.

To further improve convenience, we are considering initiatives to facilitate the secondary distribution of NFTs.

In addition, with the aim of continued development, we are considering NFT distribution not only for first-track rights but also for special experiences at the resort, such as restaurants and hotels, and anticipates the formation of a community of NFT owners in the future.

We will continue to utilize NFT and other digital technologies to add value to special experiences at our resorts. Acquired data will be used to make proposals that will satisfy customers and improve the value of the customer experience. We will also work to further deepen our business model by applying the knowledge gained from our efforts at Niseko to various other regions where we are involved in the real estate business, while accumulating additional know-how.



## Establishing an industry-leading one-stop service for real estate transactions Tokyu Livable

Started applying digital to a series of real estate transaction procedures. We build a dedicated platform to provide services tailored to individual customers.

#### Digitalization at all points of contact in procedures

As the barriers between online and offline services continue to disappear, there is an increasing demand for services that allow customers to act at their own convenience, regardless of time, place, or means. Tokyu Livable, a real estate agency, has begun building a dedicated platform that responds to each customer needs for "anytime, anywhere" convenience. This service is planned to be offered to customers from FY2023.

The platform's greatest feature is that it provides digitally customized services to individuals, particularly in real estate transactions that often involve highly personalized deals. For customers purchasing or selling real estate, the platform will enable checking of documents and various applications for a series of procedures, from the conclusion of a sales contract to payment and handover. Furthermore, the service will be tailored to customer needs even after the handover, enabling continuous two-way communication and action through digital technology. In addition to conventional support by sales representatives, We aim to facilitate secure transactions and increase customer satisfaction by building a platform that can be used anytime, anywhere, at the customer's convenience,

in order to accommodate the concerns of customers experiencing real estate transactions for the first time.

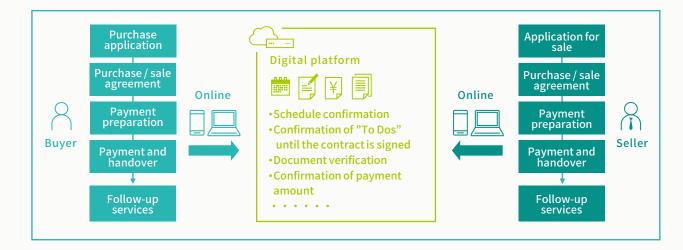
## Value creation achieved with the use of digital technologies

One of the challenges to date has been the lack of systematic and sustained communication with customers during transactions, and the lack of a two-way, long-term communication methods, which has led to a loss of rapport.

This initiative will eliminate the situation of customers waiting to be contacted, from the perspective, and clarify the next action to be taken.

Furthermore, digital solutions also reduce the time and effort required to find necessary information from documents, and the risk of loss. From Tokyu Livable's perspective, there are also benefits, including increased operational efficiency and increased ancillary income through environmental improvements. By analyzing and utilizing the wealth of data accumulated, new measures can be developed to improve the value of the customer experience.

We will continue to utilize digital technologies to solve customer issues and create social value through industry-leading initiatives.



## Other initiatives (1)

## Use of image data in building inspections

#### Tokyu Community

Tokyu Community aims to standardize judgment criteria by developing an AI that automatically judges the level of building deterioration based on image data held inhouse, and by creating an environment that is not influenced by experience when judging deterioration.

In addition, a system will be developed to enable PC-based, simulated site surveys based on 360-degree images, drawings, and detailed photographs, etc.



### Improvement of area value using City OS

#### **Tokyu Land Corporation**

In the Takeshiba district of Minato Ward, Tokyu Land Corporation is co-creating with SoftBank to build a model case for a smart city. Real-time information obtained from city activities and visitor attribute information will be used to solve urban issues such as improving flow of foot and enhancing disaster preparedness.



### Electronic receipt invoices Tokyu Housing Lease

Tokyu Housing Lease is implementing the digitization of more than 160,000 invoices received annually from companies responsible for the repair and maintenance of rental housing. By converting the invoice information of approximately 500 major clients into digital data, we aim to distribute and reduce the workload associated with invoice processing and strengthen governance.



## UI/UX improvement and discovering potential customers

In addition to the complete service from room search to contract signing using a site to attract customers, National Student Information Center provides students with unique value-added, experience-based learning opportunities before entering the workforce. This offers an effective approach to potential customers by improving web searchability and the reliability of posted information, and improving the UI/UX.



## Other initiatives (2)

#### World's first urban development with IOWN services

#### **Tokyu Land Corporation**

Tokyu Land Corporation and NTT Group are driving urban development in the greater Shibuya area, combining cuttingedge convenience with reduced environmental impact utilizing IOWN. We aim to realize a Shibuya-style urban lifestyle, utilizing the features of ultra-high speed, low latency, and high-capacity communications in various aspects of work, residence, and recreation.



#### Improving the efficiency of surveying operations through the use of drones Tokyu Land Corporation

Tokyu Resort Town Tateshina is collaborating with a local university venture to conduct drone-based forest surveying, analysis of tree species, and tree height data acquisition. Through the digitalization in surveying operations, Tokyu Land Corporation aims to improve the efficiency of forest management planning, which is currently conducted manually, and to expand forest utilization measures.



# BRANZ Gallery Omotesando opened

Tokyu Land Corporation is using digital twins to consolidate sales offices and propose a new form of condominium sales combining real and digital assets. The digital twin of a property can be viewed on a monitor in the business meeting room and projected on a large LED monitor to provide an immersive tour experience.



#### The industry's first cashier-less, completely unmanned shop Tokyu Land Corporation/Tokyu Resorts & Stays

The Hotel Tangram Madarao in Nagano Prefecture is the first hotel in Japan to open an unmanned, cashier-less shop. While meeting the needs of customers who want to use the shop even late at night or early in the morning, it also contributes to the reduction of operational costs through labor saving.



## **Other initiatives (3)** – Examples of digital technology utilization within the Group

#### Creation of TFHD chat for secure use of ChatGPT

**Generative AI** 

In light of the recent rapid growth of ChatGPT and other generative AI and social changes, we are building a secure, dedicated system environment to introduce text-generating AI. At the end of July 2023, we began using Microsoft's Azure OpenAI Service (gpt-3.5-Turbo version) on an internal trial basis with trial members from all major group companies. The risk of data leakage is reduced as much as possible by making the specification that the entered information is not used for AI learning purposes. In the trial stage, the system has received good reviews for assisting with writing, generating ideas and low codes, and being used to improve work efficiency. Tokyu Land Corporation has also established a dedicated environment for all of its approximately 1,200 employees, and began full-scale operation in October 2023. In the future, we aim to further improve operational efficiency by building dedicated environments for each group company and linking them with internal systems.

メッセージ検索		TFHD Chat	
	:ộ: (9)	<b>今</b> 能力(機能)	▲
	*量子コンビュータを簡単な単語 で説明してください*→	ユーザと話した以前の会話の内 容を思い出せます	誘った情報を生成することがあ ります
	*10歳の誕生日で行うクリエイテ ィブなアイデアはありますか?* →	ユーザは内容を修正して改善で きます	有害な指示や編った内容を生成 する可能性があります
	*JawascriptでHTTPリクエストを 作成するにはどうすればよいで	不適切な要求を断るように学習 されています	2021年以降の世界と出来事に関 しては知識が乏しいです
	すか?=→	€デル: gpt-3.5-turbo ^ 25	

# Building a collaboration space in the metaverse where employees can come and go as they please

The Group has virtually recreated the actual collaboration space at SHIBUYA SOLASTA n the metaverse that employees can experience easily at any time. Through in-house trials, we are providing opportunities to think about the differences between real spaces and metaverse spaces and how they can be used. To promote understanding of the value of the metaverse experience, we emphasized ease of use. Users can enter the room via PC or smartphone, and basic avatar operation is very simple. Projection of documents and voice conversation / reaction functions are used for internal meetings and social gatherings after webinars, etc. By actually experiencing the metaverse, users can understand its characteristics and suitability. Focusing on differences between metaverse spaces and real spaces can lead to a rediscovery of the strengths of real spaces. We will continue to take hints from the knowledge and insights gained through these experiences as we take on the challenges of creating experience value from a customer perspective based on the characteristics of each space.



Metaverse

## Section

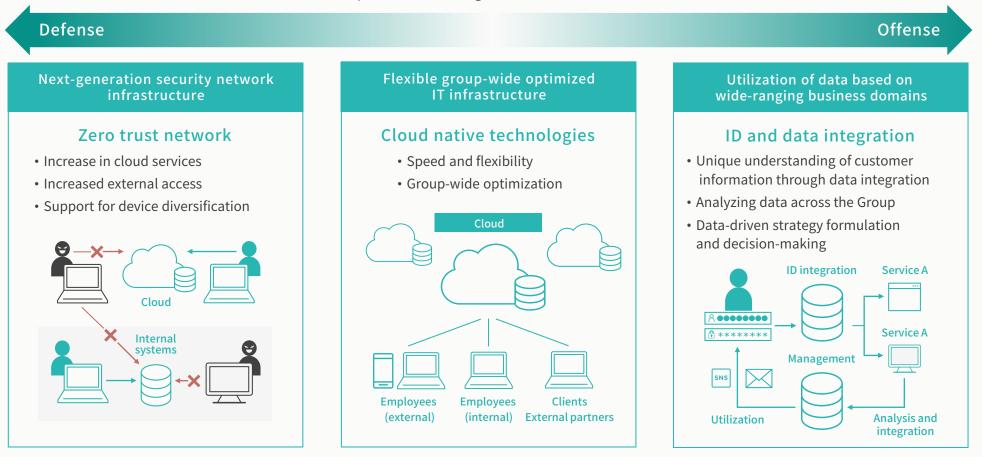




## **Building next-generation IT infrastructure**

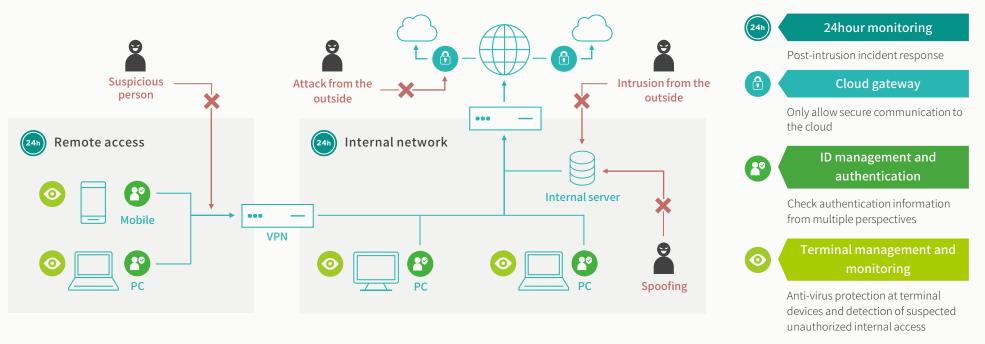
For long-term, sustainable digital transformation, a flexible IT infrastructure that can adapt to the business environment is indispensable. Under the Medium-Term Management Plan, the Group strategically builds and operates its IT infrastructure from two perspectives: defense, to enhance information security, and offense, to improve its strengths in wide-ranging business domains. From this perspective, we will focus on next-generation security network infrastructure, flexible group-wide optimized IT infrastructure, and utilization of data with the Group's unique characteristics.

#### Group's vision for next-generation IT infrastructure



## Next-generation security network infrastructure (zero trust network)

In the past, our security measures have been based on monitoring and defending our systems from external threats, and on the approach of protecting information assets on the inside. Today, however, data storage and operations using applications are mostly performed in the cloud, and the access environment is diversifying to include not only the office, but also remote working environments and mobile devices. Accordingly, we will build zero trust network infrastructure with security based on the assumption that the assets we should protect are located both internally and externally, and complete the shift to this infrastructure by 2025.

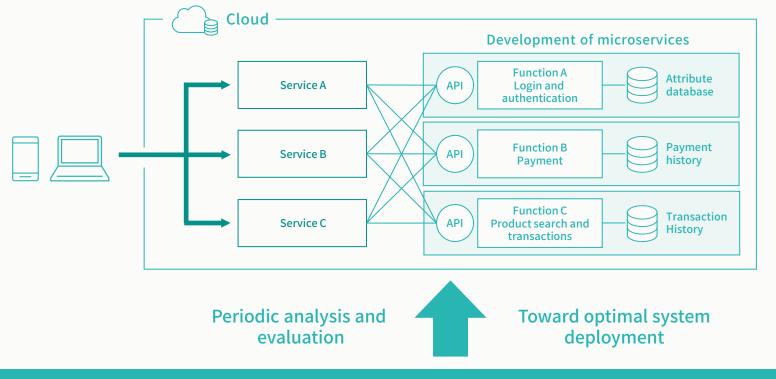


#### Implementation Status of Group Digital Risk Management and Monitoring

In accordance with its Basic Regulations on Risk Management, Tokyu Fudosan Holdings recognizes that IT strategy risks and information leakage risks are important risks, and has developed an appropriate management system. The Risk Management Committee conducts oversees the risk management handled by each Group company, and as a subset of risk management the committee establishes and appropriately revises basic and detailed information management regulations and rules as its implementation of risk management for information security. As specific activities to deal with information security, systematic information security activities compliant with the Cyber Security Management Guidelines formulated by the Ministry of Economy, Trade and Industry are continually pursued, and assessments and external audits of those activities are conducted, in order to assess our activities and take appropriate action to deal with issues. As a framework for internal audits, the Group Internal Audit Department has been established to ensure independence and fairness, creating a system that promotes improvements that include information security.

## Flexible group-wide optimized IT infrastructure (cloud native)

The Group has adopted the "cloud native" concept, which is based on the effective use of cloud services, and facilitates the appropriate use of microservices architecture, API integration, and agile development methods in building IT infrastructure. We deploy systems while conducting periodic evaluations and analysis for overall optimization as a group. Through these efforts, we aim to build IT infrastructure that is fast and flexible enough to adapt to the rapidly changing times, and accelerate group-wide digital transformation.

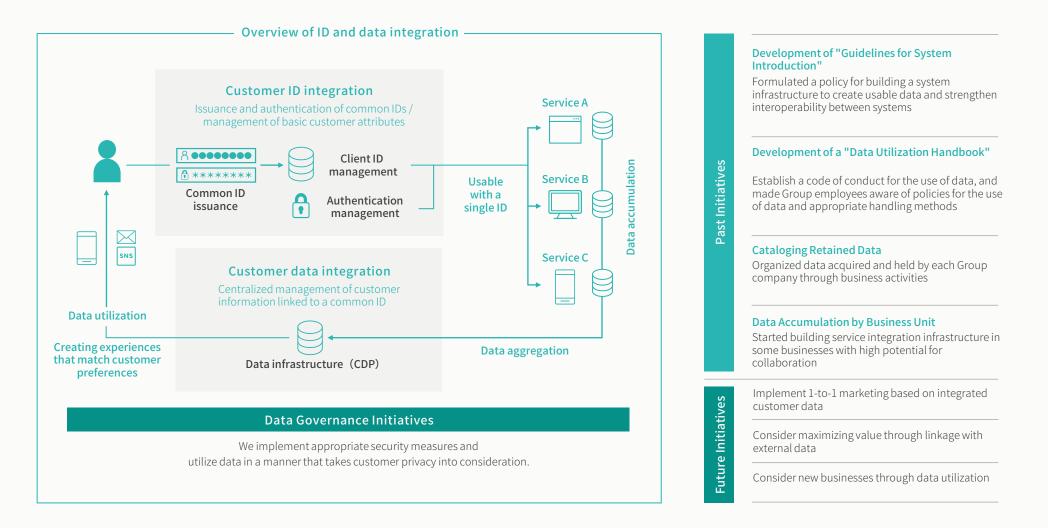


#### Management system

In addition to overall optimization in our mid-to-long-term IT medium-term plan and system construction roadmap, we also conduct annual IT system stock-taking to determine usage status and years of operation, check OS and middleware versions, and check information security. Based on the results, we visualize systems throughout the Group and review our roadmap from time to time as needed, taking into account system obsolescence, response to environmental changes, and adoption of the latest IT technologies.

## Utilization of data based on the Group's characteristics (ID and data integration)

In order to create experiences that leverage the characteristics of our wide-ranging business domains and abundant customer contact points, we will issue common IDs that can be used across the Group's services and build a data infrastructure (CDP) to aggregate and utilize customer data. While obtaining consent for the use of customer information, we will create personalized services based on data obtained through each of our businesses.





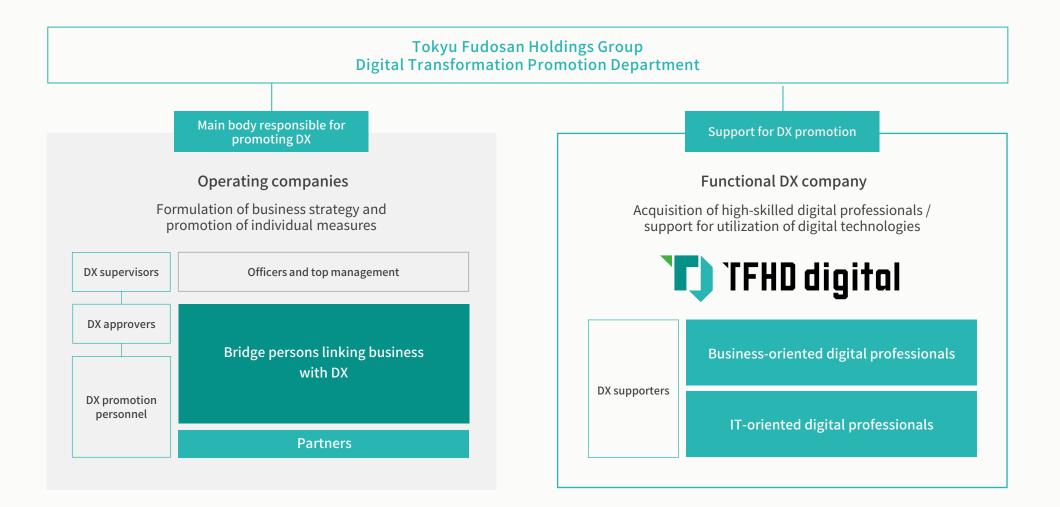
# Human Capital Infrastructure

for Promoting DX



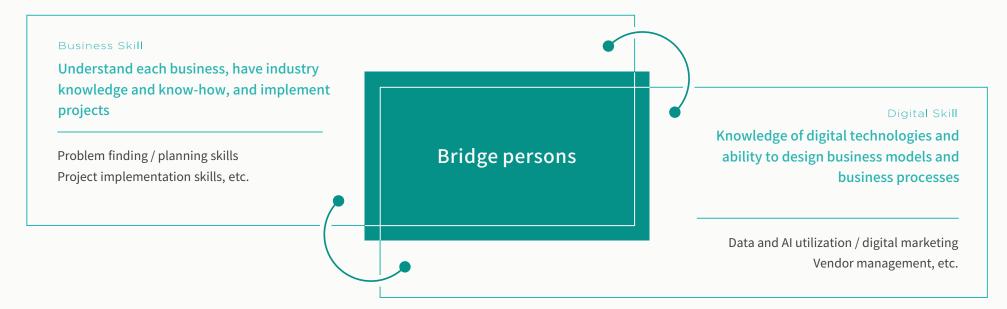
## Approach to the utilization of human capital in DX

In order to accelerate the implementation of DX, it is essential to consciously acquire and develop appropriate human capital. Operating companies—which take the leading role in implementing DX—define the necessary competencies for each level and role and seek to strategically develop the necessary human resources. TFHD digital is working to externally acquire advanced high-skilled digital professionals who are experts with regard to digital technologies and accumulate their knowledge internally.



## **Definition of bridge person**

The Group defines a "bridge person" as a person who plays a central role in the promotion of projects by integrating digital technologies into the business. In addition to indepth knowledge of existing businesses, a bridge person must also have knowledge and insights into the latest digital technologies and business models, as well as the complex skills relating to them. In each company, they are responsible for identifying business and operational issues and redesigning them into what they should be, as well as building a cooperative framework for employees, and creating an environment in which high-skilled digital professionals can maximize their activities.

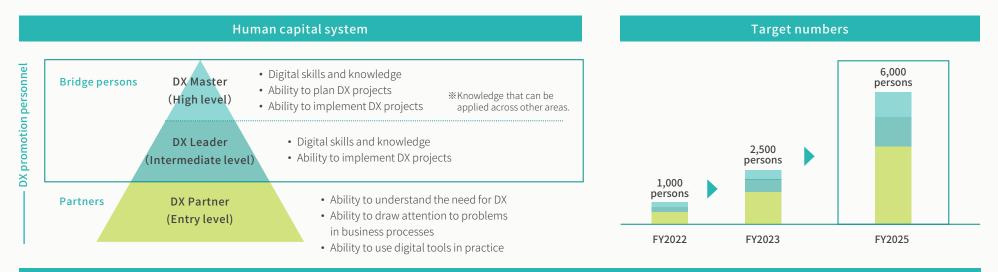


# Play a central role in the advancement of projects by integrating digital technologies into the business

Problem finding	Strategy formulation	Strategy implementation
Capture industry and digital trends and discover issues in existing businesses	Develop measures to improve operations and transform business by leveraging digital technologies	Implement projects in collaboration with high-skilled digital professionals

## Milestones in advancing of DX promotion personnel

Since bridge persons are required to possess a complex skillset, it is necessary to provide experiences and opportunities to learn not only through classroom learning but also through practice. We have therefore systematically classified DX promotion personnel as high-level (master) and intermediate-level (leader) bridge persons and entrylevel partners, and implemented flexible training programs according to their respective proficiency levels. We will set target numbers of employees for DX promotion personnel, and continue to carry out systematic training, appropriate evaluations, and assignment of human resources to achieve those targets.



#### **Development program**

#### ge **Basic understanding of DX** ed

- Definition, necessity, and importance of DX
- Key technology trends

#### **Digital marketing**

knowl

Acquire

- Marketing techniques using data
- System and tool selection for data analysis

#### Service design

- Design thinking
- Customer journey framework

#### Data utilization

- Data analysis methods and decision-making processes
- Examples of data utilization at other companies and in other industries

#### AI and IoT utilization

- AI, IoT and other advanced technologies
- Application to business processes and CX

#### **Vendor management**

- System development flow and project procedures
- Tips for preparing RFPs, competitions, and contracts

#### Future insight program $\mathbf{x}$ wor

This program aims to study urban development for a future digital society. Trainees experience digital-related knowledge acquisition, future-driven concepts, and business idea generation.

#### OJT

experience ugh practical

Gain

This program is accompanied and supported by high-skilled digital professionals. Trainees plan projects to solve business problems through the use of data.

#### Human capital exchanges, secondment, side jobs

Trainees are seconded or given side jobs at a startup or venture company in which the Company has invested. They acquire practical knowledge and skills relating to DX.

## Section Target Poforo

# Target Indicators and Progress / Reference Materials

## Target indicators and progress up until FY2030

As KPIs to steadily promote and achieve DX, specific numerical targets have been established regarding DX investment, DX initiatives, IT infrastructure and human capital infrastructure. For DX initiatives, results management will be conducted regarding the number of advanced projects utilizing digital technologies that serve as specific examples. While appropriately allocating the management resources needed to promote DX, and implementing trial-and-error approaches effectively, we will sustainably commit to DX initiatives in the long term and ultimately realize contributions on the financial front.

	KPI	FY2022 results	FY2025 targets	FY2030 targets
DX investment	<b>DX investment amount</b> (Annual investment: compared to FY2021)	2.7x	1.5x or more	2x or more
DX initiatives	Number of projects utilizing digital	Total 43 projects		100 cumulative projects or more
IT infrastructure	Building zero trust network infrastructure	43%	100% adoption	
	<b>Consolidation of IT services</b> (within the Group)	Target companies*140%Devices*248%	70% 90%	
Human capital	Acquisition of IT passport (TOKYU LAND CORPORATION)	71%	80% or higher	100%
infrastructure	DX promotion personnel	1,000 persons	Over 6,000	

\*1. All Group companies. \*2. PC, iPhone, iPad.

## Complying with the Digital Governance Code

The DX initiatives of the Tokyu Fudosan Holdings Group are compliant with the Digital Governance Code established by the Ministry of Economy, Trade and Industry. For information about how this report corresponds with the code, please check the relevant pages below.

Certification criteria	Correspondingpage
1. Vision and business model	
The company discloses the direction of its management vision and business model based on the impact of changes in the social and competitive environment caused by digital technologies.	P4,11,12
2. Strategy	
The company discloses indicators to measure the achievement of its strategy to utilize digital technologies.	P16-19,41
2-1 Measures for organizational development, human resources, and corporate culture In its strategy to utilize digital technologies, the company shall indicate, in particular, matters relating to the system / organization for the implementation of the strategy, and securing and developing human resources for the implementation of the strategy.	P14,P37-39
2-2 Measures to improve the environment for the use of IT systems and digital technologies In its strategy to utilize digital technologies, the company shall indicate, in particular, measures to improve the environment for the utilization of IT systems and digital technologies.	P32-35
3. Outcomes and key performance indicators	
The company discloses indicators to measure the achievement of its strategy to utilize digital technologies.	P41
4. Governance system	
Management personally communicates a message to the outside world regarding the company's management vision and strategy for utilizing digital technologies.	P6,10
Under the leadership of management, the company has identified issues in light of trends relating to digital technologies and the current state of the company's own IT systems.	P32
The company takes cybersecurity measures that are a prerequisite for the implementation of the strategy.	P33

## Explanation of terms (1)

P4	ОМО	Online Merges with Offline:A state in which online and offline spaces, which were previously separated, merge into one. OMO requires the provision of a highly consistent and seamless customer experience that eliminates barriers between online and offline spaces.
P7	Digital Transformation Stocks	The DX Stocks scheme selects companies listed on the Tokyo Stock Exchange that have established internal mechanisms to implement DX leading to increased corporate value, and demonstrated outstanding achievements in the use of digital technologies.
P11	Generative AI	Generative AI is AI that is capable of generating high-quality text, images, and other content based on learned data.
P11	5 G	The fifth generation of mobile communication systems. It follows on from the previous generation (4G) mobile communication network, and is characterized by high speed, high capacity, low latency, and large numbers of simultaneous connections.
P11	Web3	An autonomous decentralized economy in which co-creation, ownership, and exchange of value are performed on the blockchain through the medium of "tokens" such as cryptographic assets.
P11	Blockchain	A technology that stores transaction data in a format called "blocks" in a chronological chain. To prevent data tampering, a "hash value" derived from the previous block is written into each block.
P11	NFT	Non-Fungible Token: They are a form of digital data with a certificate of authenticity and proof of ownership that cannot be falsified.
P22	CVC	Corporate Venture Capital:The TFHD Open Innovation Program was established by the Company in 2017 to facilitate open innovation with venture companies. Moving forward, we will aim to create new value through co-creation with external partners based on functions such as investment, business alliances and hands-on support through the program.
P28	City OS	A data distribution platform that allows various businesses to utilize the vast amount of data that exists in cities (such as human flow data and visitor attribute data) in real time.

## Explanation of terms (2)

P29	IOWN	Innovative Optical and Wireless Network:It is a concept of a network and information processing infrastructure—including terminal devices—that can provide high-speed, high-capacity communications and vast computing resources by optimizing both the individual and the whole, based on all manner of information and utilizing innovative technologies, primarily optical technologies.
P29	Digital twins	Technology that reproduces a real-space environment in a virtual space and performs highly accurate simulations.
P32	Zero trust network	An approach to information security infrastructure where users and terminals are continually verified on the premise of zero trust, regardless of whether they are internal or external.
P32	Cloud native technologies	An approach premised on cloud usage to develop systems that maximize the benefits of the cloud by designing systems to take advantage of their characteristics.
P34	Microservices architecture	Under this approach, a system in which all functions integrated into a single program previously are divided into several smaller microservices aligned with specific business functions, and then are combined to develop a single application.
P35	CDP (Customer Data Platform)	Customer Data Platform:A platform for aggregating and integrating data on customers, for the purpose of providing personalized products and services to each customer.
P42	Digital Governance Code	Principles published by the Ministry of Economy, Industry and Trade to encourage voluntary efforts related to corporate DX. The code summarizes the action that needs to be taken by business managers, such as the formulation and publication of management visions that take into account social transformation through digital technologies.

# WE ARE GREEN

## TOKYU FUDOSAN HOLDINGS

WE ARE GREEN — We strive to merge the power of various forms of green deployed by our Group to create a future where everyone can be themselves and shine vigorously.

Group Digital Transformation Promotion Department, Tokyu Fudosan Holdings Corporation https://www.tokyu-fudosan-hd.co.jp