DATA BALANCE SHEET

DATA BALANCE SHEET

WHAT IS A DATA BALANCE SHEET REPORT AND WHY HAS KESKO PUBLISHED ONE?

Kesko's data balance sheet report describes the use of data for the benefit of customers and business operations in line with Kesko's strategy. Data plays a key role in building customer experience, managing online and physical trade and the supply chain, and in improving efficiency.

In addition to offering benefits for business and customers, data also involves threats and risks, which Kesko actively manages. Robust data protection, cyber security and compliance form a strong foundation. Rapidly developing technology and changing regulations challenge us to stay one step ahead in protecting our customers, partners and operations.

Kesko is a forerunner in sustainability communications in Finland. Transparent communication about data management and sustainable data-driven value creation is part of our evolving sustainability communications, and in line with the European data economy, which values the rights of the individual.

Kesko's first data balance sheet report focuses on consumer business operations in the grocery trade division in Finland.

EXECUTIVE PERSPECTIVES

PRESIDENT AND CEO

KESKO USES DATA TO CREATE SUSTAINABLE STRATEGIC COMPETITIVE ADVANTAGE

In our strategy review in the spring of 2021, we placed even stronger emphasis on the continuous development of customer experiences and the further development of digital services, as well as on sustainability.

When it comes to digitalisation and data use, our key goals are improving the customer experience and the efficiency of our own operations: these have a strong impact on the operating result and increase in shareholder value.

Kesko is rightly considered a forerunner in trading sector digitalisation. High-quality data and numerous data-based services create value for our customers, retailers, partners and the whole business. The impact of data is therefore comparable to that of our financial and human capital. For example, our first-class online trade services are based on high-quality data and its utilisation.

As a data-driven trading sector operator, Kesko has accumulated world-class data capital, which offers us boundless opportunities. In a landscape of stiff competition and a changing operating environment, new ways of collecting, processing and utilising data are constantly needed

to create the best customer experience and provide new services. Financial and intellectual investments in data quality and utilisation are at the core of our development work.

Kesko's journey in utilising data is proceeding at a good clip. The unused and unfolding potential offered by data inspires us to continue this journey. We estimate that we are currently using around 25% of our data capital: our realistic goal is to double its utilisation rate by 2025. Combined with our growing data capital, this provides Kesko with significant opportunities for value creation.

Data sustainability for Kesko means that we seek to derive sustainable value from data for our business operations and stakeholders as well as for society and the environment. It is a natural part of our day-to-day operations across our broad community. It is also part of our corporate responsibility as a service provider for customers and as an operator in society.

This is Kesko's first data balance sheet report, and indeed the first data balance sheet report published by any Finnish listed company. It acts as further proof of our responsible approach to data processing and use.

Mikko Helander
Kesko's President and CEO

CHIEF DIGITAL OFFICER

DATA IS AT THE CORE OF CUSTOMER EXPERIENCE

Data is central to all our operations. Digitalisation and customer experience are two central, complementary themes in Kesko's strategy. We are working towards becoming an increasingly data-driven organisation in which information, analytics and artificial intelligence support business at both operational and strategic levels. Through data and digital services, we create real added value for our customers and profitable growth for Kesko and K Group's stores and partners.

Data-driven management has been strongly integrated into our store operations, and we support K-retailers in creating their own store-specific business ideas based on customer data. In the grocery trade division, we are heavily focused on developing the online grocery business, which we expect to grow and remain at a considerably higher level than before. Data is also used to support decision-making and to create tools that facilitate e.g. selection planning and pricing in the stores. The introduction of digital marketing displays has made stores increasingly important marketing channels.

In the building and technical trade division, our main objective is to customise digital and online services to meet the needs of three different customer segments: technical wholesale customers, professional builders, and consumers. In the car trade division, our digital journey is still in its early stages, but digitalisation plays a significant role in the division's transformation. Digitalisation impacts all car trade operations, from the sale of new cars to servicing, the purchase and sale of used cars, and support functions such as IT, financing and insurance.

This data balance sheet report focuses mainly on consumer operations in the grocery trade division, but digitalisation plays a key role in the growth strategies of all three Kesko divisions. Data is both a prerequisite for our operations and a significant opportunity to create value.

Data is new kind of valuable capital that must be fostered, and its return potential must be recognised and exploited. Our customers must always be able to trust that we are using all data responsibly in a manner that benefits the customer, and that we offer transparent information about our data use.

Anni Ronkainen
EVP, Chief Digital Officer

DATA STRATEGY

DATA LENDS US SUSTAINABLE VALUE AND COMPETITIVE ADVANTAGE

Kesko is working to lead the way in trading sector digitalisation. Improving customer experience and increasing operational efficiency are key areas in data utilisation. Kesko's strong data capital is also used as a source in new areas such as data and analysis services and media business operations.

Kesko has extensive experience in utilising customer, product and operational data, as well as in data-driven management. Applications based on data sciences and business and data analytics have been used for a long time, but the development of technologies will offer entirely new opportunities in the coming years.

UNIQUE DATA CAPITAL

Our data capital, which we have accumulated over a long period of time, and its utilisation form an increasingly important part of our business competitiveness and competitive advantage that sets us apart. Data also plays an important role in improving operational efficiency, cost-effectiveness and reliability. Everything is based on our strong operating models for information security, data protection and risk management. Our management and use of personal and customer data comply with local EU-level regulations.

Our goal is to double our data utilisation rate by

2025

Three levels of data management at Kesko

	Competitive advantage	
Data governance and data capital management	**Efficiency Reliability**	**Sustainable use of data in business operations**
	Security Compliance	

EXPANDING INTO NEW AREAS

Kesko aims to transform itself from an organisation that utilises data into a data-centric company. Data, analytics and artificial intelligence are creating increasing value for our business at both strategic and operational levels. Kesko is renewing its overall architecture and data and analytics platform extensively to create new opportunities for using data more diversely, increasingly in real time. Ecosystems and partnerships are also highlighted: for example, the new K Data platform, with its applications and interfaces, provides new value creation opportunities not only for Kesko but also for its partners.

RAISING OUR DATA UTILISATION RATE

The value of Kesko's data capital as a source of competitive advantage and efficiency is based on its maximal utilisation rate. Data in itself does not have value for Kesko: the value is based on the various benefits that can be produced using the data.

Financially profitable and responsible use of data is based on the overall quality of data, which should be as high as possible, and on usability and reliability achieved through data governance, as well as continuously developed data, analytics and DevOps capabilities. Our strategic goal is to increase the utilisation rate of our data capital from its current level (around 25%) to 50% by 2025.

VALUE FOR KESKO AND ITS PARTNERS

We use data to create value not only for us but for those around us. Kesko is continuously developing and producing services based on its growing data capital for various target groups. K-retailers, customers, suppliers of goods and service providers, and partners all participate in the digital value creation network. The continuous development of the network in terms of the digital services offered and internal capabilities is a strategic priority for Kesko that contributes to building a sustainable competitive advantage in the short, medium and long term.

Kesko is actively developing K Network, K Group's common digital network, which brings together the technologies and data capital behind the services offered to customers, K-retailers, suppliers and partners. This requires the strategic development of existing data-centric capabilities, in cooperation with partners to a significant extent. Key capabilities identified for development include concept development, service design and planning, advanced analytics (AI), and a data platform for compiling Kesko's data capital.

Kesko's digital network

Areas where Kesko will increase its data utilisation rate

Data processing rate	We will increase our data processing capabilities and data usability in various applications.
Data-driven management	We will increase the use of data in strategic, tactical and operational decision-making.
Digital services	We will increase the quantity and improve the quality of data assets in active production use.
K data culture	We will increase the business ownership and position of data in the core of value creation of business.

Extensive data utilisation in grocery trade

Key areas of data utilisation in the grocery trade division include store-specific business ideas, high-quality customer data and its extensive use, strong digital expertise, and efficient processes. Combining the strengths of the chains with store-specific business ideas is highlighted in building the customer experience.

Kesko's grocery trade division aims to offer the most personal and valued customer experiences. The goal is to increase market share and improve efficiency and customer satisfaction.

The ease of use, usefulness and accessibility of digital services are key principles when Kesko designs new services and further develops its existing services.

PRIORITIES FOR GROCERY TRADE	DATA UTILISATION
Store-specific business ideas made visible to customers	Store-specific business ideas are based on customer, business, and market insight generated using analytics.
The best multi-channel customer experience	Continuous development, design and production of a multichannel customer experience based on data and analytics.
Leading selection image and differentiation	Selection management based on broad-based data use.
Stronger price competitiveness	Digitalisation and data capabilities strongly support operational efficiency and pricing. Software automation and robotics play a key role.
Customer-oriented decision-making based on data	Data quality and analytical capabilities strongly highlighted. The goal is to increase the data utilisation rate.
Helping customers make sustainable choices	Customers can make purchase decisions that benefit the environment, Finnish businesses, and their own wellbeing by using reporting and product information services, particularly the K-Ostokset service.
The best selection and service in the foodservice business	Customer and business insight are largely data-driven in B2B operations. Efficiency through automation.
The preferred partner and business platform	Useful data services that support business operations are a key part of the value created by the platform for customers, stores, suppliers and other partners.

CUSTOMERS AND DATA

KESKO DATA BALANCE SHEET **2021**

DATA CREATES VALUE FOR CUSTOMERS AND BUSINESS

Data helps Kesko deliver on its promise "For shopping to be fun". Customer data and other key data sources are used comprehensively to create a customer experience that is as personal as possible in both physical and online stores, as well as digitally in various channels.

Strong data-based customer insight helps us to constantly surprise our customers positively. Our success in grocery trade is based especially on store-specific business ideas and the daily use of customer data in store, selection and marketing management.

Our goal is to increase market share and improve profitability and customer satisfaction. Combining the strengths of our chains with store-specific business ideas is highlighted in building the customer experience.

For shopping to be fun

K Group's retailer entrepreneurs are the best experts on their own customer base and stores. More than half of K Group's grocery retailers operate under the store-specific business idea model, in which each store is different, tailored to its location and customer base. Differentiation is established through careful and multifaceted data use.

Kesko's growing broad-based data capital and analytics play a key role in creating and maintaining store-specific business ideas. New products and services that offer differentiation and are sustainable and suited to each store's local customer base are suggested based on data.

The almost real-time reporting of sales and the high-quality use of customer and market area data enable the continuous development of store-specific business ideas, selection optimisation, as well as selection, campaign and price testing.

Our understanding of the success of selections in terms of turnover rate, sales, and margin structure is constantly improving, and creates financial value for K-retailers. It also leads to less food waste, which benefits the environment.

Kesko has developed and is continuously developing applications to support the implementation of store-specific business ideas and their targeted marketing to customers. These services and applications are actively used by K-retailers and store personnel. Despite the support provided by data-based services, the retailer and their personnel often have the strongest insight into and experience in responding to customer needs, because they know their customer base.

Case: K-Citymarket and Intersport in Tammisto are managed by data

Kimmo Sivonen became the retailer of the K-Citymarket Tammisto hypermarket in 2020, and decided to put the data and analytics provided by Kesko at the centre of the development and implementation of his store-specific business idea. The results have been excellent.

USING DATA TO CREATE AN INSPIRING GROCERY STORE

K-Citymarket Tammisto was completely remodelled in early 2021 based on market and customer data and local customer insight. The result is a grocery store that offers a unique shopping experience with very wide selections and a milieu that precisely respond to customer wishes.

K-Citymarket Tammisto is, for example, the first hypermarket in Europe with its own in-house brewery. It also hosts the K-Citymarket chain's first in-house roastery and herb greenhouse, as well as a wide selection of restaurant-quality products.

In January 2022, IGD – a UK-based research and expert organisation specialising in the retail sector – included K-Citymarket Tammisto in its list of 'Must-see stores'. The list is one of IGD's most popular annual announcements. IGD had previously selected K-Citymarket Tammisto as its store of the month in autumn 2021. "K-Citymarket Tammisto is built for our customers. The remodelling project was based on the wishes of our customers regarding selections, and we built

an inspiring milieu around those. The best reward is that our customers are happy and keep returning, and give positive feedback," says K-retailer Kimmo Sivonen.

Customer relationships are ultimately formed between the customer and the retailer. The retailers develop and manage their stores, listening to customers and responding to their needs.

ANALYTICS SUPPORT DATA-DRIVEN MANAGEMENT

Kesko's special strength are the store-specific business ideas, where the retailers' visions for their stores are supported by the data and analytical tools provided by Kesko. The factors that contribute to a store's differentiation, customer experience and efficiency are increasingly managed using data, almost in real time where necessary.

Benefits are created at the strategic and operational levels, from planning the store-specific business ideas to supporting daily decisions. The most important areas include marketing and campaigns, selection and shelf optimisation, pricing, product flow and waste management, resource planning, and forecasting.

To take account of the local customer profile and respond to competitors' offerings, the retailers must have up-to-date information on the competitive situation

and market potential. This enables retailers to further develop their selections, services, opening hours, and competitive pricing.

Customer experience is measured by several indicators. The Hymy feedback system measures the various elements of the customer experience on a daily basis. It is supported by NPS recommendation studies, customer satisfaction surveys, and personnel surveys.

K-Citymarket Tammisto's scores in all studies and surveys have improved since its remodelling. Feedback received through the Hymy channel emphasises customer service, personnel, service attitude, and selections as the store's strengths.

BENEFITS WITHIN K GROUP ACROSS CHAIN BOUNDARIES

The Tammisto district in Vantaa is also the location of a sports store belonging to K Group's Intersport chain. Kesko's common data and analytics platform enables retailers in the same area to benefit from the local customer profile, while the customers reap the benefits of centralisation. The retailers and Kesko use the accumulated data to further develop their services and selections to gain and maintain a competitive advantage.

Case: K-Valikoima helps K-retailers manage their stores

K Group's retailer entrepreneurs are the best experts when it comes to their stores and customer base. Kesko's key goal is to enable and support their success by providing data from various sources. This data needs to be easily accessible to the retailer and the personnel.

Kesko is different from other grocery trade operators in Finland in that all our grocery stores are run by entrepreneurs – K-retailers – and most stores operate under our store-specific business idea model. Rapid digitalisation and Kesko's growing extensive data capital and analytics play a key role in creating and constantly updating the store-specific business ideas.

Data is used to suggest new products and services that enable differentiation and are sustainable and suitable for the local customer base to be included in store selections. K-Valikoima is an application that facilitates the management of a store's day-to-day operations.

One K-retailer can have several stores. Each store's skilled personnel is responsible for selection adjustments to ensure competitiveness. K-Valikoma helps in making decisions on which products should be added to or removed from product selections, based on data concerning competitors and demand.

K-retailer Eero Pyy has three K-Markets in in Siltamäki, Suutarila and Töyrynummi in northern Helsinki.

"K-Valikoima is a good application that supports daily decision-making and store management. We use it to make hundreds of decisions concerning each store's selections every month. Still, it's important to understand the big picture: each retailer and their experienced personnel know their customers and their purchasing behaviour. Decisions concerning individual products are not made separately from the whole," says Eero Pyy.

K-Valikoima collects data from various sources. It provides continuously improving insight into the success of a store's selections in terms of the turnover rate, sales, and margin structure, thus creating financial value for the retailers. It also benefits the environment as it helps reduce food waste.

"Obviously, K-Valikoima does not make any decisions, but it processes and produces information that

facilitates and accelerates decision-making. Combined with our professional tacit knowledge, this leads to accurate decisions based on competitor monitoring," says Pyy.

Faster decision-making improves the quality and efficiency of business operations, which benefits the entire value chain. The benefits are multiplied across the more than 800 K-Market stores across Finland. Of course, benefits are also generated in other K-stores, but the K-Market chain is our largest chain in terms of the number of stores.

Online sales are growing

Online grocery sales are our most significant digital service for consumers. Online grocery has taken a major leap forward in recent years due to the coronavirus pandemic. Online store visits in K Group have increased substantially: for example, online grocery sales have grown by some 448% since 2019. In 2021, online grocery sales totalled some €244 million (incl. VAT), or 3.2% of consumer sales in Kesko's grocery trade division.

With its retailer model, Kesko has been able to respond to the rapidly growing demand by quickly introducing online sales to an increasing number of stores, and scaling up the Group's digital capabilities in new areas. The strengths of our online operations include our extensive customer loyalty programme, good price competitiveness, a concept that combines the strengths of online and physical stores, the most extensive selection on the market (up to 40,000 products), and flexible delivery options.

Kesko's online grocery services are being developed by combining the strengths of store-specific business ideas, physical stores and chain business operations. Kesko's new customer loyalty data system and data and analytics

Finland's first automation-assisted in-store online order collection system to open in

2022.

platform make our online grocery services even more attractive and competitive. Kesko is seeking to create superior digital customer experiences for various customer segments.

K Group digital sales in 2021

€1.5 billion

- K-Ruoka online grocery 14%
- Kespro foodservice 41%
- Onninen technical wholesale 39%
- Building and home improvement 4%
- Sports trade 2%

At the end of 2021, 517 K Group grocery stores offered online services (2020: 500; 2019: approx. 230). The NPS score, which reflects customer satisfaction, was 81 for our online grocery services in December 2021. Customers particularly value our wide selections and high quality.

More than 10% of K Group's sales come from digital channels, and growth has been fast. In 2021, digital sales totalled some €1.5 billion. B2B trade plays a key role in digital sales, accounting for 4/5 of digital sales while B2C represents around 1/5.

Key drivers for the development of our online sales operations include the continuous improvement of selections and price competitiveness, fulfilling the potential of the store-specific business ideas, and offering a wider range of delivery options and times. We are improving the efficiency of order collection by introducing an automated storage and collection centre.

Case: K-Citymarket Ruoholahti will host the first automation-assisted in-store online order collection system

Finland's first automation-assisted online order collection system to be built on-site at a grocery store will be completed at K-Citymarket Ruoholahti in Helsinki in the spring of 2022.

"We are thrilled to be involved in this development project, which is a pioneering one for Finnish online grocery. Online sales are an essential part of our store's business, and more and more customers are making their everyday lives easier by shopping online. Moving the collection of products to the back of the house will mean less congestion in the aisles," says Tero Huhtala, the retailer at K-Citymarket Ruoholahti.

K-Citymarket Ruoholahti is one of K Group's busiest stores in terms of online grocery orders. The store has invested in online grocery sales for some time, and its excellent ability to use automation enables further development. K-Citymarket Ruoholahti was chosen to house the first automation-assisted collection system thanks to the store's central location in Helsinki.

AUTOMATION ENABLES WIDE SELECTIONS WHILE IMPROVING EFFICIENCY

The automation-assisted order collection system enables efficient local deliveries of online grocery orders. The system is being built on-site at the store premises, meaning the collection will continue to take place close to customers – thus enabling fast deliveries with a lower environmental load.

In a market the size of Finland, up to now the most efficient way to provide online grocery services has been through a network of physical stores. However, increased volumes in the Helsinki metropolitan area mean it is sensible to seek and introduce new operating models.

The system that is now being built is based on the micro fulfilment centre (MFC) concept. It will make collection approximately four times more efficient compared to manual in-store collection, yet the store will still be able to offer a wide range of products, including local products and service counter items.

The best customer experience in mobile and online

WE AIM TO OFFER DIGITAL CUSTOMER EXPERIENCES THAT ARE AS INSPIRING AND USEFUL AS POSSIBLE

We use data and analytics extensively to build customer insight and develop and tailor services with a customer-oriented approach. Moreover, it is at least equally important to ensure that services are easy to use and reliable. Accessibility and data protection design are part of the development and upkeep of every service.

We are successful when our services bring benefit for the customer and are easy to use. After signing up for the service, customers are provided with personalised recommendations and content. It is essential to offer relevant content at the right time and in the right channel. Relevant offers, product recommendations and tips, as well as personalised content, make customers' lives easier and more enjoyable. This requires Kesko to have the ability to utilise data extensively and design digital services and communication in a customer-oriented manner.

K Group's digital services have around

25 million

visits each month.

Case: Growing role for digital channels in building and technical trade

Online sales for K-Rauta in Finland grew by 42% in 2021, and we have launched a new K-Rauta Pro online service for B2B customers. We have also improved the customer experience in Onninen Express by launching new digital services. Some 25% of Onninen's sales in Finland now come through digital channels.

Customers are at the centre of our digital services and their development. Customers also increasingly expect digital services. The importance of different digital service features varies between different customer groups and countries.

Digital services entail much more than online sales: "Digital order channels cover various order options and warehousing services for professional builders, and we have digitalised related processes," explains Johanna Kontio, who is in charge of digitalisation in the building and technical trade division.

The needs of B2B and B2C customers differ, but both customer groups expect extensive, up-to-date product information. High-quality product data includes basic data on technical details, product codes, measurements and weight, colours, high-quality product images, up-to-date

documentation and certificates for product safety, as well as instructions for installation, videos and information on products and spare parts required for installation. This type of product data makes shopping easier and helps customers to purchase to right product. "This is such as central theme for Kesko that there are nearly 100 people currently working on product information enrichment in various operating countries. Opportunities and requirements vary considerably between the countries, and this is a very big undertaking for us," says Kontio.

"Making everyday life easier for our customers is at the core of our digital services. When we facilitate work for our sales staff, they can provide better customer service and offer the best possible customer experience," says Johanna Kontio. For example,

the dashboard provided to Onninen's sales staff enables them to make efficient customer orders utilising all product and online information, and to monitor that the order is delivered to the customer as agreed and on time.
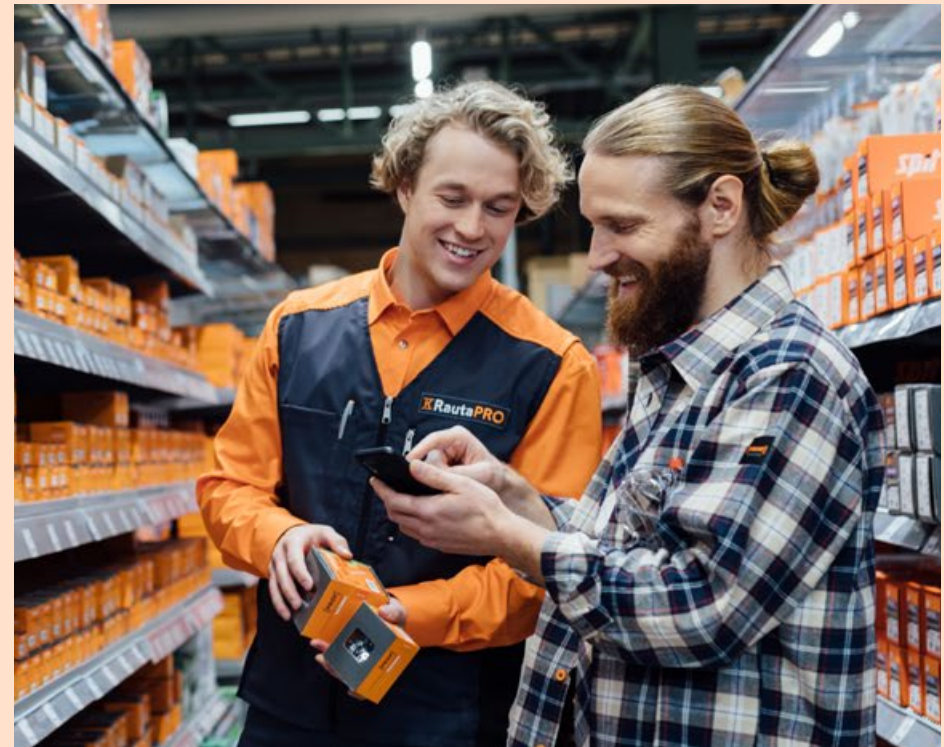
Case: Digitalisation contributes to better service in car trade

The automotive sector, driving, and mobility are changing fast. New forms of mobility demand constant development of operating models, services and technologies. Examples of innovation in the sector include the general electrification of transport, and connected cars that are constantly able to access information on e.g. road conditions. Digitalisation is also increasingly present in traditional car sales. We strive to be the leading operator in digital car trade in Finland, and to offer a fully paper-free process from order to handover. We actively seek synergies with Kesko's other divisions, and utilise shared customer data to offer digital services and a better customer experience. We have also updated website features, and are introducing digital analytics tools for used car trade.

The expansion of digital services changes the role and skillset of sales staff. We provide extensive information on car features on our website, which enables our customers to put together their dream car before they even visit a dealership. This means that our sales staff must be able to create added value by providing answers to customer questions on, for example, how to fit a bike or a stroller or install a pet barrier in the car.

ONLINE SERVICES DOMINATE, MOBILE ON THE RISE

Kesko's grocery trade division's digital services in Finland were visited on average by 2.9 million customers each week in 2021. More than 10% of these customers signed in to use the services. Most customers visit websites, but the use of the K-Ruoka mobile app is growing significantly, with average weekly visits up by nearly 30% on the previous year.

Kesko's most popular digital services for consumers in January 2022

1.	K-Ruoka.fi	8.9 million visits
2.	K-Ruoka mobile	4.4 million visits
3.	K-Rauta.fi	2.4 million visits
4.	Intersport.fi	2.3 million visits
5.	Budgetsport.fi	1.1 million visits
6.	Plussa.fi	0.4 million visits

Kesko has concentrated most of its general retail services and personalised services for login customers in the K-Ruoka service, which is easily accessible both via web browser and a dedicated mobile app. The services are available through a single login, which enables the user to access all of Kesko's key digital services with one application.

K-Ruoka (online and mobile)	• The main digital channel for purchases and content for consumers • Online grocery sales, including smart shopping lists and high-quality product information • Product, recipe and store search • Personalised customer-specific content and product recommendations and offers • Interaction with the local K-retailer(s)
K-Ostokset	• Customers can view their purchases by product category and product over various periods of up to five years • Customers can track how much products of Finnish origin they are buying and set related targets. Customers will then be provided with recommendations on Finnish products. • Customers can track the climate impact of their grocery purchases based on the carbon footprint of various product categories. Customers can set goals to reduce the carbon footprint of their grocery purchases, after which they will be provided with practical advice to reduce the climate load of their purchases. • Customers can monitor their consumption of sugar, salt, vegetables, red meat and fish. They can compare their data with the national nutrition recommendations. Customers can set goals related to consumption, after which they will be provided with practical advice on achieving their goals. • The service is available to customers through the K-Ruoka mobile app and the K-Ruoka.fi website.
Plussa.fi and K-Plussa customer service	• K-Plussa benefits, Plussa money and events • Personal customer data, consent approval, and interests • Personal and parallel cards • Available directly or through the K-Ruoka service
K-Kuitit	• Real-time and archived receipts • Warranty certificates • Available directly or through the K-Ruoka service
Identity and access management service	The K Tunnus customer ID and access management service is an integral part of K Group's online services. It enables customers to sign in securely to multiple digital services provided by K Group, links online users to their K-Plussa membership data, and enables personalised services. It is a data-critical service – without it, digital services cannot efficiently utilise K-Plussa data or obtain enriched user data. The service can be used in the Plussa.fi service and the new K-Ruoka mobile application. In early 2022, K-Tunnus was available for consumer services in all divisions (K-Rauta.fi, K-Charge, K-Ruoka.fi).

Case: K-Ostokset – your personal trainer for shopping

What goes in your shopping basket has an impact on the world and your personal wellbeing. Our K-Ostokset service helps customers understand the impacts of their shopping. The service tells customers the impact their grocery purchases have on the climate and Finnish production, and how they compare to nutrition recommendations, and helps them make changes, if they so wish.

Both Kesko and its customers value Finnish food. The K-Ostokset service enables customers to track how much products produced in Finland they are purchasing compared with other customers. They can monitor the level over the long term and set themselves goals. The service then informs them of their progress, and provides them with recommendations on Finnish products.

Many customers want to consider their consumption habits from the perspective of climate change and make more climate friendly choices at the grocery store. K-Ostokset offers a carbon footprint calculator to respond to this need. It enables customers to study the climate impact of their purchases as a whole and by product category. After setting their personal climate target, customers will be provided with recommendations that help them achieve their goal.

Food plays a key role in health and wellbeing. K-Ostokset helps customers understand how much sugar, salt, vegetables, fish and red meat their purchases contain. Its nutrition indicator is the first Nordic nutrition indicator based on purchasing data. It enables customers to compare their consumption with the national nutrition recommendations. Setting personal goals is easier for customers when they can monitor their sugar consumption and other habits on a daily basis.

The latest service feature is the Your Year in Food story – it is the first feature of its kind in Finland. It summarises each customer's purchases and highlights for the past year based on their K-Plussa purchases during the year, and shows in a visually interesting way what makes the customer unique based on their purchases in comparison with others, and also what their favourite products over the past year were.

In early 2022, the K-Ostokset service was tied more closely to the K-Ruoka mobile app, making your personal trainer for shopping more easily accessible to support everyday decisions.
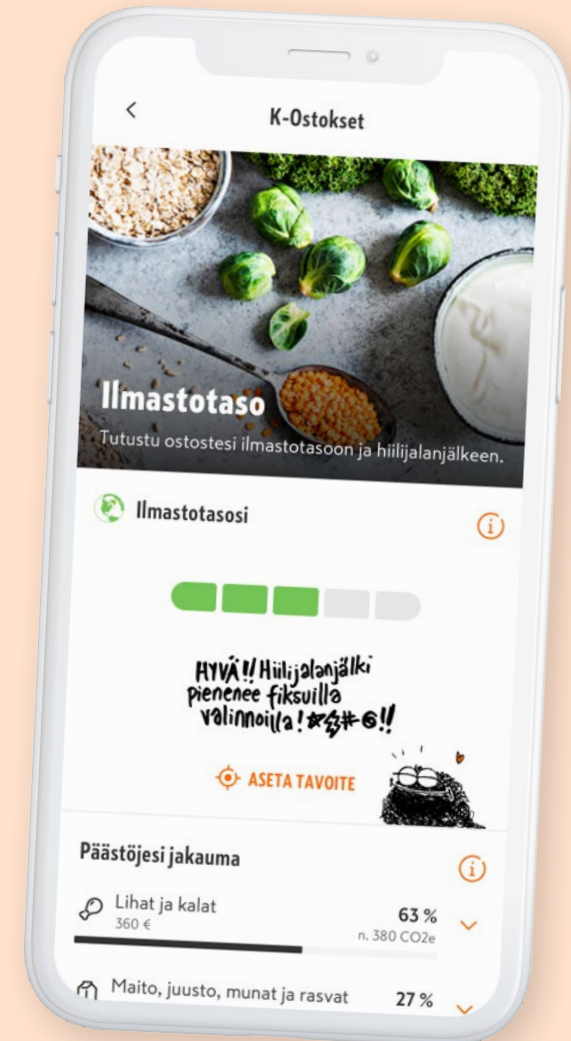
Improving efficiency by utilising data

THE KEY BENEFITS OF DATA AND DIGITALISATION ARE BASED ON INCREASING KESKO'S OPERATIONAL EFFICIENCY THROUGH DATA AND ANALYTICS
Multi-sector operators such as Kesko can achieve major synergies through economies of scale. This requires a common architecture, core technologies and a shared data and analytics platform.

Efficiency can also be improved by increasing process efficiency and automation. Kesko is using process redesign in its enterprise resource planning (ERP) system and is strongly increasing its use of software robotics. Kesko currently has more than 200 robots in production.

Data and analytics capabilities are the third way to improve efficiency. Advanced analytics are used to increase the efficiency of retail core processes, which further improves profitability. Data also plays a key role in strategic and operational decision-making.

Case: A software robot helps Kesko to process complaints

Every day, hundreds of deliveries are sent from Kesko's central warehouses to our grocery stores. Every now and then, individual products may be missing from the deliveries. In such cases, a representative of the store used to file a report, the processing of which would take a long time.

Supply chain steering addressed the issue in cooperation with the Intelligent Automation unit and explored the use of process automation in processing the reports. Soon after, automation-assisted complaint processing was piloted: reports filed by stores on missing products were processed, controlled and resolved by software robotics in line with guidelines provided by the business. Software robotics was immediately able to process 25–30% of the reports automatically.

The data collected from the pilot gave us insight into the entire process and its bottlenecks and helped us identify development opportunities. It soon became clear that our long-standing operating model could be replaced with new, automated workflows. There are dozens of workflows, and they are guided by core data and various variables and controls related to e.g. products. This has significantly improved the efficiency of processing complaints.

Utilising software robotics teaches Kesko to develop processes comprehensively and focus on identifying and optimising the most significant work phases. The courage to challenge traditional operating models and replace them with better ones is also a valuable driver for change and data culture.

KESKO'S DATA BALANCE SHEET

KESKO DATA BALANCE SHEET **2021**
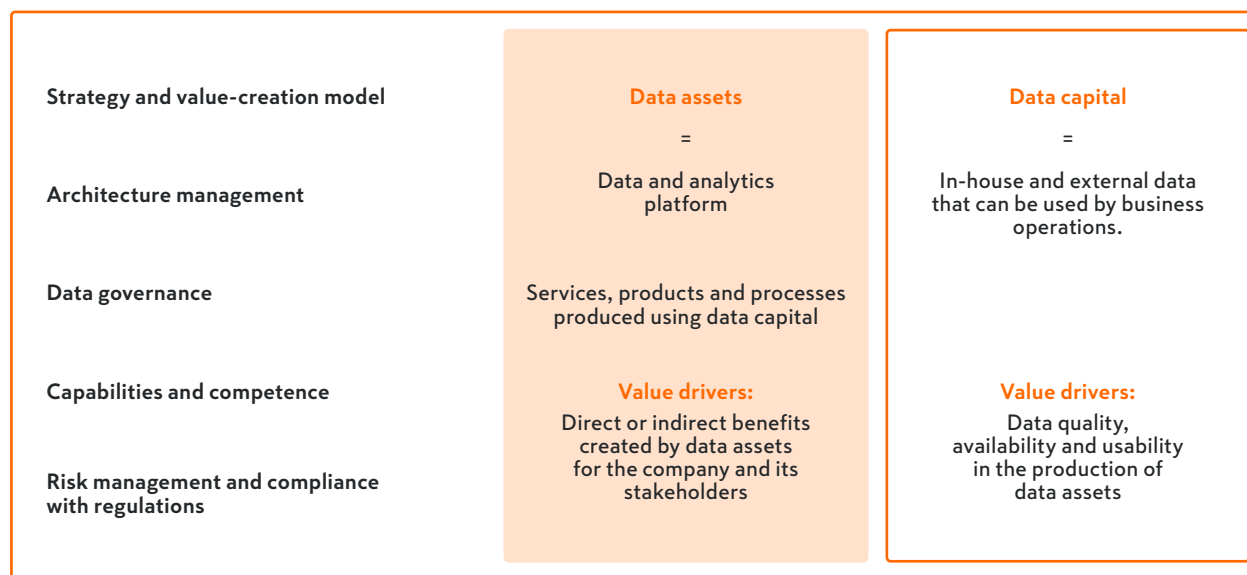
KESKO'S DATA BALANCE SHEET

Kesko's data balance sheet describes the in-house and external data capital and data assets (value-creating data products, services and processes) available to business operations

Kesko's data balance sheet provides an overview of data-centric and customer-oriented business operations. Data in itself has no value for Kesko: its value is based on the benefits for business. The model supports the strategic and business-driven management of data capital and its use.

The data balance sheet combines the management of data usability (fit for use), quality and life cycle in terms of data capital with the use of data to create value in terms of data assets. Value is created through Kesko's data and analytics platform services, and through digital services, products and processes produced by Kesko for its own operations and for customers and other stakeholders.

Data governance is the key process for managing data capital. Data governance focuses on processes related to data life cycle, quality, storage, usability and risk management. This ensures the highest possible quality, availability and reliability of data assets – i.e. digital services and data-driven decision-making – from the

Kesko's data balance sheet

	Data assets	Data capital
Strategy and value-creation model	=	=
Architecture management	Data and analytics platform	In-house and external data that can be used by business operations.
Data governance	Services, products and processes produced using data capital	
Capabilities and competence	**Value drivers:**	**Value drivers:**
Risk management and compliance with regulations	Direct or indirect benefits created by data assets for the company and its stakeholders	Data quality, availability and usability in the production of data assets

perspective of business operations, customers, K-retailers, partners and suppliers.

Kesko's data capital concerning grocery trade customers is in a class of its own in Finland and even internationally, in proportion to population and sales. The data capital is significant in terms of both temporal coverage and data

quantity. The K-Plussa customer loyalty programme was introduced in November 1997, and nearly 90% of Finnish households are currently members. Kesko's market share in grocery trade is around 37%.

We have vast amounts of usable data combined

Data-driven management is at the core of everything we do

Some key figures for data-driven management for our Finnish operations

3.3 million
K-Plussa customers
(end of 2021)

Nearly **200,000**
products on sale in
grocery trade (2021)

Over **2 million**
instances of customer feedback
(grocery trade 2021)

Over **1 million**
visits to K-Ruoka mobile app
per week (12/2021)

1,200
grocery stores

Over **2 million**
daily customer encounters
(physical & online stores, K Group, 2021)

Over **2,000**
K-partners
(grocery trade suppliers, 2021)

23,000
customers involved in
development work (K-Kylä, 2021)

Kesko's limited data balance sheet for 2021

	DATA ASSETS		DATA CAPITAL	
Definition	Value-creating digital services, products and processes produced using data capital		Available in-house and external data	
Purpose	Managing the business value and customer benefits of data		Managing data quality, quantity, usability and risk management	
Operating models	Customer and business processes Analysis, decision-making and risk management processes Data protection and information security operating models		Data quality management and correction process Data governance	

Service examples	**For consumers**
	• K-Ruoka (app and mobile)
	• Online stores such as
	  • k-ruoka.fi
	  • k-rauta.fi
	  • budgetsport.fi
	  • intersport.fi
	  • k-auto.fi
	  • k-lataus.fi
		• K-Ostokset
		• K-Kuitit
		• K-Plussa
		• K-Tunnus
		• Data protection services
			In-house data capital (examples)
			• Customer data
			• K-Plussa data
			• Receipt data (retail)
			• Wholesale
			• Selection, price and logistics data
			• Campaign and media data
			• Web browsing data
			  (sites, apps and online store)
				• Store and network data
				• Own enriched product data
				• Operational ERP data
				• HR data

	For b2b customers
	• Online stores such as
	  • kespro.fi
	  • k-rautapro.fi
	  • onninen.fi + websites in other
	    operating countries
		• Interface and EDI services
		• Reporting services
		• Product information services
			External data capital (examples)
			• Digital and Population Data Services
			  Agency (e.g. address data)
			• Carbon footprint and other
			  sustainability data
			• Product information: building and
			  technical trade
			• Statistics Finland
				• Market data
				• Social media
				• Data on the use and conditions of store
				  and logistics properties

	For K-retailers • K-Valikoima • K-Kampanja • K-Markkinointi • K-Deski • K-Tuote	• Hymy, NPS • K-Raportointi • Digital Signage display services • Electronic shelf labels		

	For partners and suppliers
	• K-Toimittaja (including information-
	  sharing services)
	• K-Mediaratkaisut
		• Data services to support production and
		  product development		

	Kesko's internal services • Forecasting and reporting, e.g. finance, HR analytics • Network planning • Risk management	• Property management • Business insight • K-Consent (cookie management)		

The report and its data balance sheet model are based on the Balanced Data Insight concept of the Finnish Functos Oy.

CYBERSECURITY AND DATA PROTECTION

KESKO DATA BALANCE SHEET **2021**

CYBERSECURITY AND DATA PROTECTION

The implementation of data protection and information security is an integral part of Kesko's operational reliability and stakeholder trust. Rapidly developing technologies and changing regulations challenge us to stay one step ahead in protecting our customers, partners and operations.

Strong common operating models and security technologies protect data concerning our operations, customers, employees and other stakeholders. Through data governance, we ensure that personal data is processed carefully, securely and in compliance with the applicable data protection legislation. We are also working to ensure that the growing expectations concerning data protection, as well as amendments to data protection legislation, are taken into account in all our operations as comprehensively as possible.

Our stakeholders' expectations concerning communication on data protection issues are steadily growing. In 2021, Kesko processed a total of 1,101 requests submitted through its data protection website. Enquiries concerning data protection were also submitted through other channels.

Information and cyber security
Kesko is proactively developing its capacity to respond to information security threats and cyberthreats and to ensure the resilience and continuity of its operations in various fault situations.

The Group's information security unit serves as its in-house competence and service centre. The unit is responsible for system-level information security architecture and operating models, and it provides training and services to the Group's other units in information security matters.

Following our procurement of IT services in 2020, we renewed our system-level information security services and successfully transferred them to a new service provider, without any interruptions or problems in the services. This reinforced our information security architecture, as key products were replaced with more effective products that provide better coverage and capacity to respond. Kesko's information security situation is monitored and managed in real time from a centralised information security control room.

Management and steering model
Kesko has an information security policy approved by its Board of Directors. The policy determines basic requirements for information security and lays the foundation for the planning and implementation of operations in line with the policy. Information security is implemented and developed by means of a risk-oriented approach, using relevant and cost-effective solutions. The information security steering model is part of Kesko's Group-level risk management steering model.

Kesko's information security policy is available on Kesko's website at www.kesko.fi/en/company/policies-and-principles/information-security-policy/

Ensuring information security in operations
The implementation of information security at Kesko is based on operating models and controls that support each other. We carry out information security risk assessments at regular intervals, as part of the development and implementation of new services and systems and in connection with significant changes. Kesko's information security requirements determine the level of information security required from contractual partners. If necessary, compliance is verified using audits.

The status of information security is reported in connection with normal internal control, as well as internal and external audits. Technical information security is assessed continuously, and separate information security audits are conducted in the most significant environments.

We have several regularly implemented measures in place to improve employees' awareness of information security. These include online training, simulation and internal communication about significant topical information security matters.

In 2021, Kesko's information security unit actively provided training for Kesko's IT and business teams on new information security services, responsibilities and threats, as well as responses to these. In addition, tailored training was provided to specific target groups.

Exercises are organised actively. In 2021, these were related to identifying and preventing phishing. Kesko also participated in the National Emergency Supply Agency's Data 20 exercise, which simulated a cyber disruption affecting society as a whole.

Data protection

Kesko's data protection instructions and methods are based on current regulations and the company's data protection policy. We actively monitor developments in data protection and legislative projects and prepare to respond to them as effectively as possible. The increasing use of data and the rapid development of various technologies and applications require us to manage risks continuously and adjust our data protection activities accordingly.

We plan the processing of personal data in advance and ensure that the processing is lawful, reasonable and transparent, and that personal data is processed for a specific purpose in accordance with a legal basis laid down by law. Personal data is processed only to the extent and only as long as it is necessary for the purpose of use.

We strive to ensure the accuracy of the data used, and the data is updated from the person themselves or from reliable sources. Personal data protection also means everyone's right to have access to the data collected about them, as well as the right to have any inaccurate personal data rectified and any unnecessary data erased. When the grounds for personal data processing expire, the data is erased appropriately.

ENSURING DATA PROTECTION IN OUR OPERATIONS

Kesko's K Compliance programme includes a data protection programme, which aims to increase employees' awareness of and expertise in the data protection instructions and regulations, as well as to promote a high level of data protection. The programme also supports the identification and management of data risks in Kesko's units as part of ensuring careful Group-level compliance.

RISK ASSESSMENT

Regular data protection risk assessment provides guidelines for the annual data protection plan and the data protection programme. The assessment is carried out in cooperation with Kesko's risk management organisation and is updated four times a year in accordance with the risk management process.

GUIDELINES

Kesko's data protection guidelines concern all employees and include key rules, instructions and processes for implementing data protection and identifying and processing incidents and risks.

The guidelines include the global data protection manual and supplementary country-specific instructions. Together, these determine the implementation of data protection in accordance with the applicable rules and regulations in all Kesko Group companies and operating countries, taking local regulations into account.

TRAINING AND COMMUNICATION

Kesko ensures its employees' sufficient data protection competence through training and communication. Data protection training is part of the induction of new employees.

Kesko's employees can complete the data protection and information security training required for their duties in Kesko's online training environment. The training is mandatory for all white-collar employees, experts and members of the management. In 2021, the training was completed by a total of 7,297 Kesko employees in Finland. Data protection training for retailers' personnel is also available at K Group's K Academy.

Data Protection Interest Groups focusing on various themes are organised four times a year. The groups discuss current data protection application practices, instructions issued by authorities, amendments to legislation, and best practices in accordance with what is relevant to each group.

Regular training and current activities are supplemented by targeted need-based data protection training events for various units.

Data protection themes are communicated internally in various complementing channels, including communication conducted by managers. All current instructions concerning data protection are easily available to all employees.

Kesko has a dedicated data protection site for customers, employees, K-retailers and partners, through which data subjects can exercise their rights under the General Data Protection Regulation. Requests can also be submitted through channels in which the identity of the person making the request can be verified.

→ **Kesko's data protection site (in finnish)**

MONITORING, ADDRESSING ISSUES AND OFFICIAL PROCESSES

Kesko ensures the implementation of data subjects' rights under the General Data Protection Regulation by informing them about data processing and determining operating models and instructions for situations in which data subjects wish to exercise their rights. The Data Protection Officer plays a key role in monitoring and steering and in providing advice and managing incidents.

Kesko documents all data security breaches and reports them to the data protection authorities as required. Kesko also immediately informs the affected person about data

breaches in situations involving a high risk of abuse or damage in accordance with the GDPR.

Data protection incidents and suspected abuse can be reported anonymously through Kesko's SpeakUp whistleblowing channel.

MANAGEMENT MODEL

The Group-level data protection organisation includes Kesko's Data Protection Officer, Corporate Counsel specialising in data protection legislation, and two members of the Compliance & Ethics team who specialise in data protection matters and requests.

Each business unit or data controller evaluates and monitors the implementation of data protection in their operations. All business operations' personal data registers have designated owners in accordance with regulations. The daily implementation of data protection and the identification of risks and incidents are supported by trained Data Protection Champions. Requests submitted by data subjects are processed by the business operation that owns the personal data register in question. The Group-level data protection organisation provides support as necessary.
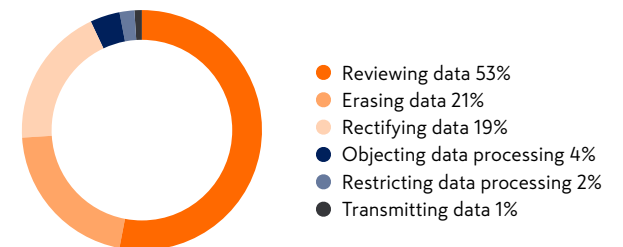
DATA PROTECTION REQUESTS AND INCIDENTS

In 2021, Kesko processed 1,101 requests submitted through its data protection site. Requests were also processed in other channels. Kesko detected and investigated a total of 497 data breaches in its operations in Finland in 2021 (2020: 910). Of these, 79 (2020: 122) exceeded the notification threshold and were reported to the Data Protection

Ombudsman. Individual cases were also reported to the affected data subjects.

The number of data protection requests has been found to be connected to the volume of communication to customers. In late 2021, Kesko also informed customers about changes to its data protection notices, which prompted customers to review their data. Most data protection requests are related to reviewing and rectifying data subjects' personal data. Requests to erase data are typically related to situations in which the customer feels that the customer relationship has ended or otherwise wishes to prevent the collection of their personal data. Customers who make purchases infrequently in particular may feel that customer communications are unnecessary.

Distribution of requests in 2021

- Reviewing data 53%
- Erasing data 21%
- Rectifying data 19%
- Objecting data processing 4%
- Restricting data processing 2%
- Transmitting data 1%

A DATA RESPONSIBLE GROCERY TRADE OPERATOR

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Corporate responsibility is a strategic choice for Kesko and integrated into our day-to-day work. Responsible data use means transparency, a high level of data protection, and the creation of common, sustainable value.

Data responsibility at Kesko is based on protecting the individual's data and using it sustainably and transparently in business operations, as well as creating positive impacts for customers, stakeholders and society. Trust in the execution of these factors is a key requirement for sharing data between an individual and a company.

DATA CONTRIBUTES TO POSITIVE IMPACT

K Group helps its customers to consume responsibly. Data enables them to understand the environmental and climate impacts of their shopping, as well as how much local Finnish products they are buying. We support wellbeing by providing information on the nutritional properties of food products. Understanding the sustainability aspects and broader impacts of their purchasing behaviour helps customers make more sustainable choices.

RESPONSIBLE AND HUMAN-CENTRED DATA USE

The use of data and artificial intelligence is based on responsibility and ethical principles. K Group uses customer data for the benefit of the customer: for example, offers, product recommendations and targeted communications are always based on the customer's preferences. The customer has the right to choose their preferred forms of communication and to limit or prevent the use of their data if they so choose.

Customer data is protected by Kesko. We process personal data carefully, securely and in compliance with the applicable rules and regulations. Comprehensive information about data use and life-cycle management is provided in the relevant register descriptions, and data protection requests are fulfilled comprehensively.

K Group's key data responsibility perspectives:

IMPACT	EXPLANATION
Climate and the environment	• Understanding the carbon intensity of personal consumption in the K-Ostokset service • Carbon footprint of products (currently at product category level) • Other indicators and certificates for environmental responsibility of individual food products (e.g. organic production, water footprint)
Supply chain	• Tracking how much of personal purchases are local Finnish products in the K-Ostokset service • Finnish origin of individual food products • Social responsibility certification (e.g. Fair Trade) for individual food products
Wellbeing, health and safety	• Understanding the health and wellbeing profile of personal purchases in the K-Ostokset service • Comprehensive product information • Opportunities to include recommendations that increase personal wellbeing in the K-Ruoka/K-Ostokset service (e.g. smart shopping lists, recipes, products based on personal goals, product recommendations, inspiration)
Ethical AI	• Solid ethical principles and practices for using artificial intelligence, customer data and analytics (profiling, automated decision-making, transparency)
Resource and material efficiency	• Continuous optimisation of energy efficiency based on condition and equipment data in properties and store fixtures and furniture • Optimisation of goods flows and logistics and delivery routes • Minimising food waste by means of predictive analytics and selection planning

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FOR SHOPPING TO BE FUN