

OP Financial Group's Data Balance Sheet 2020



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OP Financial Group’s Data Balance Sheet 2020

Data Balance Sheet unfolds the meaning of data for OP Financial Group, its stakeholders and the operating environment

Digitalisation and its various manifestations, platform economy, big data and artificial intelligence have given rise to new business models and transformed conventional operating practices. Data is establishing its position as the raw material of the new era, a means to increasing operating efficiency and a driver of added value – as well as an end product. The role of data quality and data protection in corporate risk management has increased considerably.

More than ever before, it is data that defines the opportunities and risks of a business. Therefore, a similar level of seriousness is required in improving the productivity of data and protecting it as for economic and human capital. The principles of responsibility and fairness have become important, in addition to multidimensional value creation. A business that wants to succeed in the fair data economy needs to gain the confidence of its customers, other stakeholders and society at large with respect to its use of data and its business goals.

A data balance sheet combines data, data-based business and corporate responsibility management to form a comprehensive description of data-centric value creation. It increases understanding of the company’s data capital, its use and management. Data balance sheet promotes the development of a fair, win-win, human-driven data economy.

OP Financial Group’s Data Balance Sheet describes the use of data to implement the Group’s strategy from the viewpoints of business, customer benefit and risk management. It describes data-related value creation by means of a data balance sheet that comprises OP Financial Group’s data capital and data assets, as well as data balance sheet management.

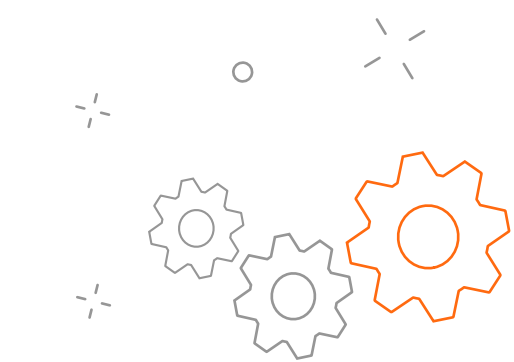
It also describes the key operating models, goals and results of data governance as well as the key principles and practices governing the safe use and processing of data.

Reporting scope

OP Financial Group’s Data Balance Sheet describes data management, utilisation and protection in a manner that creates value to customers, OP Financial Group and the operating environment. The report covers the key events of 2020 in OP Financial Group’s digital services. This is the third Data Balance Sheet published by OP Financial Group.

Key term: OP Financial Group’s financial intelligence

Financial intelligence describes the refinement and utilisation of data by means of advanced analytics at OP Financial Group. Financial intelligence also includes, but is not limited to, the use of various applications based on artificial intelligence. Financial intelligence refers to internal services or capabilities for creating new added value for the customer, improving operational efficiency and productivity and enhancing risk management on the basis of data, algorithms and automation.



Message from management



Data provides unique benefits for OP Financial Group, customers and the operating environment

OP Financial Group aims to use data to provide unique benefits for its customers, its own operations and, ultimately, for its operating environment. OP Financial Group’s President and Group CEO **Timo Ritakallio** and Chief Data Officer **Sameli Mäenpää** discuss data and the use of data from various aspects as well as the role of data in the future.

What is the role of data at OP Financial Group?

Timo: "In the digitised banking and insurance business, data is the key to everything. For a financial services provider, data capital is a particularly important asset that lays a solid foundation for the creation of excellent customer experience and a profitable business.

Banking and insurance customer relationships, all types of data related to them and the use of such data are based on a special relationship of trust between the customer and the financial services provider. The customer must always be able to

trust that OP Financial Group uses all this data in a responsible manner that creates benefits for the customer."

Sameli: "In banking and insurance business, data is a special type of capital that is subject to a wide range of expectations and requirements. Data is simultaneously a basic prerequisite of our operations and a major opportunity for value creation. We must ensure the availability, quality and protection of data while simultaneously using data in a manner that creates new value to our customers and our business. For OP Financial Group, data is both a source of value and a process outcome that is equally important as our economic and human capital."

Why does OP Financial Group want to increase transparency related to data, and the responsible use of data?

Timo: "We want to meet our customers’ growing expectations for transparency concerning the use



Timo Ritakallio
President and Group
Chief Executive Officer

of customer data. We also want to describe how we use data during a customer relationship. Privacy protection and the safe processing of data combined with the safe use of services are the starting points of everything we do. That’s why we want our customers to know why and for what purposes we need various types of customer-related data, and how we use that data."

Sameli Mäenpää
Chief Data Officer



Sameli: "Transparency increases trust towards our operations. It's important that all our stakeholders have confidence in our way of managing, protecting and using data. For us, openness about our use of data and value creation forms part of our corporate responsibility and provides a way of meeting the growing expectations of our customers. A discussion about data and its utilisation can seem

remote and abstract to our customers. Through our Data Balance Sheet, we are seeking to make data a more common topic of conversation."

What challenges do we need to deal with?

Timo: "Our digital operating environment is changing constantly at a high speed. Besides new digital business opportunities, we are also facing new threats such as international cybercrime that is becoming increasingly organised. We protect our customers and our own operations vigorously and, particularly through anticipation and continuous practicing, we secure the continuity of our operations in any threatening situations. This is particularly important from the viewpoint of OP Financial Group's customers and business as well as for the smooth operation of Finnish society as a whole."

Sameli: "The financial sector plays a key role in the functioning of societies and economic systems. For this reason, it is strongly regulated. Regulation also guides data governance and protection, encouraging us to further strengthen our risk management and resilience against incidents."

"2020 showed us that even very rapid changes in our operating environment are possible and that data is the key to understanding and managing such situations. All in all, we must be prepared for everything and protect the operating conditions

and wellbeing of our customers and society under all circumstances. We must also grasp opportunities quickly while managing any risks involved."

What kind of Finland does OP Financial Group want to build by means of data?

Timo: "We want to make Finland a safe and secure operating environment that enables active and innovative use of high-quality data – to an increasing extent by means of artificial intelligence. Advanced use of data will help Finnish companies to operate securely and successfully in a complex and rapidly changing global operating environment. Transparent use of data will increase trust and interaction between individuals and businesses using data."

Sameli: "The success of industrial Finland was based on high-quality raw materials for the industrial sector and the related refinement knowhow as well as a shared story of prosperity. In the eyes of data professionals, Finland of the future is not very different. Its cornerstones will be high-quality data, refinement and value creation capabilities as well as a story of shared benefits. Finland has excellent opportunities to profile itself as a human-driven data economy where data is used for the benefit of individuals, businesses and society in ways that are as diverse as possible, transparent and beneficial to all parties."

Viewpoint 2020: Data helps in navigating amidst the pandemic

The Covid-19 pandemic changed the lives of individuals and businesses in 2020. In the early stages of the pandemic, OP Financial Group’s Strategy and Renewal function collected and analysed data on a 24/7 basis.



Toni Honkaniemi
Head of Market Intelligence

Worldviews help us in facing dramatic changes

In its strategic planning, OP Financial Group applies a foresight model that examines various alternative worldviews. This model proved to be an effective tool for identifying and analysing the impacts of a pandemic, too. This involved establishing, as comprehensively as possible, short- and long-term understanding of the crisis from the viewpoints of health, businesses, economy, public sector and the political system

Data collected within the frameworks of different worldviews was refined for the Group’s own analysis, forecast and risk management functions that support its crisis management and decision-making. The Group extensively used its insight of how the pandemic affected its customers and its own business in order to dampen the shocks.

Besides providing up-to-date snapshots, the Group also outlined alternative development paths and assessed the impacts of the pandemic. OP Financial Group acted as an information provider for an economic situation room coordinated by Helsinki Graduate School of Economics amid the Covid-19 crisis. The purpose of the situation room was to maintain a situation picture of Finnish society to support the work of national policymakers and experts.

Payment card data increased understanding of the effects of Covid-19 on people in Finland

Almost real-time payment card data evidenced a rapid change in consumer spending and consumption structure. In spring, the lockdown measures caused a collapse in consumption, particularly in the use of services as well as travel, driving and the restaurant sector. In summer, these sectors recov-

ered rapidly as citizens chose to spend their vacations in Finland. The fact that people mostly stayed at home due to the crisis also increased purchases related to home improvements and consumer electronics. In autumn, tightening restrictions and the worsening Covid-19 situation were again reflected in payment card data – almost in real time.

In the rapidly changing world, continuous monitoring and understanding of data help us to anticipate changes and adapt to them both in the short and long term. OP Financial Group’s strategic planning and management model that is based on alternative worldviews is ideal for the new era that is permanently characterised by an uncertain operating environment and rapid changes. Data has helped us in navigating through the crisis and in identifying alternative trends during the most difficult stages and beyond.

Customer and data
– unique benefit to
our customers

Customer and data – unique benefit to our customers

The best data and customer insight lead to the best banking and insurance services. Tapping into data capital that is among the largest in Finland, OP Financial Group wants to understand and serve its customers better and bring benefits to them across the customer relationship.



OP Financial Group uses data in an innovative and secure way, and always in the interests of its customers. Data helps the Group produce high-quality and easy-to-use banking and insurance services, build customer insight and develop the services of the future. OP Financial Group also uses data to manage risks and ensure the security of the monetary system in Finland.

Data is a valuable asset for OP Financial Group and its use is based on the trust of customers and other stakeholders. Processing and using data about an individual customer is done in the manner stated in Privacy Notices. They describe the purposes of processing and using customer data and the related legal basis, including statutory obligations.

Improved customer insight with data

A key purpose of using data capital is to provide and develop secure and high-quality banking and insurance services for private and corporate customers. OP Financial Group frequently enriches its own data capital with carefully selected or externally purchased market, industry and research data.

OP Financial Group invests in high-quality service design, in order to develop new services and improve user experience in the present basic services. By analysing customers and their actions as service users, the Group ensures that it develops its services in the right direction to make them easy, useful and intuitive to use. Accessibility is an essential aspect of developing digital customer services.

Cookies are used in many ways for service development, targeting and marketing purposes. The users of op.fi and OP-mobile have viewed positively the modified cookie options introduced in May and have given consents to collecting and using data about them. At the end of the year, 83% of logged-in private customers had allowed the use of many optional cookies in addition to necessary cookies.

Besides analytics, data-driven service development uses various qualitative and quantitative customer research methods that complement each other, as well as direct customer feedback and testing. In addition, testing and continuous improvement are increasingly carried out through automation and machine learning.

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The restrictions on movement due to the Covid-19 pandemic speeded up customers’ move to digital services.

Digitalisation and automation of services

In 2020, the move from branch to digital services gained momentum across all channels, but especially in chat and mobile services. OP-mobile has for long been our customers’ preferred channel for handling banking and insurance matters anytime, anywhere. To an increasing extent, customer service is provided by one of OP Financial Group’s chatbots. Despite increasingly digitising its channels and automating its services, OP Financial Group makes sure that customers always have easy access to personal service, too.

Improving financial literacy and financial risk management

OP Financial Group aims to improve the financial literacy skills of people in Finland and support their capabilities for planning their personal finances and managing related risks. Data based insight of a customer’s overall financial situation enables us to provide them with fact-based support during customer encounters. Examples of fact-based support to customers include product and service recommendations, financial and wealth coaching, and help in preparing for expected or unexpected events in life.

Data-driven communications and marketing

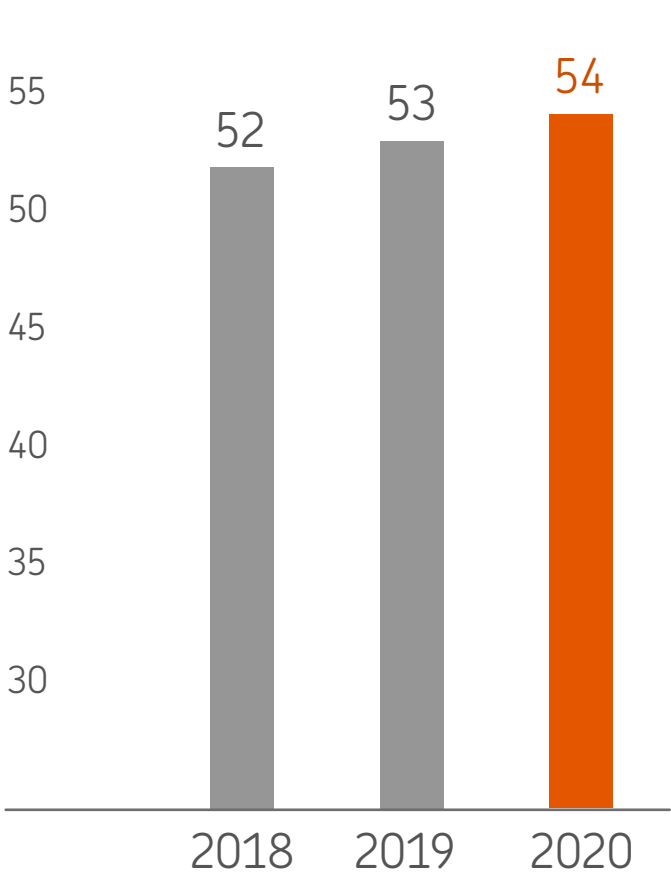
In planning, targeting and adapting marketing and communications content, we use customer, agreement and product data in various ways. The aim is to know each customer’s overall situation as accurately as possible. Better customer insight helps us serve customers more successfully and provide them with banking and insurance services that best meet their needs.

In 2020, development of customer communications focused on clarity and timeliness. Messages were made more interesting and useful thanks to testing and exploitation of data. The open rates for customer messages have increased and the number of easily avoidable calls to the customer service has decreased markedly.

Responsibility guides our use of data capital

Responsibility guides the way we use data throughout the customer process. Transparency and clearly communicated principles regarding the use of customer data play a key role since OP Financial Group is fully dependent on the confidence of its customers.

Digital channels NPS¹



¹ Net Promoter Score (NPS) measures a user’s likelihood to recommend the service on a scale of 0 to 10. This index is calculated by subtracting the percentage of detractors (scores 0–6) from the percentage of promoters (scores 9–10). The NPS for OP’s digital channels is asked from the customer when logging out from the service.

Our marketing and sales respect the limitations of customer data use as described in Privacy Notices as well as good marketing practices and regulatory compliance. The permission to use a customer’s personal data for targeted marketing is always based on the customer’s specific consent.

We have gained our customers’ confidence through responsible and careful operating models and transparency in collecting, storing and using data. Comprehensive information about collection, processing and use of customer data by OP Financial Group is available on the op.fi website.

Case: Analytics deepens the customer relationship

Historically, customer understanding in banking and insurance has been based on a long personal relationship with the customer. Now, data and analytics help us build next-generation customer insight and personal customer relationships in all service channels.



Shania Määttä
 Senior Product Owner
 Private Customers

Advanced analytics creates deeper insight into the relationship between the bank and the customer. Using data and machine learning, we can significantly improve the relevance of our product and service recommendations and the provision of more personal multi-channel customer service of consistent quality.

Relevant product and service recommendations

In late 2020, OP Financial Group adopted the Next Best Offer (NBO) recommendation module for choosing the products and services to offer for Retail Banking private customers. Implementation of the NBO module was preceded by comprehensive analyses, planning and testing. The focus of our customer insight is to combine a certain customer’s situation with OP Financial Group’s products and services.

In the first stage, we covered services related to owner-customer membership, digital transactions and eServices agreements, cards and loans, wealth management and term life insurance. Going forward, we will be looking to add insurance products and services which can be included in our recommendations with the customer’s consent.

Quality data on agreements and products at the core

The customer insight-based product and service recommendation uses OP Financial Group’s data capital from its agreement and product databases. Before this development project was started, we centralised and reformed the structure of our product information management (PIM). This effort materially improved the quality and usability of our product data capital.

The improved usability of data capital leads to more efficient customer service, digital sales and marketing. Using analysis-based insight in customer service not only results to higher customer satisfaction but it also improves the quality of our customer advisors’ work performance and their job satisfaction.

Putting our customer’s interests first

In recommending products and services, it’s essential to ensure responsible operations and putting the customer’s interests first. In our service, recommendations are always given based on a customer’s individual situation and their predicted needs.

No information related to the customer’s gender or geographical location are applied to recommendations, and no product or service recommendations are given to underage customers. The service applies the principles stated in the related Privacy Notice published by OP Financial Group, and the customer’s cookie consents and other consents.

Case: Real-time payments forming the new normal

In an increasingly digital world, companies’ order and delivery processes run 24/7. With the solution developed by OP, payments can keep up with this pace.



Hanna Äijälä
Business Lead,
OP Corporate Bank

Financial and production processes in companies often run non-stop, and goods ordered from an on-line store may reach the buyer even within one day. Traditional batch payment processing that only runs on weekdays is having a hard time keeping up with the speed at which business is done nowadays.

There have been many attempts to resolve the relative slowness of payments. One change with extensive impacts in the euro zone was the introduction of SEPA instant credit transfers that may reach payees in just 10 seconds. The next step will be fully real-time credit transfer services that banks will join in their own schedules.

OP Financial Group has noted the need among its customers to get business operations and cash flows moving at the same pace. To solve this problem, OP Financial Group developed a real-time service going beyond single and mass credit transfers. In autumn

2020, we reformed our real-time payment technologies and services completely, which enables us to process a significantly higher volume of real-time payments.

API for real-time payments

OP Financial Group has developed an API (Application Programming Interface) that significantly changes the dynamics of payments. The new technology launched in early 2020 enables payments and data transfers in real time, 24/7/365, and it can be fully automated if needed.

Traditionally the payment process and retrieval of account information have been connected to a company’s financial management software system that is dependent on accounting schedules and rules. API solutions for payments, in turn, can be directly connected to one or more business applications. This

takes payment transaction data directly to those places where it’s needed the most.

Payments data to guide operations

Which real-time services can then be directly connected to a company’s systems? For instance, financial and business applications and ERP systems can get real-time account transactions data. Other examples include the automated initiation of payments, delivery of a product or service immediately following a payment and automated refund of unidentified payments.

We wanted to make the adoption of our API solutions as easy as possible. That’s why all documentation related to the implementation of all our APIs, and the sandbox environment for testing the various real-time payment APIs, are available on our OP Developer site.

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As real-time APIs are connected to enterprise resource planning systems, payments data becomes ERP data.

Case: Data makes responsible investment easier

Investors increasingly focus on responsibility when making their investment decisions. Analysing ESG data and encouraging companies towards increasingly sustainable business are an efficient way to support the achievement of investment targets.



Annika Esono Manninen
Head of ESG,
OP Asset
Management

OP utilises various methods in its responsible investing. These include the inclusion of sustainability assessments in investment decision-making, the positive and negative valuation of investments, compliance with international standards, active ownership and direct influencing on companies.

Exploiting ESG data to the maximum

In its investments, OP uses various data providers' ESG data (Environment, Social, Governance) that covers approximately 6,000 companies worldwide. Each company is given an ESG rating based on corporate responsibility elements and metrics that are relevant for the industry in question. ESG data is put into extensive use, all the way from company selection to sustainability reporting of investment portfolios and OP funds.

The selection of data sources aims to create a sufficiently comprehensive and versatile view of in-

vestments' ESG aspects and sustainability risks. In its analysis, OP uses internationally recognised ESG data providers, including ISS, MSCI, Sustainalytics and SASB. In implementing its investment strategies and building mutual fund portfolios, OP uses quantitative models, theme weights, company-specific analysis and exclusionary screening.

ESG tool deepens integration of responsibility into investment

OP Asset Management has developed a new ESG tool for internal use to help integrate ESG even more into equity and fixed income investments. The tool helps the user understand an investment's current ESG level and find ESG momentum (signs indicating trends in those ESG aspects defined as material, and trend strengths).

Using raw data from Bloomberg's market data service and materiality data from the Sustainability

Accounting Standards Board (SASB), the developer of industry-specific reporting standards, the ESG tool combines external data and OP's internal analysis. At the moment, the ESG tool is used to support fundamental analysis.

Engagement and impact

OP is an active owner that engages with investee companies and reports on its shareholder engagement actions to investors. In 2020, OP participated in some 1,200 general meetings as a shareholder representative. Our aim is to rapidly react to any identified deviations. Mostly we seek dialogue with the company either directly or as part of investor collaborations. Impact investing is another rising trend which involves measuring impact and investor reporting.

Financial intelligence as part of daily work



“We see that OP Financial Group’s role is to be an active promoter of the use of artificial intelligence. In recent years, we have moved from individual experiments to a very wide range of benefits using artificial intelligence.”

Antti Myllymäki
Head of the AI
Centre of Excellence

The various applications of artificial intelligence (AI) affect people’s lives to an increasing extent. Exploiting AI has further increased in OP Financial Group in 2020 and almost all our new digital services use it in some ways.

The term “financial intelligence”, as used by OP Financial Group, refers to a service or capability which uses data and algorithms to create new added value for the customer, improve the Group’s operational efficiency or enhance compliance. Financial intelligence is used to provide services that benefit the customer and to improve the customer experience and customer service.

In using AI, trust plays a key role. The developers and users of AI are always responsible for controlling its operation. It’s essential to ensure transparent and controllable AI-based decision-making, as well as predictable functioning, protecting against manipulation and the division of responsibilities regarding AI-based decisions. In 2018, OP Financial Group was the first company in its sector to make a policy decision concerning the ethical guidelines in using artificial intelligence.

OP Financial Group’s ethical guidelines for the use of financial intelligence

People First

We will use data and AI responsibly and for the good of our customers. We will define the objectives guiding our use of AI clearly and refine them if necessary as based on changed data, technical possibilities and the working environment.

Transparency and openness

We will act openly in our relations with customers, partners and stakeholders, ensuring sufficient transparency for the evaluation of the AI we have developed. We will discuss our use of AI openly and subject our work to public scrutiny.

Impact evaluation

We will carefully study the impacts of the choices we make in our work on our customers and the society around us. Our choices regarding AI utilisation are always responsible.

Ownership

We will define owners for the principles guiding our operations and for the algorithms we have developed, and will ensure the ethics of AI throughout the lifecycle.

Privacy protection

We will guarantee privacy and personal data protection for the individuals represented in the data we use in accordance with our data protection principles.

OP Financial Group’s key digital services and performance in 2020

OP-mobile and OP Business mobile

The popularity of OP’s mobile services increased significantly in 2020. In fact, mobile services are the Group’s most used digital services. OP-mobile is an easy and secure mobile app for daily banking, contacting the customer service, updating personal details and using investment, wealth management and insurance services. OP-mobile also includes the financial coaching services My financial balance and OP Investment Partner.

Chatbots and new digital assistants

Viljo and Opotti, the chatbots developed by OP Financial Group, use natural language analysis and chatbot capabilities based on financial intelligence. The aim is to provide banking and insurance customers with answers to the most frequently asked questions quickly and automatically. Opotti, which serves banking customers, and Viljo, which serves insurance customers, replied to over a million customer questions in 2020. The chatbots improve customer service efficiency and customer experience.

To complement chatbots, OP Financial Group developed its first digital assistants in 2020. In addition to replying, they also carry out requested tasks on behalf of the customer. The first digital assistants operate with student loans and credit transfers.

OP Investment Partner

OP Investment Partner is a digital investment advisor launched on OP-mobile in November 2020. The service makes an individual investment plan for achieving the targets the customer has defined. Then it encourages the customer to increase their wealth in the long term with the help of responsibly managed OP-Target funds.² The target-specific fund recommendation provided is based on the customer’s replies to questions about their return target, risk appetite and investment horizon. Once the investment decision is taken, monthly investments will be automatic. After that, the customer can easily track the investment performance and achievement of the target on OP-mobile.



OP-mobile had an average of **33.6 million** visits per month (up 34% year on year)

OP Business mobile had an average of **1.3 million** visits per month (up 50% year on year)



Up to **72%** of users gave positive feedback to Opotti (in 2019: 67%)



Around **48,000** customers tried OP Investment Partner on OP-mobile in the first month.

² The OP Investment Partner service is provided by OP Financial Group. The funds available on the service are managed by OP Fund Management Company Ltd.

OP Financial Group’s key digital services and performance in 2020

OP Multi-bank Service

Launched in June 2020, OP Multi-bank Service enables OP’s customers to view in the op.fi service and OP-mobile the details of accounts they have with other banks. This service is under active development and the first new addition will be the opportunity to pay and make credit transfers from another bank’s account. Thanks to the opportunities opened up by the new EU Payment Services Directive (PSD2), OP will build even smarter and more comprehensive services.



My profile

The My profile service enables customers to check and update their basic details on op.fi or OP-mobile. The service includes the customer’s main details. In this service, the customers can update their personal data and manage their permissions and wishes related to communications and marketing.



Around **947,000** customer details were updated on My profile thanks to the Know Your Customer (KYC) information campaign.

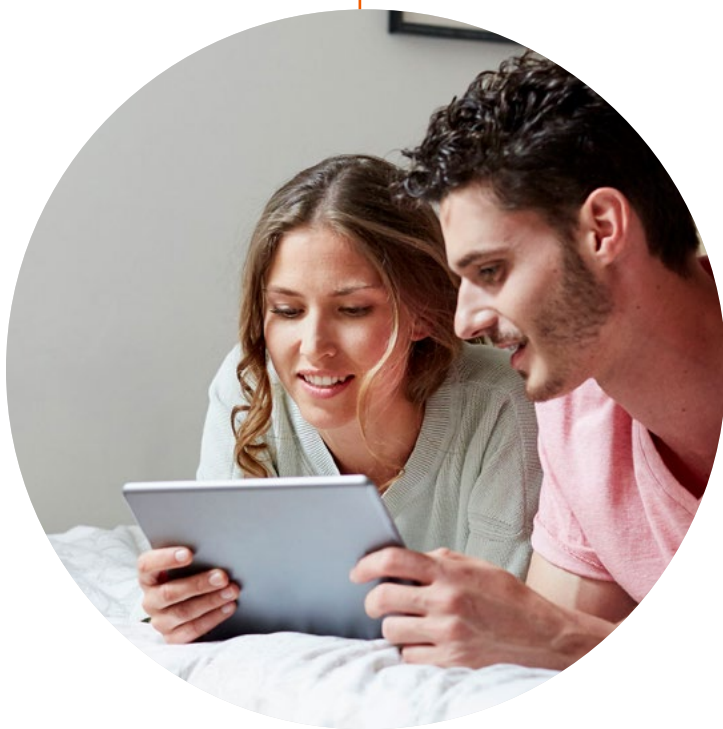
Home price assessment tool

Located on the OP Koti website, this tool supports those buying or changing a home by providing an estimate of the home’s value. The user enters the home’s details (address, area, type of building and construction year) and gets an estimate of the home’s value and the price range, including the determining factors. The tool is also used by OP Financial Group employees for assessing the collateral values of homes. The home price assessment tool uses a machine-learning estimation model. Its teaching data sets include price data from the home sales register maintained by the Union of Real Estate Agencies in Finland.



Digital home loan service

OP has provided fully digital home loan offers since 2018. Issuing a loan offer that is binding on the bank requires that all the information submitted by the customer is correct and that the customer’s collateral is in order. In the backend service, the Credit Engine uses financial intelligence to calculate the maximum loan amount and margin offer for the customer. In decision-making, it uses OP Financial Group’s own data and data obtained from the systems of external partners, such as Suomen Asiakastieto Oy.



Over **50%** of all home loan applications were independently processed by the Credit Engine.

Case: My financial balance – an increasingly networked coach

My financial balance is a smart financial coach based on advanced analytics of account transactions. It gives the customer an easily understandable overall view of their personal finances and helps manage them.



Heikki Korkeamäki
Product Owner
Everyday Banking

The most important factors in building financial security and wealth are anticipation and a long-term approach. According to a survey commissioned by OP, over 40% of people in Finland haven't prepared for financial surprises. At the same time, some 70% say they make systematic financial plans. With a better understanding of personal cost structure, it will be much easier to execute such plans.

My financial balance shows the customer at a glance whether their personal finances are in balance and where do their income and expenses come from. Thanks to machine learning, the service is constantly becoming a better assistant for managing one's finances.

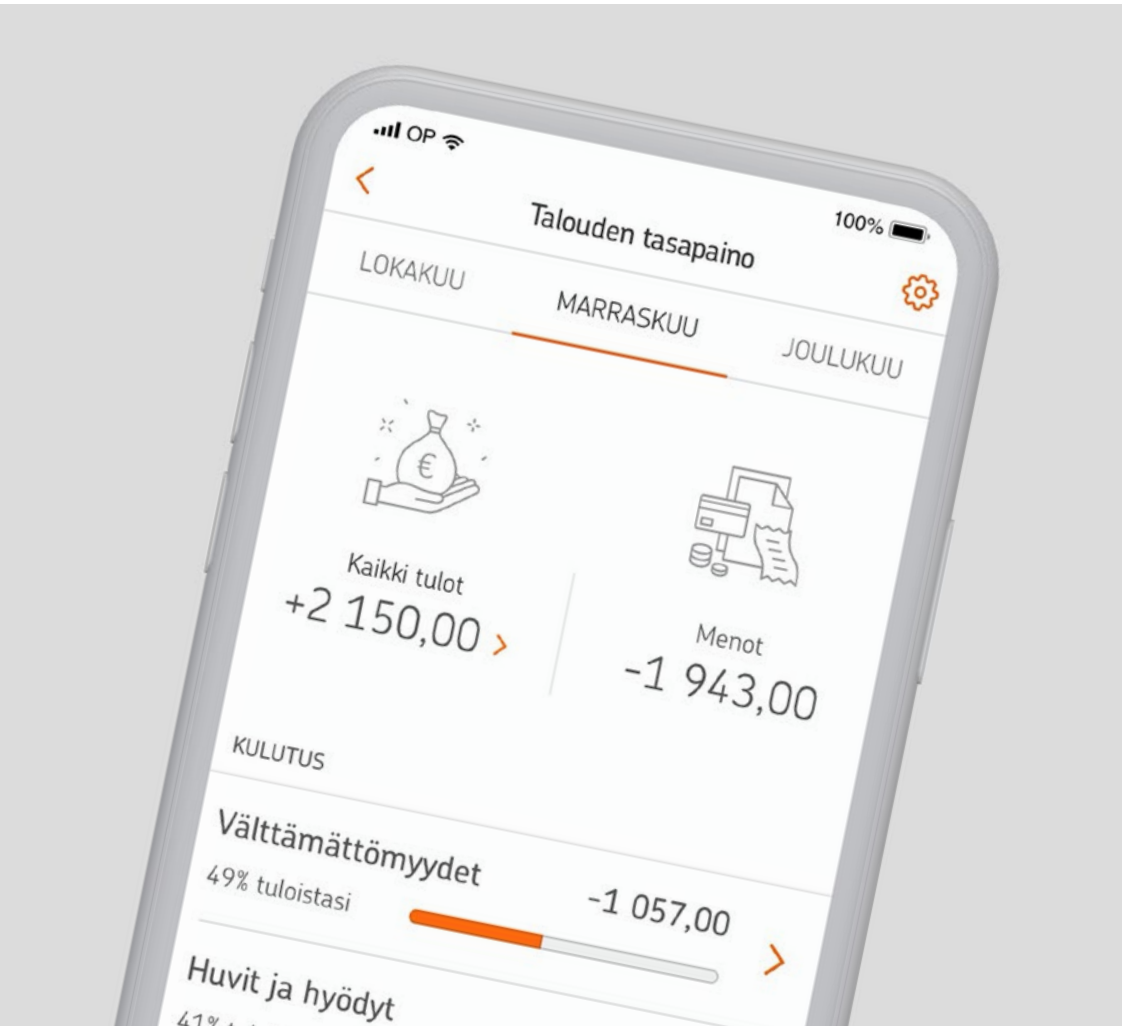
In 2020, we focused on designing features that encourage the customer to save, invest and build wealth. Now My financial balance gives the customer a friendly coach's signals that advise them

to create a financial buffer for surprises. The service's goal is that, in the long-term, the customer's expenses are lower than income.

Recurring expenses, subscriptions and multi-bank view

In 2020, we also added the Subscription management service for viewing and managing recurring expenses and subscriptions, and OP Multi-bank Service that enables the customer to retrieve their account transactions from other banks.

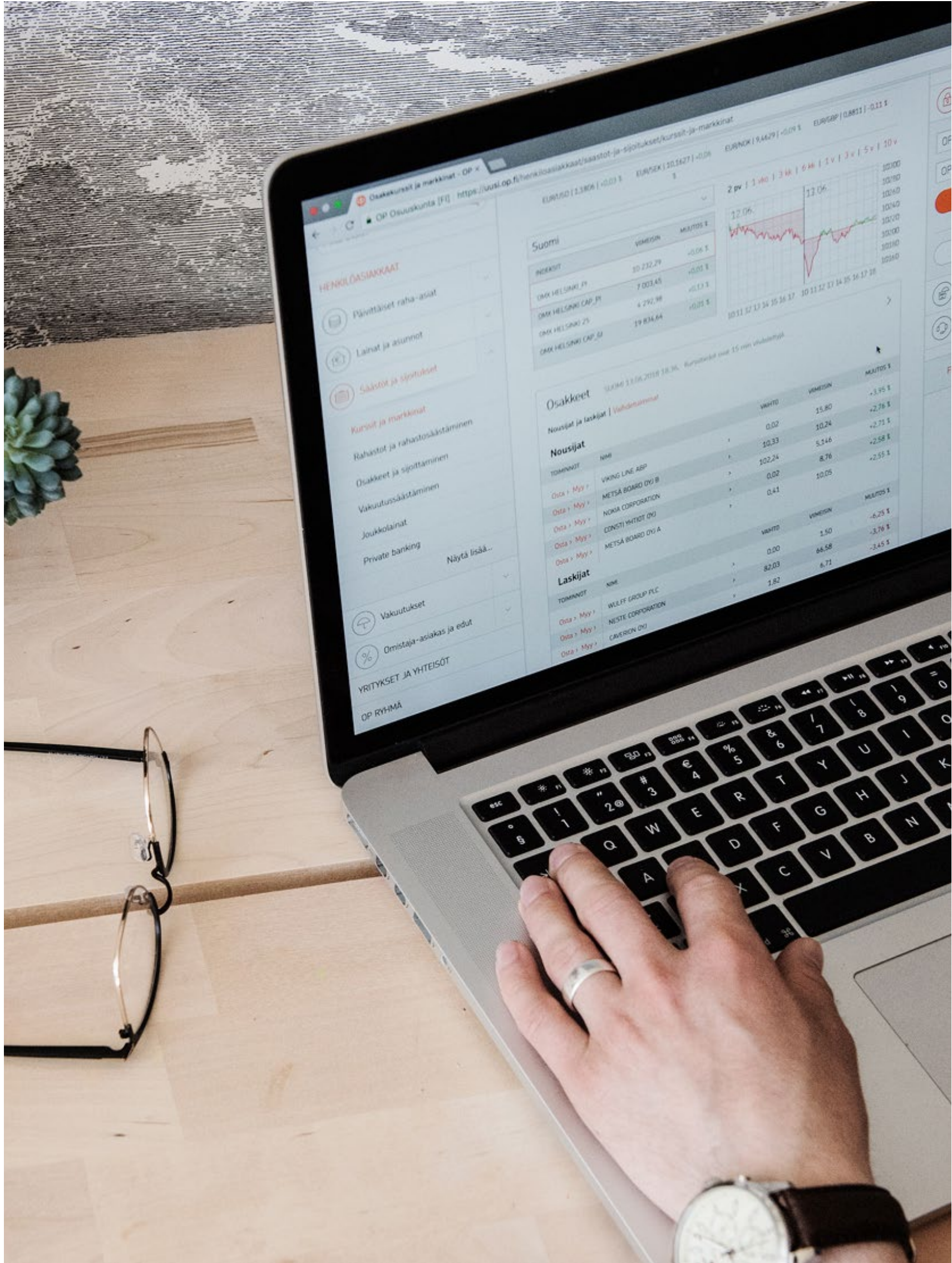
The Subscription management service shows how much the customer spends on monthly subscriptions, such as streaming services, electricity or phone and internet plans. The service also includes an advanced feature for putting subscriptions out to tender or terminating them. The Subscription management service is implemented in cooperation with Minna Technologies.



Learning from each account transaction

Based on neural network technology, the algorithm of My financial balance learns new rules, as the users specify and correct its output. This constantly improves the accuracy of categorisations.

Improving financial literacy in Finland is one of the cornerstones of OP Financial Group's corporate responsibility programme. The Group's aim is to provide increasingly intelligent services that help customers understand their personal finances better and to offer coaching in personal finance skills. My financial balance is a service with a true impact on the finances of people in Finland, as nine out of ten active OP-mobile users have enabled it.



Case: OP Corporate Hub for managing cash flows and finances

OP Corporate Hub saves the day for a financial professional. For managing a company’s payment transactions and working capital, this new cash management service is a much more efficient and flexible solution than using online or mobile banking.

Financial professionals deserve well designed tools that facilitate their work and make their days run smoothly. When developing OP Corporate Hub, we studied the daily management of finances in companies of varying sizes and industries. We learned that there is much to improve on.

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Better service design saves the day for a user.

A service that understands both the finance and the user

OP Corporate Hub relies on top quality service design. At one glance, the user can see the company’s overall cash situation and the functions for exploring and managing it. By exploring accounts and events at various levels, the user can quickly get an overall understanding from the top level to key details. The service is scalable to the daily needs of all businesses, from global corporations and large companies to SMEs and associations.

Data strategy and strategic data management

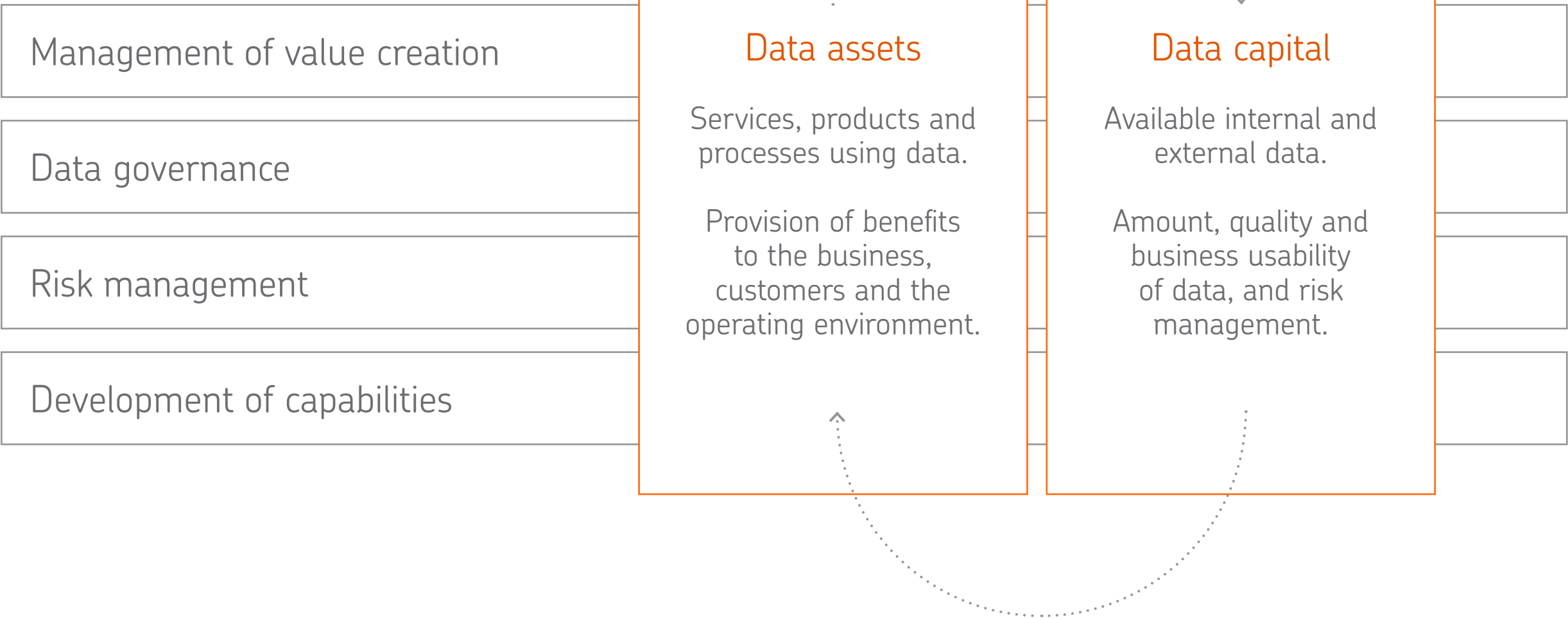


Data strategy and strategic data management

The core of OP Financial Group’s strategic data management comprises data-based value creation for customers, for the Group’s own operations and for the whole operating environment at large. The aim is to provide excellent banking and insurance services by using high-quality data capital productively and securely.

OP Financial Group’s data-based value creation is based on the Group’s data balance sheet and the goal-oriented management of the data balance sheet. Data as such has no value for OP Financial Group; instead, its value is always linked to its use in the Group’s operations.

OP Financial Group’s data balance sheet describes proprietary and external data capital available to the



Data balance sheet describes data as a commodity used for creating added value, and as valuable capital that provides return potential.

various Group functions as well as value-creating data products, services and processes. Data balance sheet management comprises value creation for the business and for customers, data governance, risk management and the development of capabilities.

OP Financial Group’s ICT strategy guides value creation, data governance and the management and development of capabilities on both sides of the data balance sheet. The principles of responsibility

and ethics are incorporated in all of these areas. The Ethical principles for financial intelligence guide the use of artificial intelligence.

Data balance sheet describes data as a whole at OP Financial Group

OP Financial Group’s data balance sheet provides an overall view of data and the use of data, and supports strategic data management in line with the



The value of data capital is based on the quality and usability of data, efficient risk management and, ultimately, its value creation potential.

Group’s strategy. The data balance sheet combines data capital, which comprises the management of data quantity, quality and life cycle, and data assets, which comprises the use of data to create value in OP Financial Group’s services, products and processes.

Data capital – the basis for value creation

OP Financial Group’s data capital comprises data in the possession of and available to the Group, which serves as the starting point for value creation. Data capital includes both data in the possession of OP Financial Group and data acquired from external suppliers.

The value of data capital is based on the quality and usability of data, efficient risk management and, ultimately, its value creation potential. The more usable, faultless, business-connected data OP Financial Group has in its data warehouses, and the higher its quality and degree of refinement from the viewpoint of value creation, the more valuable its data capital.

Data governance is a key process of data capital management. Data governance focuses on the processes of data life cycle, data quality, data warehousing, data usability and data risk management. The aim is to safeguard that the quality, availability and reliability of OP Financial Group’s data assets, i.e. the Group’s digital services, are as high as possible from the viewpoint of the Group’s business and customers.

Data assets describe the use of data capital

Data assets comprise digital services, products and processes that are key to value creation at OP Financial Group. Data assets provide value to the Group’s operations, customers and, ultimately, to the operating environment in the form of externalities (external benefits).

The provision of customer benefit is a key element of the value of data assets. Customer benefit is based on the benefit experienced by the customer while using the service. This includes functional, financial and, increasingly, emotional benefits. Meanwhile, OP Financial Group’s business benefit may include the use of data to generate entirely new revenue, increase the sale and profitability of existing products and services, decrease costs, apply advanced risk management and create safety and security.

The value created by data assets is increased by the high quality of data capital as well as capabilities in

development, analytics, business and customer insight, the use of financial intelligence, improved risk management and decision-making, new value-added services, service design based on customer insight, customer experience creation and marketing.

Managing the balance of the data balance sheet

Similarly to a financial balance sheet, the data balance sheet must present a balance between data capital and data assets. In a data-intensive business, an imbalance would result in valuable data capital’s low yield or unreasonably high risks in data utilisation. When in a balance, data capital and data assets contribute to value creation and increasing the value of assets in a reciprocal and balanced way. OP Financial Group manages the balance of its data balance sheet by safeguarding both the high quality of its data capital and the added value created by its digital services to the Group, its customers and the operating environment.

A well-balanced data balance sheet is also supported by comprehensive risk management processes through which OP Financial Group identifies risks involved in its data capital and data assets, and manages them effectively. Key risks involved in the data balance sheet include risks related to the quality and usability of data, risks related to technology, cyber security and data protection, and business risks.

Data capital

OP Financial Group's data balance sheet 2020

OP Financial Group's ICT strategy

Digitalisation has significantly transformed operating models and technologies in the financial and insurance sector. OP Financial Group has defined its role as being an active innovator in its sector, with a well-balanced focus on providing the best customer experience, developing innovative services and processes and ensuring efficiency, safety and security.

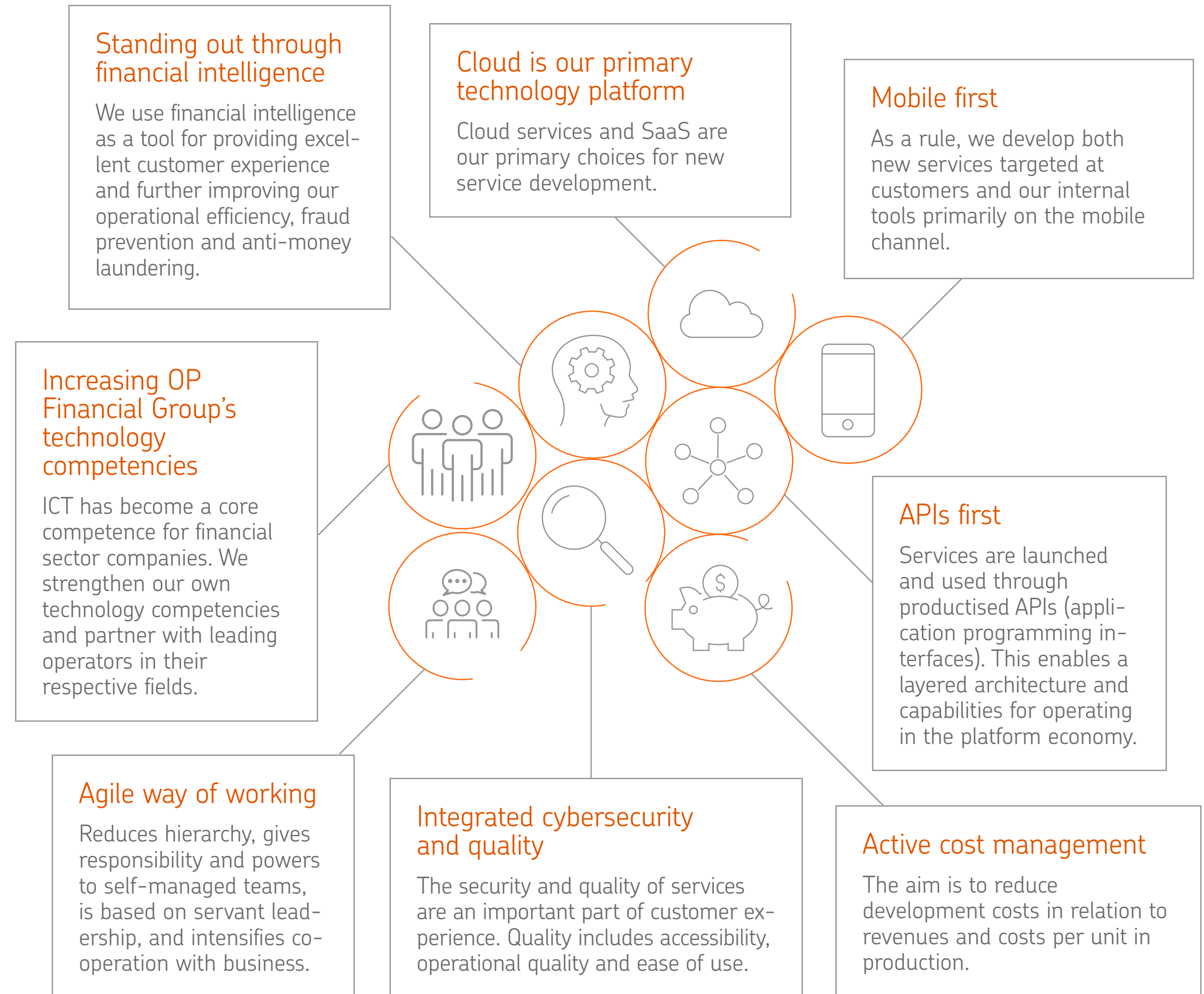
OP Financial Group has set objectives that guide its development and technologies. The purpose of these objectives is to ensure its ability to provide innovative, reliable and secure banking and insurance services in an agile way by using advanced analytics and technology.



OP Financial Group is an active innovator in its sector that uses technology innovatively, reliably and securely.



Juho Malmberg
CIO, Development
and Technologies



Data as part of OP Financial Group's value creation model

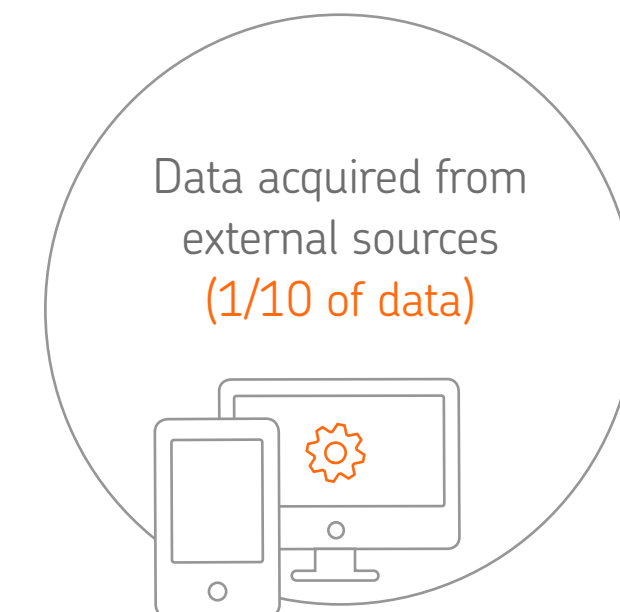
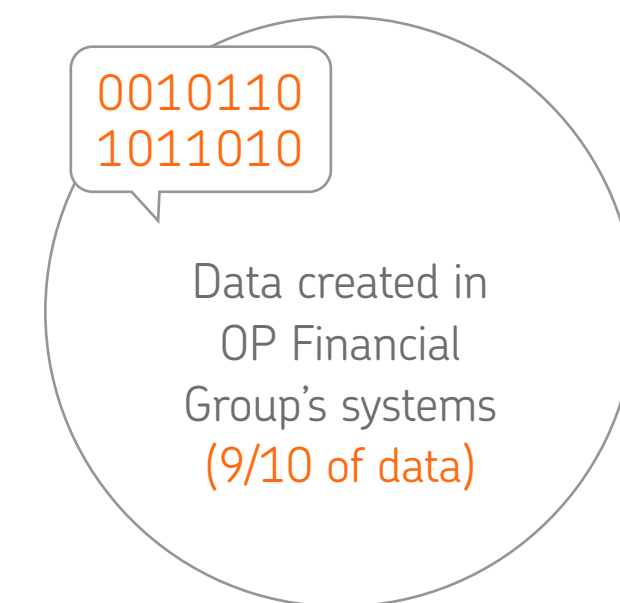
OP Financial Group's value creation model depicts what kinds of resources and capital the Group uses to implement its mission and strategy, and what kinds of outputs and impacts its activities have. Responsible and intelligent use of high-quality data capital, combined with systems and services that support a great customer experience, constitute the essential sources of value creation at OP Financial Group.

Besides data capital, other sources of value creation include a satisfied, motivated and skilled personnel, a solid capital base and economic capital, cooperative values, trust and reputation.

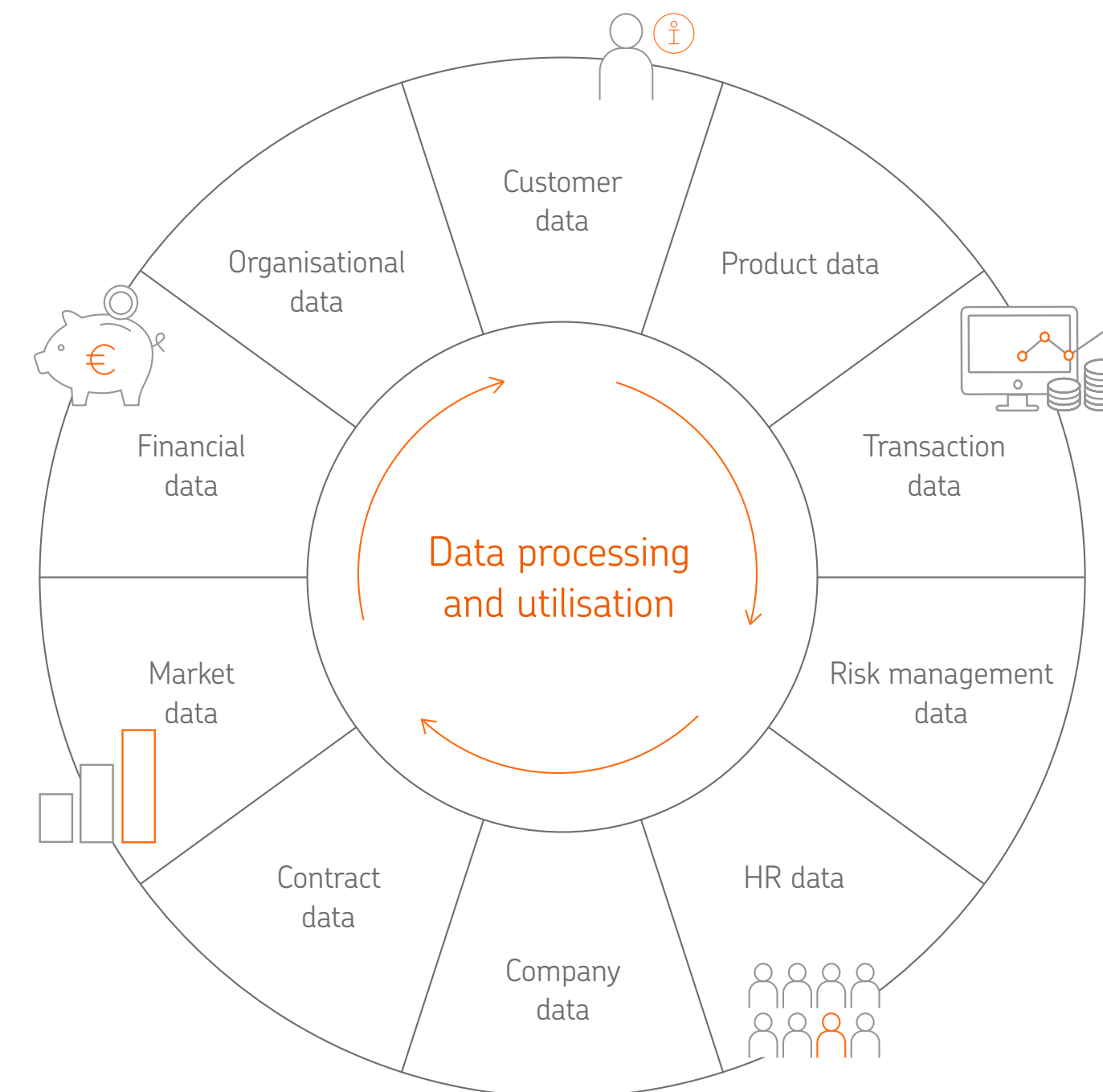
OP Financial Group wants to use its data capital to create new, sustainable and unique value for its customers, the Group and its operating environment.

OP Financial Group's value creation model is described in its entirety in OP Financial Group's Year 2020 Review, which is available at [op-year2020.fi](https://www.op.fi/en/op-year2020.fi).

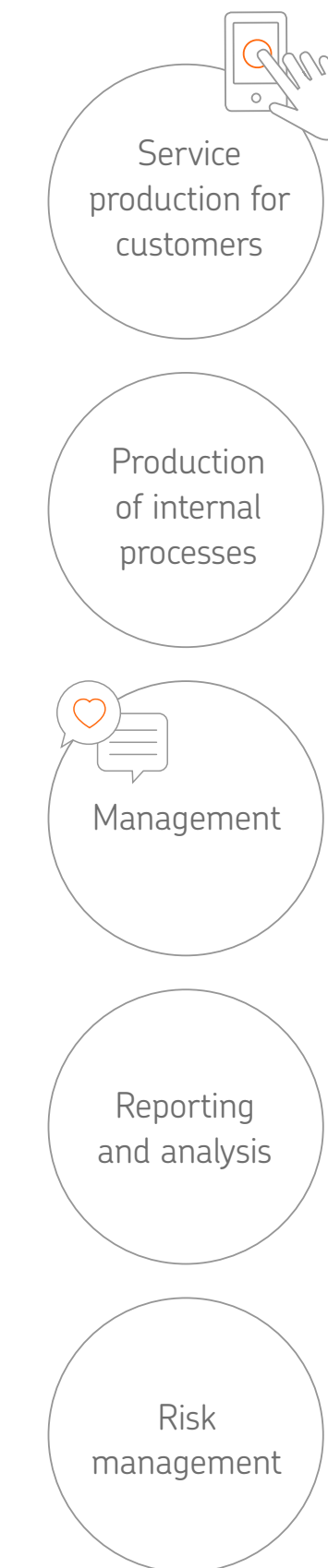
Data capital



Data operations



Performance



Benefits



Case: Advanced analytics supports claims processing

Pohjola Insurance customers annually report more than 800,000 insurance events, or claims, on the basis of which the company pays insurance compensation totalling around one billion euros. Artificial intelligence (AI) supports the various stages of claims processing and decision-making processes efficiently, reliably and quickly.



Mika Kuusela
Head of Claims
Services and
Shared Systems,
Pohjola Insurance

Since 2016, OP Financial Group has developed AI-based claims analytics services to support its service business. The first applications were deployed in 2017. Based on our experience, the use of advanced analytics and machine learning has substantially improved the quality and efficiency of claims processing and risk management.

Tireless and precise artificial intelligence

Advanced analytics applied in claims processing is based on machine learning and the use of extensive teaching data. As raw data, we use data from sources such as claim reports and claims processing to create analytics models for analysing insurance events.

A scoring system applied to insurance events is used efficiently during the claims process, enabling claims handlers to assess areas that require particular attention. If needed, the claims handler requests additional information of the loss or damage from the customer. Since analytics preprocesses the claim, the claims handler can focus on essential details. This shortens the claim processing time significantly. One of the aims has been to teach artificial intelligence to identify the various elements of an insurance claim to ensure that the claim form is completed as exhaustively as possible.

In the future, claims processing will become a real-time process so that the customer completing a loss report or an insurance claim may be immediately requested to provide additional information. This will further speed up process turnaround times.

Benefits for the customer and OP Financial Group

An advanced analysis of insurance events benefits both OP Financial Group and the customer. It considerably increases the speed and efficiency of claims processing without compromising on high process quality. Proactive analytics also enables us to respond to various incidents even before they materialise.

Besides bringing cost savings, advanced analytics also enables us to identify fake or fraudulent insurance claims. This will help us control claims expenditure and avoid large increases in insurance premiums. Through advanced analytics, we can also monitor qualitative elements related to non-life insurance sales and claims processes, which will further improve customer experience.

Data security and data protection

Data security and data protection

OP Financial Group protects the data of its customers, employees, partners and other stakeholders as well as OP Financial Group’s other data capital through comprehensive protection procedures and internal operating models. Data capabilities and financial intelligence are increasingly utilised also in risk management of banking and insurance services and to identify fraud.

Data-related risk management covers the risks of OP Financial Group and customers as comprehensively and proactively as possible. OP continuously identifies and analyses risks and plans and reports the related procedures in accordance with a Group-level data governance model and organisation, taking account of regulatory requirements.

Cyber security plays a key role

Protecting business functions from threats arising from the business environment is central to securing the operations of both OP Financial Group and the entire financial sector. OP Financial Group has confirmed practices for monitoring network environment and analysing security environment. Both own situational knowledge of cyber security and ex-

ternal information sources describing cyber weather are used in this activity.

The importance of capabilities for observing any harmful measures affecting digital processes, products and services is rapidly increasing. OP Financial Group continuously improves on its preparedness and ability to identify risks, operational deviations and new threats at the earliest possible stage. In addition, OP Financial Group is active in financial sector’s collaborative forums and works in close cooperation with the authorities. This serves to strengthen both own and the entire business environment’s capabilities to tackle cyber threats.

The financing and insurance sector is committed to the precautionary measures dictated by the emer-



gency conditions and cooperates with the authorities and other sectors of the economy. As a member of Finance Finland, OP Financial Group promotes cyber security and preparedness cooperation through the security of supply organisation, the National Cyber Security Centre of the Finnish Transport and Communications Agency Traficom, the Cybercrime Centre of the National Bureau of Investigation and the sector’s European agencies.

Theme: Building shock resistant cyber security

The safety of digital business environment has fast become a key area of corporate security. Cyber security in the banking and financing sector does not only mean safeguarding businesses and customers against cyber attacks. It also means safeguarding the operations of the financial sector and the monetary system, both pivotal for a functioning society, against external threats.

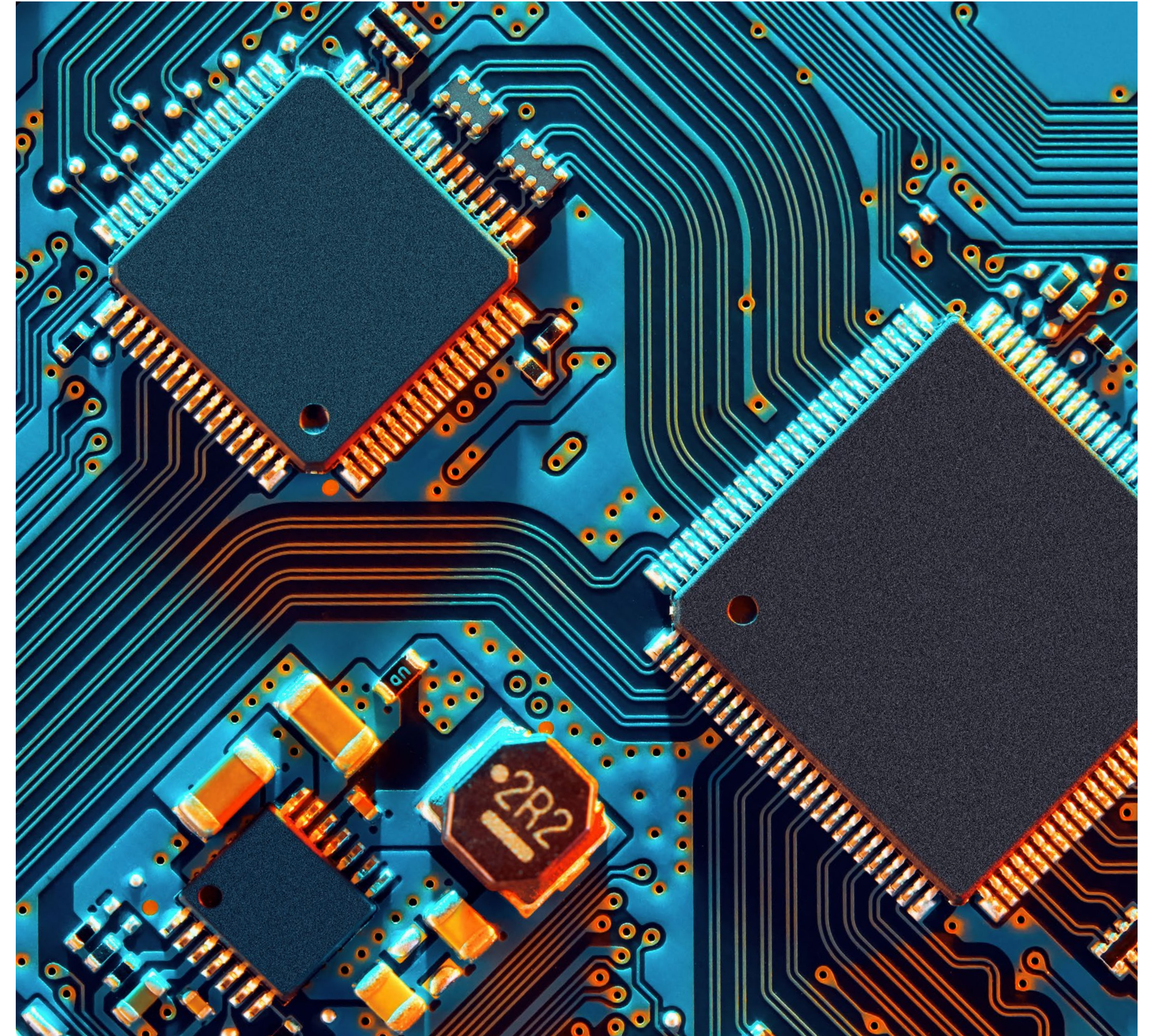
OP Financial Group is part of the Finnish and international digital business environment where new threats arise every moment from the direction of organised crime as well as individual and state actors. In managing cyber security, OP Financial Group complies with, among others, the ICT risk management guidelines and regulations by the European Banking Authority EBA.

Continuous analysis and layered capabilities

OP Financial Group's operating model for cyber threats is based on multi-layered capabilities protecting operations and data as well as on the

active monitoring of cyber security environment. The operating models for preparing for, protecting from and observing threats together with responding to deviations are shared at Group level and applied across the organisation. Each OP Financial Group employee is responsible for day-to-day cyber threat prevention. In 2020, we carried out a comprehensive cyber security communication campaign aimed at the personnel.

The overwhelming majority of cyber attacks targeting OP Financial Group's systems are phishing attempts by email. Each Group employee has the possibility and duty to report suspicious emails immediately on detection. The entire personnel



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We want to train all OP Financial Group employees as skilled and active ensurers of cyber security. The extensive 2020 campaign promoting cyber security awareness is one practical example of this.”

have been trained to prevent various types of data security threats and to immediately report their observations. Thanks to the employees’ rapid response, OP Financial Group has been able to intervene very quickly and effectively against several cyber attacks targeting the Group.

Integrated cyber security

OP Financial Group seeks to build an integrated cyber security operating model for its application and service development. This is required especially by the new agile and self-managed way of working and the constantly accelerating pace of application development.

Cyber security is traditionally ensured through auditing and testing but to an increasing degree also by actively searching for vulnerabilities in the services already in use. Service developers get feedback and suggestions for improvement from the Data Security Centre of Excellence professionals already at the very early stages of development. New code and services are tested extensively throughout the development stage and always prior to a launch or release to production.

Support from white hat hackers and drills

OP Financial Group uses external testers and bug bounty programmes in finding vulnerabilities. A bug bounty programme rewards so-called white hat hackers, or independent data security researchers, who are invited to find data security vulnerabilities in the Group’s services and systems. The finder is rewarded for the found vulnerabilities, the bounty being in proportion to the severity of the finding. Development teams receive information on the found vulnerabilities immediately and fix them.

Also, regular cyber security drills form a part of the Group’s prevention and disruption management capability. OP Financial Group runs internal drills that simulate cyber attacks and their prevention and participates in national drills arranged by the authorities and drills between companies. The most significant drills in 2020 were OP Financial Group’s comprehensive internal cyber security drill that covered several business divisions and the national Taisto20 cyber security drill arranged by the Digital and Population Data Services Agency, which was participated by two independent OP Financial Group teams.



Teemu Ylhäisi
CISO,
Cyber Security

Data protection in OP Financial Group

OP Financial Group updated its personal data protection principles and practices extensively as part of the implementation of the EU General Data Protection Regulation (GDPR). In 2020, the common management and operating models for data protection and data security were applied and further developed to meet the changes in OP Financial Group’s operations and business environment.

OP Financial Group has defined at Group level the operating models and responsibilities for the implementation, regulatory compliance, supervision, deviation management and reporting of data protection. During the course of the year, the Group-level management model was improved to better serve business divisions. The centralised service model provides business divisions with key control models and practical tools for including data protection and data security comprehensively in the development, production, marketing and service processes of the business. The work related to data protection was integrated as part of OP Financial Group’s new agile and self-managed method.

Other development projects completed during the year included bringing the management of private customers’ consents and objections from local to Group level and the modified cookie practices adopted at op.fi in May. By the end of the year, the new cookie practices had been received positively, as only 17% of logged-in users were limiting the use of cookies to necessary cookies only.

Data protection organisation

Data protection activities are coordinated by OP Financial Group’s Data Protection Centre of Excellence. In 2020, good experiences were gained about the impact of data protection roles extended to the business level. Security and Privacy Specialists and Compliance Engineers who are responsible for day-to-day data protection and data security work in tribes organised according to the agile method. This method has significantly enhanced the prevention of risks and threats at the early stage.

OP Financial Group has a strong data protection organisation that covers all operations and companies,



Hanna Lankinen
Manager,
Data Protection Affairs

” Discussion on data protection often centres around duties and regulations. It is as least as important to consider how significant a trust and risk management service it is to internal and external customers.

including those in the Baltic countries. The Group has five Data Protection Officers required by law, three of whom work in the Baltic businesses. Data protection specialists work at OP Financial Group, each personal data file has a person in charge of it and individual banks have contact persons for data protection matters. In addition, OP’s Customer Service has a

separate team that handles customers’ requests and questions related to personal data processing.

Personnel’s training and data protection competence

Data Protection and Data Security Centres of Excellence provide tailored training taking account of work duties and roles at OP Financial Group. Employees who have undergone special training in data protection and data security work across all Group functions. Data protection is also included in every OP Financial Group employee’s new employee orientation programme and basic training. In 2020, the online training course on data protection was modified so that it must be taken annually.

Protection of customer data and the rights of data subjects

OP Financial Group takes the protection of its customers’ data and data security seriously. Our operations meet local regulatory requirements in all countries that we operate in. We ensure the confidentiality, correctness and usability of personal data through careful data processing and by applying several protection methods that complement each other.

Personal data is protected with appropriate technical and organisational safeguards. Such methods include proactive and reactive risk management and the use of firewalls, encryption techniques, secure data centres and access management and safety systems. We also make use of security planning, grant and supervise user rights in a controlled manner, ensure the competence of personnel who process personal data and choose our subcontractors carefully.

OP Financial Group stores data necessary for the customer relationship at least throughout the customer relationship, after which the retention period depends on the type and use of data. OP complies with statutory obligations concerning the storage of data.

Open and transparent information on personal data processing at OP Financial Group is available to customers in the data protection section of the op.fi website. This includes more detailed information on sources from which OP Financial Group gets, and to which it regularly discloses, personal data.

OP Financial Group’s customers also have the right to check their personal details, demand correction of inaccurate or incomplete information, and demand the deletion of unnecessary or out-of-date data.

Comprehensive information on these rights is available at www.op.fi/dataprotection.

Data protection deviations

For a long time, OP Financial Group has had efficient operating models in place that enable responding immediately to personal data breaches referred to in law and other data security deviations. Every data security breach detected at OP Financial Group is processed centrally. At the same time, the necessity of reporting a breach to the authorities and the targeted data subjects is assessed.

OP Financial Group received 20 substantiated customer complaints concerning the processing of personal data or breaches of customer privacy in 2020. The total number of complaints was calculated by counting only one complaint for each case where several complaints were filed concerning a single event (for example, a mailing error).

In 2020, OP Financial Group’s internal controls identified a total of 916 cases that can be classified as personal data breaches under the GDPR. This figure also includes, for example, breaches attributable to human error that are unlikely to compromise the rights and freedoms of natural persons.



OP Financial Group’s comprehensive operating models for data protection and data protection roles are an everyday part of our business and the agile way of working. The Group-level big picture is led and managed by the Data Protection Centre of Excellence."

Hannu Järvinen
OP Financial Group’s Data Protection Officer

Risk management

The risks related to OP Financial Group’s data are managed according to a Group-level operating model. The Group has separate and independent Compliance, Risk Management and Internal Audit functions that support other functions and their activities by providing independent supervision and ensuring effective supervision in accordance with risk management’s three lines of defence.

Risk management related to data capital

Risk management related to data capital spans the entire lifecycle of data and addresses risks associated with data acquisition, processing, storing and disposal. These risks may be divided into system, process and property risks, mainly on the basis of the technical quality and governance of data, management of the regulatory environment and the level of data security. These risks increase if the data is of poor quality or scattered, contradictory or obsolete. As data-related regulation is becoming more complicated and requirements are increasing, the importance of so-called compliance risk management becomes emphasised.

Other identified risk factors include operational data security threats, such as data system break-ins,

data leakage and other unauthorised use of data. Other factors increasing risk include low usability, performance or reliability of systems and services. Data protection management models have been modified so that they function together with risk management related to data capital.

Risks affecting data assets, services and customers

Risks affecting customers are related to customers’ personal data security, identity theft, and hoax and phishing messages. OP Financial Group’s website provides instructions for ensuring secure transactions for private and corporate customers.

OP Financial Group informs its customers in a clear manner about its contact channels and the principles pertaining to the Group contacting them. Additionally, OP Financial Group provides guidance for customers who suspect that they have fallen victim to fraud.

OP Financial Group monitors external data security threats that may affect customers and warns them regularly on its website and mobile application. In recent years, the number of these alerts has remained high, and the range of threats has continuously in-



creased. Thanks to these alerts and the improvement of customers’ general data security skills, materialisation of threats is rare.

Before the Group launches any products or services or adopts new business models or systems, it assesses their risks using procedures as laid down by the central cooperative’s Risk Management. If the planned processing of personal data so requires, OP Financial Group also performs a data protection impact assessment required by law. OP Financial Group only provides its customers with products and applies business models that have been approved at Group level.

Internal control

Managing compliance risks forms part of internal control and good corporate governance and, as such, forms an integral part of business management and corporate culture. Compliance operations and resources related to data protection, data security and data governance were further strengthened in 2020.

OP Financial Group has increased control and internal auditing and further sharpened the focus of actions on the basis of risk assessments. The implementation of financial intelligence has further increased automated control and the number of control events.

Key areas of development include anti-money laundering and anti-corruption. OP Financial Group has significantly increased the scope and efficiency of

control. In addition to inquiries, it uses automated control to an increasing degree. Instead of random sampling and observations, control has been extended to cover considerably larger transaction volumes. The purpose is to prevent both criminal activities affecting customers and possible criminal activities committed by customers. Customers are actively warned of any impending threats targeting them.

Guidelines, advice and support concerning compliance within OP Financial Group are the responsibility of the central cooperative's Compliance organisation that is independent of business lines/divisions. Responsibility for local regulatory compliance and its supervision within OP Financial Group entities rests with senior and executive management and all supervisors and managers.



Data governance



Data governance – at the source of value creation

Active and conscientious data governance ensures that OP Financial Group’s data capital is of the highest possible quality and can be utilised in business and internal processes. High-quality data is a key requirement for data-centric value creation.

The purpose is to make data quality management an increasingly integral part of all OP Financial Group business operations. The leading theme of 2020 was quality assurance of data related to credit risk management.

Data governance framework

In 2020, OP Financial Group began the updating of data quality and data governance frameworks. The aim of the update is to integrate the frameworks more concretely into daily work and to modernise practices to support the needs of the new agile method and self-managed teams. As each OP Financial Group employee deals with data on a daily basis, data governance must be applied across the entire OP Financial Group. Our shared data governance principles and processes ensure that we can provide OP Financial Group’s customers with ser-

vices of the highest possible quality, usefulness and safety

We develop our data governance within the following three main themes: a) data quality, b) availability and usability of data, and c) confidentiality and privacy of data. OP Financial Group supports its data governance, data warehousing and information architecture with strengthened structures and operating models that enable us to maintain and increase the quality and business usability of our data capital.

A large number of special requirements are placed on data governance and data processing due to regulation in the financial sector. OP Financial Group ensures every moment that we process and use data in a shared and consistent manner in line with the Group’s core values and the regulations

Elements of data governance



that govern our operations. OP Financial Group ensures the compliance of different areas of data governance in relation to regulation and recommendations and reports to the supervisory authorities regarding these areas.

Data Quality Engine to support credit risk management

Through the implementation of new operating models and systems related to data quality, we seek to promote comprehensive quality thinking and continuously improve the value of our data capital. The most significant development project in 2020 was the strengthening of data governance relating to credit risk management, especially the improvement of quality of data and data flows.

OP Financial Group developed the rule-based Data Quality Engine in 2020. At the initial stage, it will focus on data capital and data flows that are central to value creation and risk management. These encompass hundreds of attributes the data of which are validated using dozens of different quality rules.

At first, rule-based quality monitoring will control the quality of data related to credit risk models,

among others. In future, rule-based quality monitoring will be extended to all key data flows and related quality rules. Rule-based quality monitoring of data is also supported by data standards defined in OP Financial Group.

Implementation of new data governance model enters the home stretch

The implementation of OP Financial Group’s renewed data governance model was continued in 2020. The key reforms include the transfer of data ownership to the various business lines, the data quality correction process, the gradual harmonisation and centralisation of customer data from local to Group level, and the harmonisation of terminology.

Following the new data governance model, the ownership of the various elements of OP Financial Group’s data capital has been transferred to the various businesses. Previously, data was owned by functions that were responsible for each data warehouse. The new way of thinking and implementing data ownership in business organisations has rapidly made OP Financial Group’s data governance more customer-driven and has integrated it in daily operations.

OP Financial Group’s data governance model includes two key roles: data owner and data steward.



Risto Koistinen
Tribe Lead,
Information
Management

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In 2020, we focused particularly on developing data governance related to credit risk management. The most significant project was the implementation of the new rule-based Data Quality Engine. Data quality has a major impact on OP Financial Group’s credit risk management.

Data owners are the business’s best experts in the use of data in their area of responsibility. They make sure that data is developed and used in accordance with agreed policy decisions, rules and legislation, and that the quality of data is suitable for its intended purpose. Data owners cooperate with data stewards, who have detailed knowledge about the characteristics of data included in systems, and who make sure that the data is in good order.

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We have made the increased utilisation of data in OP Financial Group’s operations possible. The use of data is a positive circle; the more data is used, the more its quality can be improved, which in turn encourages further use.”

Pasi Ruhanen
Tribe Lead,
Data Warehousing

Data warehousing centralised

Based on its ICT policy priorities, OP Financial Group data governance is based on centralised data warehousing and governance. In 2020, we continued the transfer from decentralised data warehouses of different age to centralised data warehouses, both on the cloud platform and in own newly upgraded data centres.

Data warehousing will be centralised at Group level. At first, this will cover banking and insurance operations in Finland and the Baltics. The data warehousing operating model has been developed towards an agile, more collaboration-centred model, which has yielded the first notable improvements in the speed and quality of development workflows.

The centralisation of data warehousing and data governance progressed as planned in 2020. This has involved prioritisation on the basis of the data warehouses’ lifecycles and OP’s business needs. The older warehouses have been transferred onto platforms featuring the new architecture. Next, the transfer will proceed to systems that contain larger amounts of data.

Data governance and management model

OP Financial Group ensures that it applies consistent procedures in all decision-making related to data by implementing roles and bodies specified in the data governance model. The model describes the various decision-making parties and roles, and responsibilities linked to those roles, in the use and processing of data.

The governance model also includes parties responsible for data quality as well as support organisations that modify processes, applications, systems and solutions. Furthermore, the governance model defines the roles and responsibilities of data processors. The data governance organisation, including the related roles, that is based on the agile way of working in self-managed teams began its work in 2019.

OP Financial Group’s data governance model

Governance model and roles

Decision-making focus	Decision-making forums
Strategic – OP Financial Group level	Data Management Team
Tactical – Data area specific level	Data area specific working group Customer/Product
Operational – Business- or sector-specific level	Data governance processes and development areas



Competence

Competence – building tomorrow’s data capabilities

The fast-evolving forms of utilisation of data and digitalisation and new technologies constantly create new opportunities to learn something new. At the same time, as the business environment becomes more complicated and regulation increases, higher demands are placed on skill requirements.

OP Financial Group aspires to be the forerunner in new data capabilities and to play a comprehensive role in ensuring the security and reliability of financial business. In particular, the importance of capabilities related to business continuity management, cyber security and data protection increased substantially in 2020. Correspondingly, the development of new services and the growing significance of the agile method have speeded up the development of new competencies in a self-managed way.

Data competence as part of each employee’s role

Management with data and data governance are among OP Financial Group’s key capabilities. Extensive basic skills combined with role-based in-depth expertise



Anna-Mari Valkila
SVP HR, Development and Technologies and centres of excellence

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In the future, OP Financial Group’s ability to meet customer expectations, competition from new players in the financial sector and changes in the regulatory environment will be increasingly based on capabilities linked to data and technology.”

ensure that OP Financial Group's capabilities are enhanced comprehensively. Based on individual roles and motivation, we develop the competencies of each Group employee through on-the-job training, learning from colleagues, instruction via internal and external networks or training events, and through self-study.

Digital skills as part of each employee's basic skills

From early on, OP Financial Group has developed capabilities related to digitalisation. Continuous competence development is guided by the digital skills framework defined in 2017 that undergoes regular updating. It specifies the key areas of digital skills and their definitions at basic and expert levels.

Numerous experts specialised in data and its utilisation work in different OP Financial Group functions. The skills related to the management, utilisation and analysis of data and quality and risk management are emphasised in their role requirements. In addition to role-based expertise, each employee has good basic skills in data security and the use of data in their own work.

Building a new-era capability profile

A rapidly changing operating environment poses challenges for strategic resource planning, too. In its strategic planning, OP Financial Group anticipates the financial sector's future scenarios from the viewpoint of competition, economy, customer, technology and regulation.

Case: AI literacy a new basic skill

The increasing use of AI-based applications across all sectors of the corporate world and society also increases competence requirements related to AI. The commonplace nature of AI is reflected at OP Financial Group too: so far, more than 1,000 professionals in development and business have received training in the management and use of AI through one-day workshops

In 2020, the Understanding AI and Introduction to AI online courses were made available to the entire personnel. They explore the general principles of AI, its impact on society, threats and opportunities and its application in OP Financial Group. Additionally, the courses take a look at customers' expectations and questions about AI.

General knowledge in AI will further improve OP Financial Group's ability to use AI in various fields, talk about it with a customer in a common language and in that way promote an understanding of it among customers, too. Over the years, OP Financial Group has gained positive experiences with training provided to the whole personnel under themes such as service design, mobility and data protection.

In the future, OP Financial Group’s ability to meet customer expectations, competition from new players in the financial sector and changes in the regulatory environment will be increasingly based on capabilities linked to data and technology. At Group level, capabilities are primarily developed in the Development & Technologies function.

OP Financial Group has analysed its existing capabilities in relation to its future capability needs and has designed paths to building the required capabilities. The capabilities highlighted in the updated resource plan by Development & Technologies include the active utilisation of AI opportunities, cloud technology, interfaces, agile DevOps methods, cyber security and data-driven best customer experience.

We attempt to meet these capability needs by developing existing personnel’s competencies, recruiting new professionals and using external experts when needed.

Over

600

OP Financial Group specialists in the central cooperative already work in specialised data development and refinement roles. This represents 8% of central cooperative’s entire personnel.

Case: OP Software Academy

The professional expertise of the specialists in the Development & Technologies function is a key component in the entire Group’s data capability. OP Software Academy offers versatile opportunities for developing own expertise.

The learning platform OP Software Academy launched in 2019 by the Development & Technologies function is an example of continuous, independent self-improvement. Its learning model strengthens and refines specialists’ competence profiles to meet the requirements of the agile and self-managed way of working. The central idea is combining broad overall understanding and basic skills with the in-depth expertise, or competence, of one’s own role and duties.

The training offering comprises six relevant development and technology competences that are: cloud services, APIs, mobile, data, DevOps and Security. The courses are divided into three levels based on whether basic skills, professional application skills or advanced top specialist skills are sought. The primary learning method on the courses for advanced top specialists is applied research, carried out in a small group, relating to a competence having to do with one of OP Financial Group’s strategic areas.

The best sides of online and face-to-face teaching are tapped into in the studies. Self-study online modules are combined with peer and mentoring discussions during a course. The volunteer mentors of each competence area play a key role. They improve on the courses and support course takers during a course.

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Nearly 430 specialists and 27 volunteer mentors from the Development & Technologies function have participated in the trainings arranged during the first terms.

Examples of the most common roles linked to data utilisation and competence development:

<div>Chapter, Chapter Lead</div> <div>A group of people focused on a particular area of expertise whose members work in different tribes and teams. The group includes a coach focused on competence development, the Chapter Lead.</div>	<div>Data Engineer</div> <div>Plans and implements technical solutions that contain elements such as data modelling and integration, data warehousing and cloud-based data pipelines.</div> <div>The number of new recruits grew markedly in 2020.</div>	<div>Data Scientist</div> <div>Solves complicated business problems by building solutions based on data and machine learning.</div> <div>The number of new recruits grew in 2020.</div>	<div>Developer</div> <div>Responsible for the planning and coding of a software product.</div> <div>The number of new recruits grew in 2020.</div>	<div>Competence Lead</div> <div>Responsible for Group-level development of specific area of expertise, or competence. Supports coaches in their role.</div>
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Agile method strengthens competencies

The demand for resources linked to data governance and utilisation has increased exponentially. In addition to coders, developers and technology professionals, OP Financial Group employs an increasing number of Data Scientists (analysis-driven refinement of data), Data Engineers (data process development) and Data Analysts (data analysis for business needs).

The specialists of the Development & Technologies function bring their expertise to many teams across the different OP Financial Group functions. Top specialists form their own groups, or Chapters, that cross team and function boundaries. Within the scope of these Chapters, they can together further develop their own competencies under the direction of the Chapter Lead. Chapter Leads are supported by Competence Leads representing different competencies.

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The number of specialists working in data roles grew by 26% in 2020.

Key figures



Service channels and digital services

OP Financial Group’s service channels	2019	2020	Change
Digital channels NPS	53	54	1
Online and mobile services (millions of logins per month, on average)			
Op.fi	8.5	5.7	-33%
OP-mobile	25.2	33.6	34%
OP Business mobile	0.8	1.3	50%
Pivo mobile app (visits)	4.4	3.6	-17%
Services Agreements (1,000)			
Private customers	1,937	1,980	2%
Branches and telephone services			
Bank branches	352	342	-3%
Private Banking branches	42	48	+6
Customer contacts in telephone service	4,720,914	4,637,865	-2%
Social media			
Followers on Facebook (OP Financial Group and OP cooperative banks)	376,979	442,004	17%
Followers on Twitter	42,515	46,951	10%
Followers on LinkedIn	43,355	60,188	39%
Followers on Instagram	14,953	18,211	22%
Followers on Youtube	4,140	6,090	47%

Customers (millions)	2019	2020
Owner-customers	2.0	2.0
Retail Banking customers	3.3	3.3
Corporate Banking customers	0.3	0.3
Joint banking and insurance customers	1.2	1.3

Digital services’ key figures and ratios (1,000, unless otherwise indicated)	2019	2020	Change
Home loan applications processed by the Credit Engine			
Total applications processed automatically	26	57	121%
Positive decisions made automatically	9	20	115%
Number of reports sent to authorities per month	20	20	-
Ratios of the banking services chatbot Opotti			
Message resolution rate	70%	80%	+10% pps
Fully automated chats	40%	44%	+4% pps
Customers giving positive feedback	67%	72%	+5% pps
Fully automated chats of the insurance services chatbot Viljo	50%	50%	-
Number of external APIs in production (pcs)		48	-
Data transferred through external APIs, terabytes		563	-
Number of users registered for Siirto payments	666	899	35%

For security reasons, OP doesn’t publicly report key figures related to anti-fraud and anti-money laundering.

Data capital

Data capital (1,000, unless otherwise indicated)	2019	2020	Change
Data in analytical databases, terabytes	520	776	49%
Number of log events collected by centralised log management per month, (billions)*	97	165	70%
Number of electronic documents	520,000	611,000	18%
Digitalisation of agreements in banking services		45%	-
Customer details maintained through the My Profile service	250	947	279%

Capabilities

Data capabilities and competence	2019	2020	Change
Employees working in data development and refinement tasks in OP Financial Group’s central cooperative	480	606	26%
... share of the central cooperative’s personnel	7%	8%	1% pps
Employees trained in the use and management of AI	500	636	27%
Training courses organised by OP SW Academy		430	-

Data protection and information security

Data protection and internal control	2019	2020	Change
Number of customer requests for access to personal data processed by financing and insurance operations	362	453	25%
Cookie consents, op.fi and OP-mobile		1,985,435	-
Customer complaints related to personal data processing or privacy protection	11	20	82%
Cases categorised as personal data breach	750	916	22%

For security reasons, OP doesn’t publicly report key figures related to anti-fraud and anti-money laundering.
* The calculation principle of the key figure has changed after the 2019 report.



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