

## Improving the customer experience

To keep pace with customers' evolving needs and continue delivering on our Customer Promise we have to be innovative and move fast to turn ideas into products and services that create differentiating customer experiences. This requires an innovative culture and a willingness to connect and cooperate with others. We also have to be operationally excellent, efficient and comply with regulations.

ING's customers are already digital and increasingly mobile. Across ING, digital channels now account for 98 percent of contact with retail customers and mobile interactions increased by more than 50 percent during 2016.

Digital customers have different expectations, driven by their various online experiences. No matter where they are in the world, people want seamless interaction across multiple devices and channels. They want products and services – not just financial ones – that are simple, save time and can be accessed when and where they need them.

Meeting these expectations requires simple, standardised processes and systems and an IT architecture that is integrated, and globally scalable. Our systems and platforms should be able to plug into others, both inside the bank and within third-party ecosystems.

In a world that is increasingly digital and where financial products and services are increasingly commoditised, we strive for a differentiating customer experience that will set us apart.

### Converge

ING has a head start. We are already a digital leader in banking and we are pan-European. We have a unique opportunity now to converge our capabilities into one borderless digital financial platform: the go-to place for all our customers' financial needs and an open ecosystem offering our products and services along with third-party offerings.

We intend to invest EUR 800 million in our digital transformation to deliver a consistent, first-class experience for our customers everywhere. To drive the execution of this strategic priority, COO Roel Louwhoff was appointed as Chief Transformation Officer in 2016. We also set up a robust transformation governance model to ensure we achieve our intermediate goals for 2020.

We are laying a strong foundation on which to converge ING onto a single platform for financial services. This encompasses global process management, global data

management, modular architecture, a cloud-based infrastructure and operational efficiency through bank-wide shared services.

To ensure customers everywhere have the same experience and level of service we are standardising processes and re-using best practices across the business to standardise our systems and platforms. In Germany, we are developing the Welcome banking platform, which will be open to non-ING customers and third parties; the Model Bank to be rolled out in Austria, the Czech Republic, France, Italy, Poland and Spain, will be a standardised platform for six million users; and through the Wholesale TOM (target operating model) we are creating a superior client experience for Wholesale Banking customers around the globe, based on simplified systems and uniform products and services. In the Netherlands and Belgium we also intend to move to an integrated banking platform with a harmonised business model and shared operating model as part of our Orange Bridge programme.

### Technology

In 2016, we started developing TouchPoint Architecture (TPA), our own modular architecture that will enable our strategy. With TPA we can build generic components that can be used across businesses and countries to create a consistent customer experience. This unlocks our global scalability, speeds up innovation so we can bring new experiences to more customers faster, and makes it easier to integrate our systems with those of third parties.

The ING private cloud is another enabler. It went live in 2016, starting in the Netherlands, and provides a single global platform on which we can standardise and automate our infrastructure. Migrating business applications onto the private cloud further simplifies our IT landscape and optimises the use of our IT infrastructure to speed up the pace of innovation and improve the customer experience.

### Reliability and stability

Excellent delivery requires our services to be available to customers when and where they need them. Some countries' legacy IT and operational systems obstruct this; here, remedial actions have been taken. For example, in the Netherlands and Belgium the Focused Reliability Initiative was launched in 2015 to find permanent solutions for issues that impacted the availability of online channels (internet, mobile) and payments processing. We continued the programme in 2016 to further improve the reliability of our financial services to customers. As a result, ING's channel availability towards our customers improved to 99.75 percent on average in the Netherlands, Belgium and Wholesale Banking.

### Operational excellence

Standardising and simplifying our systems, processes and ways of working are key to becoming a leaner, more customer-responsive organisation that delivers a consistent customer experience everywhere. Operational excellence also allows us to respond faster and more

efficiently to regulatory demands and new technology standards in the rapidly evolving digital environment.

To step up operational excellence we launched a global programme to improve 11 end-to-end bank-wide processes by standardising them based on the best practices from across the organisation. This will lead to fewer errors and help us work faster, more effectively and more efficiently. For example, getting a consumer loan varies from 10 minutes in one ING country to 10 days in another. On average it takes 3-4 days. ING aims to halve this to 1-2 days in all countries.

In addition to consumer loans, the identified processes include contact centre operations, opening a current account, getting a mortgage, small business loans and Wholesale Banking lending.

We also see enormous potential in using robotics and artificial intelligence to improve accuracy, cycle time and productivity. Creating systems that can autonomously learn to perceive the world will allow us to address key challenges and provide personal assistance on a large scale.

### Shared services

We took steps in 2016 to improve the operational excellence of our shared services and align bank-wide support functions such as Procurement, Human Resources, Finance and Risk Management. We are looking to further centralise operational and IT tasks by bringing people together to create larger, more specialised skill pools in single locations. This could mean transferring some activities to shared service centres, for example in Bratislava or Bucharest, or outsourcing others to external providers as part of our strategy to converge to one digital banking platform.

This is not new for ING. We have already successfully standardised and streamlined some of our Wholesale Banking and IT operations and have Centres of Excellence in several locations. We are convinced this will allow us to respond faster to new client needs, improve our IT capabilities and boost the efficiency of our digital-first model, helping it to evolve into a true competitive advantage.

### Data management

Another area we are standardising is global data management. As a bank we collect and store vast amounts of data, such as customer profiles, payment transactions, complaints and more. This information can give us meaningful insights to better understand our customers and provide them with more personalised products or services. At the same time, it gives customers a complete personal financial picture that empowers them to predict the financial impact of their decisions. It also improves the accuracy of our internal and external reporting.

We understand the sensitivities around data collection and privacy and comply with legal and regulatory requirements. We are transparent about how we handle customer data and seek customer consent when using data to personalise our offering. (see Data privacy and security below).

However, raw data in itself has little value. It has to be sorted, harmonised and put into context to be meaningful for ING and our customers. Global data management is therefore a key priority to ensure the quality, integrity, usability and security of our data.

In 2016, we started using ING Esperanto, a set of common terms that harmonises our data definitions. We also implemented data lakes, cloud-based repositories for storing and accessing vast amounts of data by authorised ING employees. We aim for 95 percent of our core data to be in the Esperanto language by the end of 2017.

### Data privacy and security

Earning and keeping the trust of our customers is of paramount importance. Customers trust us to keep their – and our own – data safe and to offer reliable products and services. We comply with our legal obligations to protect customer data, which can differ from country to country.

We are transparent about what we do with the personal data of customers, suppliers and business partners and only process personal data for specific business purposes. Our approach can be summarised as: the right people use the right data for the right purpose. We consider the wishes of our customers and corporate clients, which is critical whenever data is processed for services and offers. In cases where we rely on consent the customer can withdraw this consent at any time.

All business units have adopted the global data protection policy (GDPP) that qualifies as binding corporate rules. In each business unit and at bank level, a data protection executive is responsible for maintaining GDPP compliance and compliance with local privacy laws. Local data protection officers provide expertise and support. The GDPP is currently being revised to comply with the new EU General Data Protection Regulation 2016/679, which must be adhered to by May 2018.

We continuously invest in our security organisation and systems to protect the data of customers. In a world where cyber-attacks are on the rise, both in frequency and intensity, we have created an agile cybercrime resilience control environment designed to predict, protect against, detect, respond and mitigate e-banking fraud, distributed denial of service (DDoS) attacks and targeted attacks.

We maintain strong global alliances with the financial industry, law enforcement authorities, governments and internet service providers to jointly fight cybercrime. ING's responsible disclosure programme encourages ethical hackers to report vulnerabilities they might discover in ING's online services.

## Innovation Bootcamp at ING



ING actively promotes a culture of innovation. At our annual Innovation Bootcamp, employees submit ideas to improve the customer experience and compete for seed funding. Ideas launched commercially in 2016 included Startarium, a starter platform for entrepreneurs, and Direct Lease, a leasing platform for small and medium-sized enterprises.

We take a holistic approach to counter the complex and constant threat of cybercrime by combining prevention with detection and rapid response. We also provide e-banking fraud awareness training for employees and clients which, in addition to maturing controls, has resulted in e-banking fraud damages stabilising at low levels across our organisation.

The advanced analytics capabilities we are developing to better understand and service customers also play a key role in combatting criminal activity. Pattern recognition and advanced algorithms help to predict and detect, and thus prevent, fraudulent activity.

### Creating a culture of innovation

Next to operational excellence we will continue to innovate to remain relevant to customers in a digital world. By being innovative we can turn ideas into products faster and use new technologies, like blockchain and artificial intelligence, to improve our efficiency, make things easier for customers and define future competitive advantage. In future, customers could even interact with smart machines (robots or virtual personal assistants and smart advisors) rather than with impersonal menus and buttons on a phone.

Our approach to innovation is built around making banking easier for customers; stimulating a culture that is open to new ideas; and connecting and cooperating with others to innovate faster.

We use a structured process called PACE to accelerate innovation within ING. In 2016, more than 2,000 employees were trained in the PACE methodology (a combination of the Lean Startup, Agile Scrum and Design thinking methods). We also launched the PACE Accelerator, an intensive 18-week programme that speeds up the time to market by testing ideas for new products and services through experimentation and customer validation. The programme is running in six businesses across the bank.

In early 2017, we will set up a Innovation Council to define and align priorities and measure the bank's innovation progress. It will replace the Innovation Fund Steering Committee. We will also set up Business Unit Innovation Councils for each country and bundle large internal start-up initiatives in a Scale-up Portfolio. This will help speed up ING's transformation into an innovation-enabled organisation offering customers an integrated digital ecosystem beyond traditional banking.

To bring internal ideas to fruition, the Innovation Fund continued in 2016 to finance concepts developed by the business units, particularly when these can be shared and replicated in other countries. It supported 20 initiatives in 2016. These include FM Katana, a data-driven dashboard for bond traders. Since 2014, the fund has financed 29 ideas in total. In addition, the Chief Innovation Office supported initiatives such as Yolt, our UK cross-bank aggregator.

Another way we source ideas is through our annual Innovation Bootcamp. It encourages employees to

come up with innovative ways to improve the customer experience. A total of 1,194 ideas were submitted to the third edition in 2016. The winners receive funding to develop their concepts further. Innovations from previous Bootcamps that were commercially released in 2016 include Startarium, a starter platform for entrepreneurs in Romania, Direct Lease, for small and medium-sized enterprises in Belgium and the Netherlands, and digital safety box Safe & Sound in Germany.

In total, 16 employee innovations have been transferred to the business since 2014. Some are still in development. Six were shelved. One of these is Kid'ING, an app to help teenagers become more money literate. It won the 2015 Innovation Bootcamp but the pilot in Belgium only attracted 250 users. In 2016, we also pulled our instant payments app Twyp (The Way you Pay) from the Dutch market following feedback from users that they preferred their existing mobile banking app. Twyp is still widely used in Spain where the mobile banking apps have less functionality.

The use of advanced analytics to improve the customer experience led to innovations in 2016 such as Kijk Vooruit (Look Ahead), a mobile app showing customers direct debits due up to 35 days in advance. It has 750,000 users in the Netherlands (where 2.5 million people use the banking app). More than 50% rate it favourably.

### Connect and cooperate

We work in an agile way to bring products and services to market quickly and use customer feedback to improve and develop propositions for a better customer experience. We also partner with external financial technology companies – usually start-ups – whose technologies and propositions we can adopt or embed to move even faster. In return, these fintechs benefit from our strong brand, extensive network and large customer base. The ING Innovation Studio links start-ups with internal teams globally to develop ideas into viable products and services.

Our fintech partnerships are spread across several countries and business areas such as instant lending, payments and money management.

At the end of 2016, ING had more than 65 fintech partners, of which we invested in 11. Among these are Zervant, an e-invoicing and money management platform for Belgian SMEs, and Kabbage, an alternative credit scoring method incorporated into our SME lending proposition in Spain. Thirteen partnerships were stopped, mostly after unsuccessful or unsatisfactory proof of concepts.

We are also working closely with 12 start-ups at Fintech Village in Belgium and the ING Innovation Studio in Amsterdam. These are our incubators where we link start-ups with internal teams globally to develop ideas into viable products and services. Products that emerged from the Innovation Studio include Whydonate, an internal portal for employees to donate to charitable causes and CheckMetrix, a 360° dashboard for SMEs that gives retailers insight into their customers' buying behaviour.