DIGITAL TRANSFORMATION



Digitalization is one of the global trends deeply influencing every part of life. Digital transformation is driven by developments in many different areas from the internet of things to cloud technology, from big data to artificial intelligence. As internet access and smart phone usage become far more widespread, customers change their preferences to reach products and services in favor of more simple, useful and time-saving channels which they can access from anywhere, turning away from traditional methods. It is now more important to deliver a customer experience where customized solutions are offered, going a few steps beyond just meeting customer expectations.

Constantly investing in digital platforms to provide unrivaled customer experience, transaction convenience, and pioneering solution suggestions, and to increase the share of digital channels in sales is one of the strategic objectives of Garanti. The Digital Transformation strategy is to deliver a full-fledged banking platform covering various banking transactions and services that are convenient, accessible and customized through all channels. Therefore focus is placed on omnichannel banking which enables customers to perform seamless transactions. Accordingly, the Bank's main concern is to listen to customers' needs and answer them in a prompt manner. The goal is to bring the age of opportunity to everyone, and Garanti is aware of the fact that this process will commence at the branches.

Digital transformation led the banking sector to develop effective risk management tools in many areas including ensuring customer information security and privacy, and managing the increasing cyber threats. While continuously investing in IT systems guaranteeing information security, Garanti takes precautions against all risks that could prevent secure and uninterrupted service, and measures the results within the context of customer satisfaction on digital platforms.

For Garanti, digitalization is a key material topic, as identified by both our internal and external stakeholders. Therefore, technology is an integral part in the decision-making mechanism, which supports process efficiencies and continuously drives the Bank forward. With a single source of data and common understanding, technology is used within Garanti as an enabler for top-down fast decision-making and strong communication. It is reflected in the way we do business, from advanced CRM applications and segmentation, to innovative products and services, and to a paperless banking environment. We want to offer an unrivaled customer experience by constantly investing in digital platforms.

Garanti supports the idea of all individuals benefiting from the opportunities created by digitalization, and develops solutions to enable use of banking services by more people, by focusing on digitalization, we are actively contributing to Sustainable Development Goal 9: Industry, Innovation and Infrastructure.

VALUE DRIVER	INDICATOR	PERFORMANCE	
•	•	2018	2017
CONSTANTLY INVEST IN DIGITAL PLATFORMS SO AS TO PROVIDE UNRIVALED CUSTOMER EXPERIENCE, TRANSACTION CONVENIENCE, AND PIONEERING SOLUTION SUGGESTIONS	Digital banking customers*	7.3 million	5.9 million
	Mobile banking customers*	6.5 million	5.0 million
	Digital transactions in non-cash financial transactions	95.5%	95%
EXPAND OUR DIGITAL CUSTOMER BASE AND INCREASE THE SHARE OF DIGITAL CHANNELS IN OUR SALES	Digital sales (share in total sales)	44%	39%
	Number of cardless transactions via Garanti ATMs	33.7 million	27.6 million
	Amount of Cardless Transactions via Garanti ATMs (TL)	17.9	13.9
TAKING PRECAUTIONS AGAINST ALL RISKS, WHICH COULD PREVENT SECURE AND UNINTERRUPTED SERVICE (E.G. CYBER THREATS) ENSURING INFORMATION SECURITY	Programs organized to raise awareness on customer privacy and information security	13	19
	Hours of cyber security training per Full Time Employee	1.11	0.64
	Employees who attended cyber security trainings	92%	99%

Data breaches regarding customer privacy



^{*} Digital and mobile customer figures are provided for "active customer" definition, which refers to at least one login in the last 3 months. 2017 figures are for Dec'17 active & 2018 figures are for Dec'18.

DIGITALIZATION FOR UNRIVALED CUSTOMER EXPERIENCE

Strictly focused on offering a better experience on digital channels at all times and a follower of omni-channel strategy, Garanti aims to reach the users at the right time with the right message. The outputs from regular usability research conducted in cooperation with universities are used to constantly improve its platforms, thus ensuring sustainability of perfect experience. Customers are approached through the best-fitting channel by the use of smart decision techniques. Technology is utilized to upgrade customer experience. Garanti improves its structure on every possible platform based on its vision of being accessible by customers anywhere they need banking services.

Furthermore Garanti transforms digital channels into an environment where customers can receive financial consultancy. Garanti also contributes to its customers' preparation for the digital future by developing financial tools supporting digital transformation. Garanti aims to maintain its leadership in digital channels by continued monitoring and implementation of new technologies putting mobile channels at the heart of this experience.

The Bank aims to increase customer interaction and dialogue through efficient advertisement, innovatively designed competitions and campaigns on social networks, while using them in a creative and pioneering fashion. The Bank intends to make use of social networks both for promoting its products and services, and also as an active sales platform.

VALUE CREATION THROUGH DIGITALIZATION

Investing in digital channels feeds the sustainable growth model of Garanti. It leads to increased customer satisfaction & loyalty. Branches with above-average digital penetration also enjoy higher operation and service quality and efficiency than others. In addition, product penetration of digital customers is higher than average customers, an evidence of higher cross-sell. Services fees driven by digital channels make up 46% of the non-credit-linked commissions and support the growing fee base. On the other hand, transaction costs on digital channels are lower than branch banking, resulting in higher efficiency. Digitalization also leads to higher profitability. Through digitalization comes sustained growth: branches can

increasingly focus on building relationships, providing advisory, generating sales and acquiring new customers.

The EVP in charge of digital banking responsible for digital channels, customer experience & satisfaction and call center together with the EVP in charge of technology, operations, organization and process development, customer analytics, innovation & product development lead digital transformation within the Bank in collaboration with the senior management team. Furthermore, the Board of Directors closely monitors the progress and the performance.

WHAT WE DID IN 2018

Managing the largest digital customer base in Turkey, Garanti Digital Banking enables 7.3 million digitally active customers to execute any banking transaction anytime, anywhere, with 5,258 Paramatik ATMs, an award-winning Call Center, its Internet Banking that has been leading novelties, and its Mobile Banking platform. While 6.5 million of these customers actively use mobile banking, 5 million customers use only mobile banking. Approximately 365 million transactions are performed through online and mobile banking channels annually. Utilizing digital channels effectively, 95.5% of all non-cash financial transactions go through digital channels with increasing weight in mobile, which reached 267 million in November 2018. Garanti has 19% market share in retail digital banking financial transaction volume. Aiming to offer its customers an instant, convenient and uninterrupted experience, Garanti succeeds in remaining the leader of digital banking year after year.

With the objective of managing brand awareness and corporate reputation on social networks, Garanti is present in social media platforms with more than 40 social media accounts. Aiming to provide direct access to innovative products and services by addressing customers' and followers' needs, Garanti places social media as a digital channel. With over 5 million followers overall and more than 1.7 million followers on Facebook, Garanti is one of the financial institutions with the highest number of followers in Turkey and in Europe.

The creative solutions Garanti produces on social media are groundbreaking in Turkey, and globally. Garanti Bank has been the first bank in the world to receive general-purpose loan applications through a secure form on Facebook. With "GarantiyeSor" (Ask Garanti), which is the first 24/7 social

media customer satisfaction channel in the banking sector in Turkey, the Bank offers an efficient customer satisfaction service. It designs special offers in line with the customers' profiles and needs. On social media platforms, Garanti makes use of creative content and initiatives that support its corporate image and contribute to business results by offering a description of products and services, which are at the same time aligned with the entertaining nature of social networks.

Branches play an important part in digitalizing the customer base. Therefore, an important step was taken for digitalization of the branch network. Branches were vested in an innovative structure on the axis of digitalization, whereby customers will be able to receive a one-stop service as easily and quickly as possible. In this context, 95% of the branch network has already made the transition to the new structure. While mobility increased, the new structure enables service delivery not just out of branches but anywhere. Moreover, as all business processes and operations have been simplified and digitalized, the quality and speed of the service rendered have also increased. The figures already reflect the positive outputs of the new service model as waiting times improved by 20%, 85% of loans are approved in a paperless manner without signatures, and retail loan extension process is down from 25 minutes to 7-8 minutes.

Garanti Mobile Banking Application and Internet Banking feature informative videos that walk the customers through product application steps. This allows users to easily access information about how to perform a given transaction on digital channels. At the same time, the renewed application page performs tendency calculation to present customized product offers. Seeing a maximum of three different products in this section, customers can easily reach the application step for the offers that interest them and complete the application process.

In addition, the Stories from Garanti feature, which is the output of an agile project, has been integrated into Garanti Mobile Banking App. The Stories function, which is an already familiar feature that users enjoy, presents digital product and service publicities, campaigns, customer-specific informative messages, and contents that will make life easier.

EMPOWERING CUSTOMERS

Garanti analyzes customer behavior for each platform and continuously develops them based on customers' needs along the cycle. Completely analyzing and understanding customer life cycle for every single platform is of paramount importance as customer needs vary depending on the platform. For example, customers using mobile platforms tend to perform their transactions quickly and they use this channel while they are on the go. In order to meet their mobility needs, Garanti created a virtual voice assistant, MIA (Mobile Transaction Assistant), which enables customers to perform their transactions just with voice commands. Using this service that is a first in Turkey for the banking service, users not only perform simple and basic inquires but they can also enquire in a much more complex and diversified manner. MIA is developed for the purpose of perceiving natural language understanding and users are not required to use specific sentences or keywords. In other words, it understands what the customer says and develops itself with Al while it serves. MIA is a world leading Bot among similar applications, with its sophisticated understanding capability and the ability to serve for nearly 200 different intents and 100 different concepts. MIA has responded to approximately 27 million intents from 2.5 million distinct customers so far. Also, Siri and MIA integration has been realized, allowing handsfree performance of Predefined Money Transfers. After the user tells the recipient and the amount to Siri, the user is directed to MIA for completing the transaction.

At Garanti, all products, infrastructures and services are designed according to the needs of digital channels besides physical channels. On the other hand, products that are developed solely for the needs of the digital channel are also introduced. With the automatic FX product launched this year and available only on digital channels, customers can give foreign currency and gold buy/sell orders at the rate they determine. Made available on Garanti Mobile Banking and Garanti Internet Banking, the product enables customers to invest in gold or foreign currency without having to follow up the rates.

Garanti does not convert traditional products on physical channels to digital channels with the same features. The aim is to create entirely digital products designed for the needs of digital channels. Modular Auto Insurance is a good example of

Solely Digital products, where customers can determine their coverages by themselves and take advantage of discounts depending on the number of coverages they select. It was designed based on the analysis of customers' buying trends on digital channels and customers' pain points, etc. Features of the product were shaped based on this thorough analysis and needs of the customers. It is available only on digital channels, and as such, it is a truly end-to-end digital product. The learnings from the Modular Auto Insurance were transported to the Health Insurance product at the end of 2018, and Modular Health Insurance was introduced.

Garanti tries to be a part of every technological movement and to adapt its services or create new ones based on these technology trends.

Technology and the faster internet connections boosted video calls and video content consumption. Making use of technology, Garanti launched video chat service to users for limit increase, unblocking etc. that used to require a branch visit, in a bid to make their lives easier. Another service is face-to-face loan service, whereby customers can interact with agents face-to-face while they apply for a loan on Mobile Banking. This provides a good example of human touch placement within digital experience.

Another digital innovation Garanti has implemented further extends this example. Garanti's Facebook Messenger Bot enables personal loan calculation in a conversational form. Users can run calculations through this platform and easily reach the information they need. The bot responds to personal loan related questions to a certain extent, and it guides the user to a Garanti website or other distribution channel when needed.

Garanti tries to position its channels in a way that they talk to each other. This applies not only to online experience; Garanti aims to connect online and physical experience. Money withdrawal via QR code is a good example of this. In addition to cash withdrawal via QR, cash deposit via QR code and money transfer via QR code functions were also integrated into Mobile Banking. Customers can easily deposit or withdraw money to fulfill their cash needs from the QR Transactions function on Garanti Mobile Banking, without having to carry an ATM card. Money transfer is also easy via QR code, as it does not require an

IBAN number. Another example of this is the general purpose loan application process. Customers are able to perform loan disbursement through online banking irrespective of the application process's having been initiated online or otherwise. When developing products and services, all digital channels are taken into consideration. Garanti believes that customers would like to use the features that one tool offers also in all the other tools. For instance, they would like to approve a banking document using the mobile app when on the way or to do it on the desktop screen when at work. That is exactly why Garanti focuses on omni-channel banking.

3rd party partnerships are also important to be in customers' lives in every way possible.

Car dealers can now finance zero-km brand new vehicles via Internet Banking without any dependency on the physical branches with the completely re-designed Dealer Based Stock Financing product Garanti Dealer (Garantili Bayi). With its flexible and tailor-made perspective, Garanti Dealer grants performance-based floor plan pricing by taking a given dealer's retail auto loan generation performance into consideration.

Furthermore, in purchases from Garanti's in-network e-commerce websites, customers can apply for a loan via Garanti Mobile Banking or Internet Banking by selecting "Payment by Shopping Loan" option, and can enjoy shopping in the comfort of their homes without having to go to a bank. Moreover, Garanti Shopping Loan offers installment payment option on mobile phones or smart phones, eliminating the obligation to pay the full price outright on these products.

Garanti is able to offer most of the products and transactions in each channel with a similar customer experience and is capable of developing new platforms adaptive with other channels from the very first day. Customers can inquire the transactions they made in a channel on another platform, while they can display the campaigns tailored for them in each channel. Also channel's own needs are taken into consideration. Garanti is well aware of the fact that the key to keeping customers engaged with each platform is to offer the same rates for banking products and transactions on each channel.

Garanti Bank tracks customers' and their peers' financial habits and background data. Based on target-oriented research,

customer-specific products & campaigns are offered to relevant customers. Furthermore, the Bank is working on offering one-click and proactive products to customers. These offers are customer-specific products that are available one-click away. Proactive offers are customer-specific offers prepared based on the customers' financial backgrounds. Advanced analytics and big data are considered within the products and services in order to understand customer needs and wishes, and to offer them desirable products at the right time from the right channel. Thus, analytic tools are highly used to offer proactive and customizable services to customers.

In addition, customers' channel usage is taken into consideration in order to keep customers engaged and to offer the services that best fit their needs. This is crucial in terms of migrating customers to digital channels. If a customer is a digital customer, tailor-made offers and features are proposed on digital channels. If a customer is a potential digital customer, Garanti draws a path to convert the customer to digital with smart offers at each level by starting to communicate with the customer offline (at the branch) and then moving to online. Offers proposed to customers are shaped according to the segmentation model which is based on a customer's engagement level depending on various criteria such as investment portfolio, deposit account, GPL disbursement, whether they have a salary account and so on. The smart combination of channel usage and segmentation model enables Garanti to decide what to offer, how to communicate. when to communicate and how to behave. This way, customers can benefit offers that best fit their needs on the channels.

To sum up, offering the best user experience across all channels, taking customer needs into consideration in digital channels and designing products based on those needs, leading innovation, being in the customers' daily lives and engaging with customers through smart offers are key in implementing the digital strategy for empowering customers through digitalization.

MOBILE BANKING

The number of monthly transactions carried out with Garanti Mobile Banking surpassed 25 million. Active customer base increased to 6.5 million while mobile-only customers significantly grew to 5 million. Garanti Mobile Banking has 63%

share of non-cash financial transactions. The number of active mobile banking customers grew by 25% in the twelve months to end-2018.

Some of the new functions introduced on Mobile Banking are as follows:

The QR Transactions menu on Mobile Banking now features money transfer via QR code in addition to money withdrawal/deposit via QR. During 2018, the number of QR transactions more than tripled as compared with the previous year.

Pension Contract application feature has been added to Mobile Banking app. Users can make calculations depending on the monthly contributions they wish to pay or the amount of total savings desired to be reached in retirement, and they can apply for private pension through Mobile Banking.

"Video Chat" function on Mobile Banking lets users have video chat with the Call Center and get support. Support topics in this context include Security and Limit Preferences, Authorize Account/Card for Viewing on Digital, Contact Number Definition etc.

Thanks to the improvements to the money transfer menu, Mobile Banking users can now view the recipients of their recent money transfer transactions on the Money Transfers main menu, and resend money with a single touch.

In addition, since June 2018, customers can give same-day or forward orders at their targeted rates in Buy/Sell transactions performed with USD, EUR and Gold rates. Orders can be issued both from demand and time deposits. Maximum validity of an order can be five days and any order given can be updated, or cancelled, if necessary.

Brand new Mobile Banking and Internet Banking experiences have been introduced for SME customers as well. Real and legal person SME customers handling the banking transactions of their work places via Garanti Bank can easily monitor incoming and outgoing money through the Money In and Money Out tabs on the new dashboard redesigned according to need and products, whereas the Overview tab allows a quick review of the summary position. In addition, POS transactions for the next 120 days can be viewed, as well as the amount and dates

of money that will be received in the account through POS.

As a result of all these developments, Garanti topped Forrester's mobile functionality benchmark in Europe with Garanti Mobile Banking in terms of user experience, and ranked second in overall mobile category.

INTERNET BANKING

To enable its customers to manage their personal finances over the internet, Garanti offers interfaces which enable customers to follow their assets and liabilities in product-based graphs, and their income, expenditures and cash flows with needoriented notifications and alerts through its Internet Banking website.

Garanti Internet Banking was renewed in October 2018 in line with the banking product and financial needs of our SME customers.

Help and Advice field on Garanti Internet was improved. All product pages feature a section viewing the most common Frequently Asked Questions (FAQ) along with a brief answer. These FAQ fields are automatically generated upon matching the labels of product pages with the questions (and updated when a new question is added to the database). A similar function is available also on the detailed question page where relevant questions are asked to the user. Under each detailed answer, there is a "Was this answer helpful for you?" button, which is used to further develop the help and advice section based on visitor feedbacks.

BONUSFLAS

Garanti launched BonusFlas in 2015, a first in the credit card sector. Giving access to all cards and a large number of transactions unavailable on mobile applications until then from a single platform, BonusFlas also analyzes spending habits and sends Push notifications regarding the campaigns that best suit the customers. Having a considerable impact on digital transformation of card customers, BonusFlas has a satisfactory download and engagement trend with more than 6.3 million downloads. It has become the main channel for campaign enrollments with 25.5 million enrollments coming through the app, and it has a significant impact on customer satisfaction

as it enables tracking all card information, loyalty campaigns and card products. More than 160 million transactions were generated to check card information by the users.

Holding a very strong position and accepted as a benchmark product in the market, BonusFlas is being enhanced constantly via addition of new product features and improvement of the existing ones targeting customer needs and feedbacks. The highlights of the developments in the reporting period include addition of Shop&Fly, which is our new travel card, to BonusFlas, capability to place a 24-hour temporary block on your card and renewal of the card if necessary, solely-digital follow-up of account statements, and redesigned "Campaigns" sections. Moreover, GarantiPay fulfills the need for secure and fast checkout solution for e-commerce transactions without registration and without sharing any card information with merchants. It is available at more than 1,800 merchants, and it is the first solution accepted on the Revenue Administration website, enabling Garanti cardholders to make tax payments conveniently.

PARAMATIK ATMs

The Paramatik network reached 5,258 ATMs in 2018. The ratio of cash deposits to cash withdrawals from Paramatik ATMs was registered as 108%. While 300 million transactions per year were carried out from Paramatik ATMs, more than 33 million transactions were carried out using the cardless menu. Common ATM menu was expanded to include credit card debt payment and credit card debt/limit querying for customers of all other banks. Moreover, the set of transactions available to visually impaired customers was broadened to feature credit card debt payment and credit card debt/limit querying functions.

ALO GARANTI - CALL CENTER

Recognizing the importance of customer satisfaction created by quality and consistent service delivery, Garanti Bank Call Center analyzes customer needs timely, efficiently and accurately, and offers its customers fast and easily accessible services targeted at first call resolution.

With a successful track record of 20 years, the Call Center maintains its dedication and contention in the sector with its differentiating service concept and its financial products portfolio positioned in line with the Bank's strategies. The Call Center also preserves its leading position in the fields where it is active, successfully handling 14.7% of all the calls in the financial sector with an average response time of 32 seconds via its qualified team of 1,085.

Garanti Bank Call Center, Turkey's largest financial call center with 73.4 million total customer contacts in 2018, keeps making a difference with a call response performance at a rate of 98.1%, which is the key service performance indicator in this field.

By constantly increasing the Call Steering system's performance, which was launched in previous years, the Call Center maximizes the customer experience delivered by directing customers to the related service point almost with a %100 Correct Routing Rate.

Continuing to produce customer-centric solutions through its innovations in technology, the Call Center continued to invest in voice technologies. With the Free Speech project that provides a much higher protection than customary encryption methods and recognizes customers from their free speeches, the Call Center reached a much broader customer group in 2018, and keeps pioneering the sector with the benefit it creates for customers.

Taking an active role also in the digital transformation process, the Call Center proudly launched six different services that used to be available solely from branches (limit changes, SIM card activation, IP restriction, usage period definition, product display and money transfer notification) via the "Video Call" feature in 2018, making a significant distinction in customer experience with this innovation. Accordingly, the Call Center secured faster fulfillment of customer demands with higher quality, without referring them to a branch. The future plans include increased variety of services offered through this channel.

Garanti Bank Call Center kept fulfilling demands and needs in the most efficient manner, by instantly connecting the customers, reached via either incoming or outgoing calls, with customer representatives specialized in the services and products that the specific customers were interested in, thanks to the projects developed with the "right customer, right channel, right product" concept. With 27 financial products on its portfolio, the Call Center broke new record with a powerful

performance that will be a real challenge to match in terms of the net financial income figure generated on 3.7 million financial products sold in 2018.

In 2018, the Call Center remained the leader of the sector by taking a significant share and responsibility in the marketing and sales of general purpose, mortgage and auto loans through the dedicated hotlines at 444 0 335, 444 EVIM and 444 OTOM, as it did in previous years.

Also in 2019, the Call Center will be committed to its mission of maintaining its pioneering position in the sector in terms of the diversity of services offered to customers, empathic and differentiated customer experience delivered, and financial benefit generated.

GARANTI'S NEW SERVICE MODEL

Garanti recently launched a new service model, which captures the benefits of the emerging digital world. With the pilot program started in May 2017, the project was rolled out in phases until the end of 2018. We have completed the transformation of our entire branch network within this context. In this new model, Garanti reflected digitalization in branches.

With the aim of creating seamless, omni-channel experience to reduce branch dependency and ensuring similar customer experience across all channels, Garanti also launched the "digital approval platform" where customers can approve product/service agreements with the Two Factor Authentication (via internet banking through corporate tablets or mobile devices) in branch processes as well, where paperwork and time spent to complete sales/transactions are reduced. (This service is available for General Purpose Loans, Overdraft Accounts, Insurance and Pension and Deposit Accounts.)

Through STEP, Garanti leads the digital transformation of its employees, as well as of its customers. During 2018, customer representatives tripled client visits using their tablet PCs installed with STEP as compared with 2017. They have touched more than 150 thousand customers, delivering a seamless and interactive banking experience.

Garanti believes that acquiring/co-innovating with fintech startups is essential for Banking-as-a-Service (BaaS). Today,

banks are no longer just financial players; they offer different services by establishing collaborations with third parties. Building a culture of innovation within the bank is vital for an open innovation point of view. Thus, co-innovating with fintech startups is very important in terms of imposing startup culture into our and others' way of doing business. Therefore, Garanti acts in accordance with the notion of supporting new entrepreneurships, products and projects in all areas. Garanti thinks that the market can be transformed and external disruptions can be turned into opportunities, by collaborating with various third parties.

The change brought on by technology is picking up speed across all economic sectors, and banking is no exception. Open innovation is one of the key elements of the Bank's transformation to adapt financial services to customers' new needs. The concept stemmed from the necessity to keep up with the rapid pace of change that companies are undergoing. The connection with the innovation ecosystem and entrepreneurs is essential. At this point, Open Talent has evolved from a unified competition for technological companies to one divided into categories that supports all kinds of entrepreneurs in innovation from many countries. In the process, Garanti continues with collaborative efforts with BBVA.

The Bank's approach to internal innovation can be described as one that is inclusive and facilitative. The primary objective is to ensure conveyance of all employees' creative ideas and suggestions to the correct recipients by offering various channels. In this context, the employees can just communicate a concept for it to be implemented by related teams, or they can take the ideas they share to advanced stages and present their solution suggestions to the Senior Management personally.

Methodologies developed specifically for each channel paves the way for the conversion of bright ideas into real products in the most sensible and profitable manner. The different channels used and tailored methodologies employed enable Garanti to also address the entire innovation range. This allows simple but valuable improvements on one side, and to carry out initiatives targeted at the bank of the future, on the other.

OUTLOOK

Offering pioneering digital solutions, Garanti Digital Banking provides users with convenience and speed. In 2018, customer penetration and digital sales targets have been exceeded, and

a substantial digital transformation has taken place in consumer loans and credit accounts.

Going forward, we will strive to increasingly expand the scope of application of our digital channels. With an End to End Digitalization perspective and a zero-based mindset, products will be re-invented within a digital context. Customer journeys will be continuously monitored to boost NPS and to offer best-in-class UX.

In 2019, Channel Transitivity will be launched, a project that will secure seamless execution of deposit transactions between branches and digital channels. The project is intended to provide customers with a transparent and seamless experience in all channels.

"e-loan", the credit solution enabling commercial loan disbursement to SME and Commercial customers, is also one of the projects targeted to be introduced in 2019.

We will also seek out partnership opportunities and create a range of APIs to integrate with 3rd parties. Not only will this expose the Bank to a much wider range of new technologies, but it will also help Garanti become the leading financial institution in the fintech ecosystem.

Taking the banking business beyond being a mere provider of banking products and services to offer recommendations to customers for enhancing their financial positions and warn them at times of difficulties will be much more important in the period ahead. Garanti is aware that acting as the customers' reliable financial coaches is critical for customer satisfaction and social responsibility. The Bank is also working to increase its customers' financial literacy, to help them become more knowledgeable about their financial positions, and to improve their financial positions in general.

In addition, with digital transformation, providing an end-toend digital experience to users in their customer relationship initiation journey will acquire greater importance in the coming period depending on banking regulations. Garanti is working hard to offer a perfect experience to customers in this journey.

Garanti will maintain its leadership in digital channels by continued monitoring and implementation of new technologies, and will put mobile channels at the heart of this experience.

DIGITALIZATION FOR SECURE AND UNINTERRUPTED SERVICE

Increased digital use leads to greater exposure to cyber security risks, and the improved threat profile results in elevated effect of the diversified risks of the digital environment. Constantly investing in technology, uninterrupted processing capacity, infrastructure security, cost efficiency and energy saving in light of corporate governance and international standards; Garanti, through its subsidiary Garanti Technology (GT) since 1981, sharpens its monitoring effectiveness. The company allows the Bank to put measures in place more rapidly and to become aware of global threats at an earlier time via networks that GT belongs to. Accordingly, Garanti's internet access architecture is restructured with a risk-based perspective. With its strategy, "Better IT, Better Business", Garanti continuously invests in cloud technology and microservices in order to ensure cost saving and introduction of solutions at a faster pace, and positions its application architecture and security layers so as to support these technologies. Through these initiatives, Garanti targets to better adjust to the new business models presented by the constantly digitizing world, and to deliver its clients a better customer experience by transforming Big Data infrastructure investments into business intelligence solutions and open application platforms.

The opportunities offered by digitalization also transform issues regarding data protection and security into one of the most significant risks. Taking precautions against all risks, which could prevent secure and uninterrupted service, particularly cyber threats, ensuring information security and informing customers on related issues are among the material issues, both for Garanti and its stakeholders.

Garanti carries out efforts ensuring continued awareness of compliance with laws and corporate standards, and development of processes that guarantee management of IT/information security and IT related risks, in order to effectively manage reputational risk across the Bank. In terms of governance, the Information Security Committee headed by the EVP responsible for Technology, Operations, Central Marketing and Product Development coordinates all efforts within the Bank to guarantee information security and monitors policies, procedures, regulations, and is responsible with respect to necessary updates.

Adopting an "enterprise external fraud prevention" approach within the framework of customer protection principles, Garanti centrally monitors incidents of fraud involving card transactions, account transactions, POS transactions and loan product applications carried out through any branch or non-branch channel.

Within the scope of monitoring and controlling operational risks that Garanti is exposed to, the Anti-Fraud Monitoring Department is charged with the development of strategies to proactively monitor, detect, control and prevent acts of external fraud. Combining its growing experience and expertise with its ability to quickly adapt to new technologies, the Department takes rapid and efficient actions that give the foreground to customer experience against constantly changing fraud trends and make customers a part of anti-fraud management. Through analyses of fraud incidents, the Department works to minimize the potential losses of the Bank and the customers, which may arise due to acts of external fraud.

the Anti-Fraud Monitoring Department Furthermore, formulates views and suggestions on the Bank's new product and service developments upon assessing the same with respect to external fraud risks. The Department also carries out all necessary examination and investigation about acts of external fraud, sharing related information within the Bank and with other banks. In order to provide its customers with a more secure, more convenient and more frictionless transaction environment, the Anti-Fraud Monitoring Department strives to improve communication channels with customers so as to better understand the customers and establish communication in line with their preferences. Garanti also cooperates with its stakeholders to increase anti-fraud initiatives across the sector, as well as those between different sectors, against fraud events. Training programs for employees continue to be an important topic for Garanti in this sense. In this context, Garanti carried out 77 training programs and/or informative actions in relation to external fraud, using various means including announcements/ statements, virtual training, information meetings and e-mailing

The Anti-Fraud Monitoring Department closely follows up technological developments, makes assessments together with national/international various service providers and leads technological developments in order to carry out fraud risk management in the most efficient and effective manner, and to

deliver the best experience to Garanti customers. In addition, necessary developments are carried out, which are also continuously followed up with respect to their effectiveness in fraud prevention and maximizing customer satisfaction. Also instant tactical updates are performed depending on the needs within the frame of strategies determined with a customer-focus.

WHAT WE DID IN 2018

Garanti secures all IT assets including people, processes and technology so that the organization can focus on business targets without suffering an interruption due to security related issues by concentrating on Confidentiality, Integrity and Availability. The latest and the most advanced security systems are followed up in an effort to offer the most effective security solutions to protect the clients' information. Regular penetration tests and vulnerability assessments are performed to identify and eliminate security risks. Garanti follows the COBIT (Control Objectives for Information and Related Technology) framework, internal security policies, procedures, and ISO 27001 with specific scope.

Garanti provides various security-building practices for its customers in line with its approach determined by security and privacy policies. Tokenization (Şifrematik application & device for generating one-time passwords), SMS OTP, Mobile Notification, Voice Biometric Verification and Eye Biometric Verification are used for the authentication of customers. In order to increase security of digital channels' usage; Security Picture, Security Software for both mobile and PC are available for customers. Transactions are automatically analyzed and if necessary, additional verification is implemented to prevent fraud events. As a result, there has not been any data breach regarding customer privacy in the past four years. Garanti also supports safe execution of external projects that introduce novelties to the sector, in addition to its internal practices.

Through its website and Alo Garanti, Garanti offers its customers security information regarding digital banking. Warning its customers against possible situations, Garanti also explains additional security precautions that customers can take, particularly with the "6 Golden Rules" for security, such as creating and protecting passwords, situations when private information is requested, viruses spread via e-mails, fake prize notifications or requesting personal banking information via SMS or by telephone, phishing attacks, suspicious money transfers and requests for information. Also, Garanti provides

customers with information on the protection of mobile devices and computers on which they use Garanti's internet banking. Garanti furthermore advises to use utility programs such as anti-virus, spyware scanner and firewall. Garanti sends SMS and e-mail messages at certain intervals in order to inform its customers about current and widespread attacks.

In 2018, Garanti successfully completed a project building on the security of authentication used by its employees for remote access to the Bank's infrastructure. Work is carried out within the frame of DevSecOps in order to enhance secure software development process. Security evaluation approaches that are aligned with current software trends such as agile are being developed. Initiatives are being carried out targeted at best practices in data classification and data leakage prevention methods, in addition to efforts spent for regulatory compliance. Stricter rules have been introduced in related processes and platforms for the security of mobile market and social media accounts, and training programs were organized for enhancing awareness of the teams managing these accounts in the Bank. Garanti keeps improving its information security processes by also utilizing the know-how and global experience made available by BBVA group. The Bank also extends support to global projects carried out by BBVA in this context.

While fraudulent attempts increased in our country in 2018, Garanti focuses on dynamically monitoring and precluding these trends based on a frictionless and customer-centric approach in line with its strategy. In doing so, the main objective is to prevent both the Bank's and the customers' potential financial and reputational losses.

In 2018, social engineering related fraudulent attempts were the major trends. Garanti aimed to manage these trends by enhancing customer experience, getting customers on board while fighting against fraud, and managing the risk in a frictionless environment. In keeping with this, Garanti continued to enlighten its customers and to raise awareness about fraud trends and important considerations by using various channels. In 2018, Garanti further strengthened its fraud intelligence network with the contribution of BBVA, and carried on with efforts and initiatives aimed at fighting with fraud.

OUTLOOK

In 2019, Garanti will keep ensuring secure transacting for its customers, and will also continue to work towards ensuring

its customers to transact in a convenient and frictionless environment and adopting a focus that will get customers on board while fighting against fraud. Along this line, higher convenience to be created through strengthening fraud risk monitoring systems with contemporary technology and analytical methods and constantly enhancing customer experience will continue to take place among the most important targets. Garanti will continue to explore new technology for the security of mobile applications and will work on integrating them into Garanti applications for further enhancing customer security.