



Chapter 5

Innovation and Technology



*Innovation at Our
Customers' Service*

We develop and implement cutting-edge technology that allows us to give timely responses and positively impact the quality of life of our customers.

5. Innovation and Technology

Having a technology and operations strategy that responds efficiently and effectively to the new communication, information, ease of access and service needs demanded by our customers and financial consumers is fundamental to obtain outstanding results and to be the leader in the Colombian financial sector. This sector has had excellent levels of development, growth and competitiveness in recent years.

To respond to the demand for a service model that allows us to continue as sustainable sector leaders, in the second half of 2013 we began a process for **change in operational efficiency and in the customer service model**. This essentially seeks to re-design our processes to focus them on generating value for our customers.

This strategy is supported by 7 initiatives that will help achieve the established goals: Increase the productive capacity of the branch fronts, optimize back-office and technological processes, rationalize support duties, rationalize organization, optimize purchase management, optimize the infrastructure and reorganize the offer.

The process for change is aligned with the general Technology and Operations strategy to support business plans defined for the various expansion, consolidation, strengthening and differentiation fronts for all segments that we serve through our concept of Universal Banking.

To achieve the established goals, in 2013 we made investments in technology in the amount of almost USD 60 million. This enabled us to develop and implement the following action plans:

Expansion of the Service Portfolio

As part of our ongoing technology renovation process, in 2013 we began the project to update the Core Banking platform to the latest version released globally. In the first quarter of 2014 this will support operation optimization processes in terms of functionality, availability and sustainability, and will also improve service levels for customer and business needs.

Continuing the process' optimization strategy based on use of Business Process Management technology (BPM), we changed the integration service with national credit reporting agencies improving the process to consult debt information. This allows us to use a more efficient process supported in a comprehensive vision that checks the customer's financial situation in a timely way.

In order to improve our range of products and services and have a more competitive portfolio, we made changes to internal systems by updating the Core Banking platform to enable Leasing Advances and Financial Leasing products. This achieved an increase in the market share of more than COP 2 trillion. Moreover, we selected a front platform to support development of the Factoring Business. Therefore, a controlled pilot scheme was started with real sector customers using the confirming methodology.

We continued developing the collection service through the direct integration with companies model, using Web Services technology certified by our Quality Management System under the ISO 9001 standard, and expanding new schemes to offer the fund dispersion service. This enables non-financial information operators to automatize processes they use to disperse funds to administrative entities. Additionally, we enabled a new scheme so that entities can implement **business collections with automatic debit** from customer accounts to automatically debit the accounts of the collection organizations.

Development of Electronic Channels and Methods of Payment

With regard to electronic channels that are fundamental to sustaining a large part of the products and services expansion strategy, we made significant progress such re-designing content from the personal banking portal. We also implemented the new purchasing portal through the PSE service (Secure Online Payments, for its Spanish acronym), improving the interaction and security models for customers.

In order to expand coverage and facilitate access to services offered through the ATMs network, we enabled payment of cardless wire transfers so that employees of companies affiliated to the Bank can access cash at an ATM without needing a Debit Card to perform the transaction.

Similarly, we made progress in enabling methods of payment with innovative technologies, developing a payment model with cellphones using Near Field Communications (NFC) technology. Therefore, we changed the model that was implemented in the first half of 2013, thus improving the service, coverage and the transactional costs model for users of this technology.

We implemented the automatic PIN generation service to improve customer service and optimize use of environmental resources, thus eliminating the use of paper in PIN generation for debit and credit cards for cards delivered through the branches network. For the same reason, the pilot scheme to generate extracts by e-mail was extended to checking account, savings account and mortgage loan products. In 2013, under this strategy we sent a total of 14.5 million e-mails for sales campaigns and extracts, representing significant savings in costs and important

progress in terms of modernizing communication media with our customers.

As a result of the strategy that began at the start of 2013 to update the Bank's Mobile Banking platform, in the second half of the year we implemented the pilot for the new Smartphone mobile banking solution. This will now work on the various operating system platforms available on the market, including the latest systems such as Windows 8. The results of the pilot will allow the Bank to implement one of the most updated mobile banking applications in terms of usability and coverage of mobile devices in the second half of 2014.

We enabled integration of the Corporate Transactional Portals of Banco de Bogotá and BAC Credomatic.



The Project to Connect the Bank's and BAC Portals (Phase 1) is worth highlighting. These enable Banco de Bogotá's ordinary customers, its agencies and affiliates and BAC to consult their account balances and transactions by entering the electronic branch on the BAC or the Banco de Bogotá transactional portal. This service will allow our customers to manage their liquid assets in a centralized way, among other benefits.

Operational Efficiency

The growth we have achieved in recent years has largely been supported by strengthening the operating model, due to ongoing optimization work seeking operational efficiency. This has given us significant increases in productivity and an adjustment in processes towards a new customer-focused service model.

One of the strategies defined to achieve operational efficiency is the delivery of processes to specialized third parties to op-

imize the use of resources and delivery of results. Therefore in the second half of 2013, the national clearing process was outsourced, achieving cost reduction of more than 25% of the total process costs.

The Advice and Management team in Payroll Loan Operational Processes Management was strengthened, improving speed and response times by assigning special agreements for personalized service. This strengthening lowered and controlled the loan balance index below 0.9%

By the end of the second half of 2013, Operational Cards Management had issued 316,358 cards, 64,846 more cards than those placed in 2012 (251,512) without increasing capacity. This represents growth of 25.78%.

We continued the zero-paper strategy to improve usage of resources and help the environment by sending scanned documents for various processes and improving service times for customers by up to 30% given that various activities can



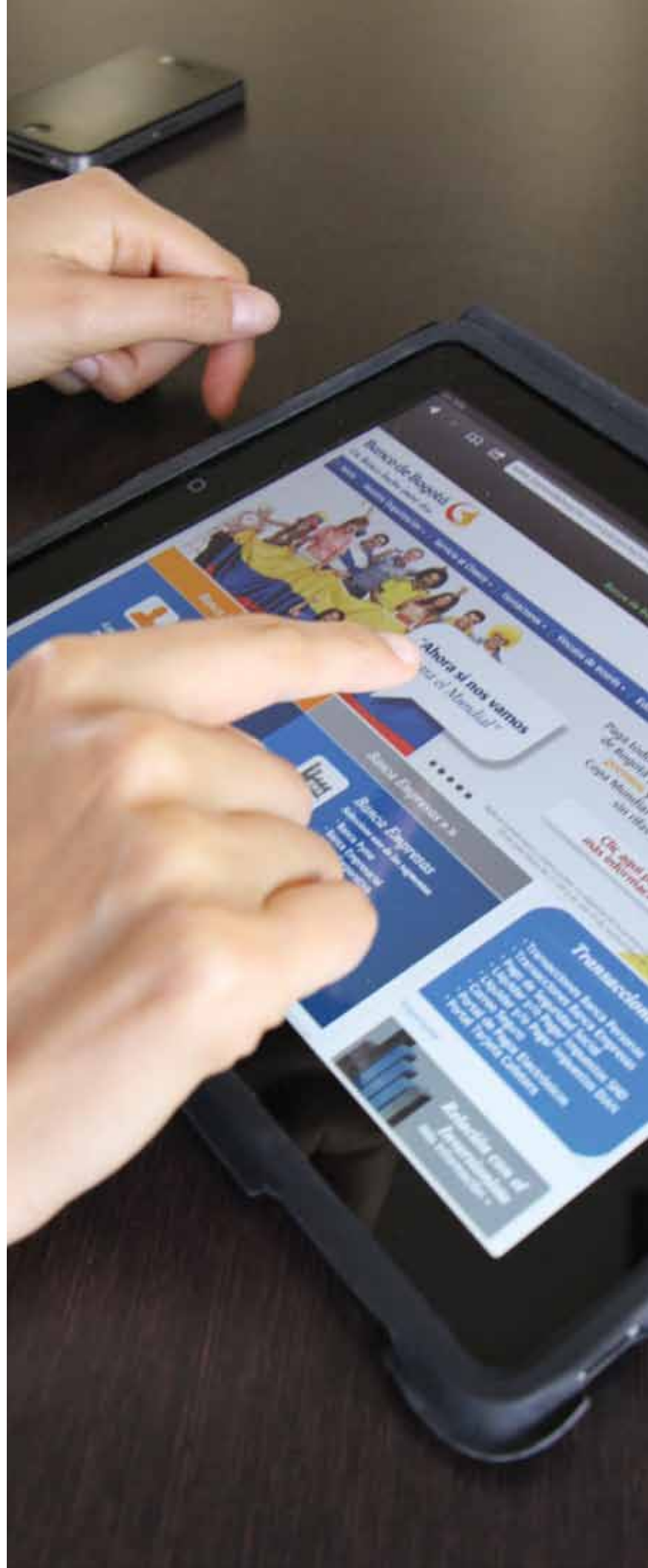
be processed quicker in product creation and activation processes.

Strengthening of the Security and Compliance Strategy

We implemented the hardware and software infrastructure required to strengthen the security scheme and comply with SOX rules. In this way, and to provide sustainability for the technological infrastructure that we have in the Alternate Computer Center and ensure an effective response to disasters or major interruptions of the IT systems that support the entity's critical functions, in the second half of 2013 tests were successfully carried out that allowed accumulation of more than 150 service hours for contingencies.

We also strengthened transactional monitoring of debit cards in dollars, to be performed in a specialized department in Colombia. This will considerably strengthen the security scheme for cards in dollars used by our agency and affiliate customers to make withdrawals and purchases, given that transaction monitoring performed on this product will go from business hours (Monday to Friday, from 8:00 a.m. to 5:00 p.m.) to continual monitoring without interruptions, mitigating the risk of fraud for this product.

In the second half of 2013, we invested USD 1.2 million to strengthen the business continuity and disaster recovery strategy. This reinforced the continuity risk mitigation plan for the 4 factors evaluated (technology platform, human resources, physical infrastructure and providers) associated to the business's critical processes. These investments helped to carry out physical modifications required to facilitate a new crisis command center that began operations in independent facilities to the General Management building.



We Promoted Strategic Creativity

Technology and digital developments have played a fundamental role in the global evolution at all levels and in all industries.

As a key part of the economic growth, the bank is no exception. Therefore, we decided to build an area dedicated to innovation processes focused on strategic creativity. The main objective of this area is to search for solutions, applications and all types of tools that can improve our customers' experience, based on combining our employees' talent with the Colombian entrepreneurial environment.

This co-creation scheme permits the Bank to improve processes with greater speed, greater efficiency and in line with the needs of a demanding market.

In this first year we had significant achievements, marking an important precedent in financial innovation:

Fintech Challenge: We held the first open innovation marathon in the Colombian financial system.

We organized the first open innovation marathon in the Colombian financial system. The Banco de Bogota Fintech Challenge invited young entrepreneurs to develop solutions that will reinvent banking. We now have almost 10 application proposals from these talented groups, with whom we are developing business venture schemes to encourage innovation in Colombia.

As part of this culture, we are strengthening a co-creation scheme within the Bank through suitable spaces so that our employees can help build new innovation and strategic creativity proposals that generate value for our customers and the organization.

Continual research and monitoring of trends and market needs has allowed us to explore new schemes to improve service schemes with our customers such as Wearable Banking, mobile applications and internal social communication platforms. This will enable us to propose new options in the short term to improve our product range.

In this way, Banco de Bogota has consolidated a new innovation proposal for the banking sector, promoting relations between the private industry and entrepreneurs, and generating participation to reinvent banking based on co-creation.





“A good idea is just the beginning of a large project”

“The experience of participating in the Fintech Challenge was wonderful. We worked on an application to optimize communication with credit card customers. With help from the bank, we turned our idea around and turned it into an entrepreneurial digital project. We were beginners and with the Fintech Challenge we learned that a good idea isn’t enough, you have to work on it and have an ally that believes in young talent”

Team Bakia, winner of Fintech Challenge and *Julián Abril Fonseca,*
Manager of Innovation and Strategic Creativity