

Bantotal

The platform for financial institutions that conquered Latin America with Low-Code

Whitepaper



GeneXus™



Bantotal is a set of Mission-Critical Systems for Financial Institutions that has been developed and implemented by the technology company **De Larrobla & Asociados** for the past three decades. This comprehensive technology platform was **built with GeneXus from its very beginnings**. In this article, some key milestones are outlined which have occurred from its origins to date, and which support the intrinsic relationship between Bantotal and its continuous evolution with having selected from the beginning a platform – that today we call [Low-Code](#) – at a time when the advantages of relational databases were just beginning to be heard about.

In the 1990s, Bantotal set out to improve technological support for the day-to-day operations of a bank. It aimed to bridge two worlds of mission-critical systems: those that support customers' daily banking operations and their accounting records.

Designed with GeneXus with a **unified data model on relational database managers**, Bantotal's solution came at the right time: given the enormous amount of data and banking operations, which at that time was already growing exponentially and becoming unsustainable, there was no way to continue without comprehensive support for business processes.

Since then, Bantotal has kept growing and evolving along with the changing and complex world of finance, and today it is present in 65 banks throughout the Americas. In fact, Bantotal is present in 14 countries, and its highest level of market penetration is reached in Uruguay, where it is used by 70% of the country's banking institutions.

In an increasingly complex and diverse world, Bantotal is the foundation of a bank's critical mission; in other words, it is the platform on which to build any other necessary solution in an agile manner.

It currently provides solutions for Retail Banking, Corporate Banking, Second-tier Banking, Financial Entities, Micro-finance Entities, Municipal Savings, Rural Savings Banks, Credit Unions, Digital Banks and Fintech Entities. It serves world-class cli-

ents including International Banks, National Banks, and Public Banks, as well as Financial Institutions dedicated to Micro-finance and Cooperatives, in the different countries in which it operates.

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5 technological milestones in 3 decades

The original promise that led **De Larrobla to choose GeneXus** was that if technology or reality changes, what remains the same is knowledge. Thus, throughout its history, the Bantotal platform has evolved from the green screens generated on IBM AS/400 equipment, through the Client/Server architecture with Windows screens, from Win to Web with Internet, and from monolithic applications to the most current ones based on microservices. “Through all these changes, GeneXus has always been versatile, agile, and fast,” affirms Marcelo Kosec, General Manager at Bantotal, and highlights what he considers crucial moments, in which both the work team and the technological support have proven to be up to the task.

1. In the current context of the pandemic, by early 2020 most of Bantotal’s 65 client banks across the Americas had to reschedule their loans to help millions of people who were financially impacted. This implied programming changes – which had to be generated in record time – in more than 20 million contracts, as described in the paper titled [Smart Solutions for the Financial Sector in Latin America](#). It was done throughout the continent: Argentina, Bolivia, Chile, Colombia, El Salvador, Honduras, Guatemala, Mexico, Paraguay, Peru, Panama, and Uruguay.

«The fast response to our clients was possible thanks to a committed team with a high level of banking expertise and knowledge of our system. Developing with an extremely high productivity platform such as GeneXus, combined with our skills, allowed us to work at an incredible speed and meet all needs in a timely manner.»

Marcelo Kosec. General Manager at Bantotal.

2. The implementation of the Bantotal system at Uruguay's national bank (**Banco República Oriental del Uruguay** - BROU), which was completed in **2019**, is another large project that stands out in Bantotal's track record. Since Banco República is an institution with a large market share in the country (more than 50%), changing its core system is almost equivalent to changing an important part of how the country's financial and payment system works. There was a lot of pressure then, because if the bank failed, an entire country was in trouble. Given the complexity of the process involved in supporting the daily operations of Banco República, this was done in stages, with 3 deployments that involved the development of 600 interfaces and 23 test environments.

It was a huge project that made the bank stronger and more prepared for the future, operating on a 24/7 basis through its digital channels and ATM network, in addition to its physical branches.

At present, 1,140,000 transactions are carried out daily and some 3,400,000 queries are made through its main digital channel, e-BROU.

3. Technological support to **microfinance** institutions was another significant enhancement that Bantotal made to its systems. Thus, since **2005**, Bantotal has strongly positioned itself as a solution for the processing of personal, group and social microcredits. Credits are generated through the workflow engine in the GeneXus Business Process Management Suite, applying best practices in microfinance for Latin America.

4. The economic crisis that started in Argentina in **2002** caused changes in banking systems: "Numerous changes became necessary. One day we would face "pesification," and account freezes the next," recalls Mr. Kosec. All of these modifications to the system needed to be made immediately and were critical to comply with the country's rapidly changing regulatory requirements.

5. Another milestone in Bantotal's history is the simultaneous implementation of the system for a financial group in seven Latin American countries, beginning in **1995**. The process, which had to be completed before the turn of the century, involved adapting to the banking regularization of each country and nationalizing the software for each of them.

Mariano De Larrobla, the leading individual behind Bantotal and GeneXus' second client ever, described how impressed he was 30 years ago when he learned about what GeneXus proposed regarding data management and relational databases.

Believing that the world of day-to-day bank operations and accounting had to be unified in order to be efficient was the beginning. Over the past 30 years and together with GeneXus, many other elements have been developed as part of this evolutionary approach to digital transformation, in which **Low-Code software currently provides certainty.**



«Today, I can affirm that there is no way to conceive the development of Bantotal without GeneXus, because they are intrinsic. GeneXus was based on the premise that the world changes continuously, and that whatever is represented in a system, according to the needs of a specific moment, will change later on. With GeneXus, we have peace of mind because when this happens we can make the necessary adjustments, in programs and databases, quickly and automatically.»

Mariano De Larrobla. Director at Bantotal.

Technological possibilities valued by Bantotal:

• **Integration:** The [possibilities for integration through APIs](#) enable us to extend any bank's business using the service-oriented Bantotal platform (for example, with payment methods for Fintech entities or facial recognition for increased security). APIs are essential to today's world: "We are experts in banking but we need to work with Artificial Intelligence specialists," Mr. Kosec concluded.

• **Productivity and scalability:** Bantotal also accounts for an increasing processing load in terms of the number of transactions. The greater volumes relate directly to aspects involving digitalization and access to banking services. Added to this is the ability for solutions to run securely in the cloud to cope with unforeseen peak demands.

• **Business Intelligence:** Large volumes of transactions generate data that constitute essential information when processed by means of specialized tools, in order to make the right decisions and determine segmented offerings according to specific needs.

Technological structure of Bantotal:

From a **technological** point of view, Bantotal has 5 fundamental characteristics:

- > Multi-platform
- > Extensible
- > Modular
- > Clients and Accounting are the system's core elements
- > An API that makes services available for integration

The Bantotal System, like its add-on modules, **runs on Java architecture using a graphical interface in a web browser (Microsoft Edge or Chrome).**

On the following **platforms:**

- > IBM i-Series
- > Windows Server / SQL Server
- > Unix / Oracle Systems

In addition, it has deployed implementations in the Cloud (Azure).

Find out how GeneXus can do the same
for your company.

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