

# Banesco Integrates Multiple Systems with Middleware Technology, Boosting Efficiencies and Driving Sales



Banesco  
Caracas, Venezuela  
www.banesco.com

## Industry:

Financial Services

## Annual Revenue:

VEB19,697 million (US\$9.17 million)

## Employees:

8,000

## Oracle Products & Services:

Oracle Application Server  
Oracle Integration & ESB  
Oracle Forms Server  
Oracle Report Server  
Oracle Database  
Oracle Real Application Clusters

## Key Benefits:

- Projected 72% net return on investment
- Increased speed of processing trust funds 63%,
- Shrank product development time 59%
- Expanded Web offerings
- Boosted call-center productivity 68%

## Executive Summary

With US\$5.5 billion in assets, Banesco is one of Venezuela's top commercial banks. The Caracas-based institution serves 3.6 million clients, runs a network of 913 ATMs, and is the largest issuer of credit cards in the nation. Banesco manages a large trust fund ("Fideicomiso") business, including a thriving collective trust operation that pools funds from institutional and other investors.

In recent years, Banesco has pursued a range of strategic initiatives designed to strengthen customer relationships, increase business productivity, and boost revenue and margins. By 2002, the company had identified key investments to achieve these goals. The investments focused on breaking down barriers between different business functions and computing systems, establishing efficient cross-department business flows and information sharing, and enabling a significant increase in Web-based customer services.

IDC recently evaluated Banesco's integration project, focusing on the bank's deployment of an Oracle Fusion Middleware solution consisting of multiple Oracle software adaptors and application server technologies. The new architecture created seamless transactional links between Banesco's internal computing systems and applications, and led to benefits ranging from greater coordination between departments and higher labor productivity, to more responsive customer service and call center operations, to a surge in the popularity of the bank's Web-based services.

By enabling integrated business-process flows, including the creation of transaction templates, the middleware architecture made it possible for Banesco to design and launch new financial instruments faster and at lower cost. Greater integration also shrank transaction errors, cut IT development time, and put more information into the hands of customer reps supporting up-selling and cross-selling efforts. In the two years following the implementation, Banesco's trust fund revenues rose 107%.

**“The implementation of this system has allowed us to define new transactions so that they can cover all product business rules, reducing the margin of errors as well as the decision-making time when registering operations.”**

Nery Sánchez  
Manager  
Product Development  
Department

According to IDC, Banesco is on track to realize benefits totaling around \$3.7 million over five years. Factoring in project costs, IDC expects Banesco to realize an estimated return on investment of 72%.

### **Project Background**

Banesco decided to overhaul its IT architecture in the face of growing technical challenges that threatened attainment of strategic business objectives such as boosting customer service and loyalty, expanding and capitalizing on new revenue sources, and improving operational efficiency.

Banesco underwent a four-phase selection process in the fall of 2003, consulting executives from key business areas, including the trust fund business, the information technology group, and the audit and security department. Company executives said they chose Oracle database and middleware technology for its “functionality, security and recoverability” and “synergy” with the company’s legacy applications infrastructure.

The first components of Banesco’s new platform went live in July 2004. The core middleware architecture employs Oracle adaptors to tie together heterogeneous software and hardware systems, providing a unified view of data across the trust fund, treasury and insurance businesses, and integrating support operations such as its online banking, call center and interactive voice response (IVR) systems.

### **Key Benefits**

IDC documented numerous benefits from Banesco’s investment in the Oracle business integration solution. One key improvement: Banesco broadened and deepened its sales and communication channels. The middleware architecture enabled the improvement by distributing information and services across the enterprise, facilitating new automated transactions and providing a unified view of the customer. The following systems now share data through transactions managed by Oracle middleware:

- ATM network
- Online banking system (known as Banesco Online, or SIF Web)
- Call center (known as CAT, for Center of Attention Telephonic)
- Phone banking system (IVR)
- Banesco agencies

**“The integration of other units' platforms with the trust fund system, has allowed us to manage our clients with an integral vision, as well as save time during the negotiation process and attention to our client's needs.”**

Iride Rivera  
Vice President  
Trust Fund Post Sales

Another key benefit: Business users can now create financial products independently from IT Development, speeding time-to-market and reducing dependency on internal development resources. To implement this capability, Banesco leveraged the middleware system to create “transaction templates” that allow business managers to set the business rules and validations for each new product. Banesco launched a product development department (“estructuración de negocios - traducir”) to assist business users in this process.

### **Labor Productivity Gains**

Following deployment of the Oracle middleware system, Banesco saw significant productivity increases in its Collective Trust Fund (“Fideicomiso”) Back-End department, enabling the unit to redeploy about 23% of its staff. IDC attributed the efficiency boost to global applications integration and the enablement of process automation across departments.

Other labor savings came from the introduction of self-service tools for customers. Today many clients enter information directly through a new Web interface called Banesco Online (or SIF Web), helping reduce in-house data entry. In addition, automatic transaction validation—embedded in the middleware architecture—saved labor hours previously employed to handle error processing. “The use of automatic validations has reduced the number of transaction errors to zero,” said Scarlett Dager, manager with Banesco’s Collective Back-End department.

### **Integration with Investments and Credit Departments**

Similarly, the company leveraged the Oracle middleware architecture and adaptors to tightly integrate its Investments and Trust Fund departments. Managers said the move preserved Banesco’s existing investment-management system while eliminating redundant transactions and speeding access to analytical reports.

Today it takes 63% less time to process trust fund investments and 60% less time to prepare an investment cash flow analysis, IDC found. Said Luis Torres, manager in the investment department: “The integrated platform allows us to get a cash-availability report on time when needed, along with generating a cash flow analysis, with the objective of making the best investment decisions.”

**“The self-management functionality given to our clients through the development of transactional services in our Web page...has allowed the level of satisfaction and quality of service to be better received and graded by our clients than before the implementation.”**

Maraide Jaimes  
Project Leader  
SIF Web

Integrating the investments and trust fund systems enabled Banesco to simplify and accelerate common tasks such as reversing transactions (to correct errors). Banesco now perform reversals 77% faster, which enabled a 19% reduction in Investments staff with further decreases expected.

The Trust Fund department similarly connects to Banesco’s Credit Department through a middleware interface. Integration between the two systems allows the credit department to directly handle the trust fund’s credit-approval needs without adding staff, and accelerates product launches. IDC estimates the cross-system workflow automation helps Banesco avoid significant additional staffing costs annually.

### **Accelerated Customer Service**

Banesco executives said its Post Sales operation today responds 83% faster to customer requests, an improvement directly related to the integrated business flows and productivity increases noted above. The expansion of Banesco’s Web capabilities contributed to the improvement, as workers spent less time mailing out information that clients can now get online.

The productivity boost in Post Sales is helping Banesco handle surging business activity and related phone traffic. The staff has absorbed the increase by leveraging the middleware platform to more rapidly access transactional and customer data stored across multiple systems. Between 2003 and 2005, call operators became 14% more productive (measured as the number of calls per operator), IDC found. Moreover, the integrated platform equips post-sales staff with more information to efficiently cross-sell and up-sell Banesco products.

### **New Web Interface Attracts Clients**

In conjunction with the Oracle middleware rollout, Banesco launched a customer-facing Web interface called SIF Web that connects clients to internal business systems through the middleware architecture. Banesco’s clients are moving to the Web in record numbers, getting access to information and executing transactions faster, and experiencing greater satisfaction overall. Meanwhile, Banesco reined in costs by shifting more resources to low-cost Web services.

Banesco reported that by March 2006, 25% of all trust fund clients had signed on to use the SIF Web service, a six-fold increase from 2004. And managers said that customers are not just

**“The SIF (trust fund integrated system) allows us to develop our technological capability, which is translated in a qualified value attribute of our collective trust fund product, making us competitive in the trust fund market. The consequence of not developing this capability would be our exit from this market.”**

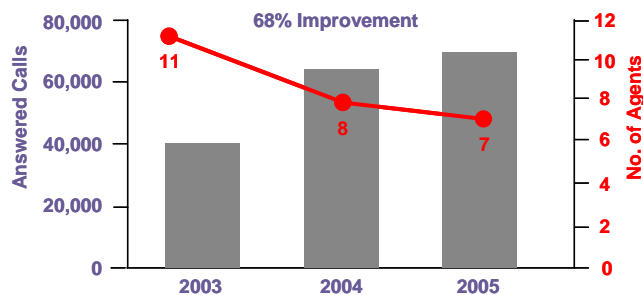
Alejandro Montenegro  
Vice President Sales

subscribing, but actively using the service. In 2006, Banesco clients printed more than 1,400 reports over the Web compared to just 187 in 2004, saving paper and time. The volume of financial transactions executed by clients over the Web has risen steadily as well, from slightly more than 100,000 in October 2005 to about 225,000 in March 2006.

### Call Center Productivity Surge

Using the Oracle middleware platform, Banesco connected its call center system (CAT) to its financial and back office systems, giving agents full access to updated account and transactional information. The result: Banesco saw call-center productivity surge 68%. As shown in Figure 1, from 2003 to 2005 Banesco handled rising call volumes (the result of surging business) with 36% fewer agents. And despite the increase, agents dropped 50% fewer calls, IDC found.

**Figure 1: Call Center Productivity Rises**



### Bottom Line Impact

According to IDC, Banesco’s deployment of the integrated solution contributed significantly to a subsequent rise in sales and revenue. From 2003 to 2005, for example, the number of trust fund customers rose by 49% while the number of clients lost to competitors fell by 83%. The result has been a 107% jump in trust fund revenue over this time period -- from about VEB200 billion (US\$93 million) to slightly more than VEB400 billion (US\$186 million).

Overall profitability also rose, in part because Banesco controlled costs with the expanded Web functionality that allowed the company to retire several brick-and-mortar branch offices.

**“The use of the integration interface is recognized by the business as a discipline. It has been incorporated in the business language throughout the bank.”**

Juan Ignacio Uría  
Executive VP  
Systems Development

**“One of the most representative products was the launch of a trust fund in dollars, which ... demanded 24 hours of IT-area time, not in development activities, but in technical advice related to creating parameters for the application to achieve the desired objective. The product was launched in just three months.”**

Geraldine Abreu  
Vice President IT

## IT Efficiency Savings

BanESCO executives said the Oracle middleware investment introduced a range of efficiencies within the company’s IT organization. By tightly integrating its heterogeneous legacy systems, IT is responding faster to business requests, completing development projects sooner, and bringing greater operational discipline and data consistency throughout the enterprise.

Moreover, BanESCO’s deployment of middleware interfaces and adaptors have all but eliminated ongoing manual point-to-point integration efforts and related consulting costs.

Significant IT savings were realized from the move to user-created (financial) transactions that sharply reduced the demand for development time. More than 150 new transaction types were created in this way by March 2006, saving a significant amount in development costs. Similar savings were realized by enabling user-generated reports.

BanESCO also shrank the time developers needed to build and launch new trust fund products. During 2004 the development team took 2,430 hours to develop four new products using point-to-point interfaces. In 2005, the same team took only 310 hours to develop seven new products on the Oracle middleware platform -- a 93% improvement in product development speed.

Developers gained further efficiencies by repurposing system interfaces originally designed for the Trust Fund. In the Treasury Department, for example, BanESCO saved by shrinking development time by an estimated 59%; in the Insurance department, interface reuse helped save substantial development costs, IDC found.

## Summary of Improvements

Table 5 summarizes a range of operational improvements realized after the Oracle middleware implementation. Overall, according to IDC’s study, BanESCO is expected to realize a net present value of approximately \$780,000 from the investment, equating to a net return on investment of approximately 72%.

**“To have an integrated system for managing the trust fund business has been a dream come true. It wasn’t just a change of systems, it was actually a transformation of the area by incorporating new processes, a new system and an organizational structural change to manage our business.”**

María Nuvia García  
Vice President  
Trust Fund Back End  
Department

<b>Table 5 Banesco’s Business Integration Investment: Summary of Operational Improvements</b>			
	<b>Before</b>	<b>After</b>	<b>% Improv.</b>
Trust Fund: Number of back-office staff <sup>1</sup>	30	23	23%
Time spent processing trust funds	700	200	63%
Time spent preparing cash flow statement (min.)	700	20	60%
Investments Dept: Number of staff	6	6.5	19%
Investments: Time to reverse transactions (min.)	30	7	77%
Post Sales: Transaction processing time (hrs)	72+	12	83%
Post Sales: Response time to requests (days)	15	Real time	100%
Number of reports printed via the Web	187	1,435 <sup>2</sup>	670%
Number of subscribers to Web service	24	162 <sup>3</sup>	580%
Number of Web-based transactions	110,000	230,000	105%
Customer Service: Number of dropped calls	3,200	1,600	50%
Sales Boost: Number of trust fund clients	450,000	675,000	49%
Number of clients lost to competitors	6	1	83%
Trust Fund Revenue (Venezuelan Bolivares)	200,000	425,000	107%
Time to develop new products (hours)	607	44	93%
Treasury Dept.: IT development time (days) <sup>4</sup>	644	262.6	59%
Insurance Dept.: IT development time (days) <sup>4</sup>	656	248.4	62%
1. Collective Back-End Department 2. Estimated 2006 3. Estimated 2006. By March 2006, 25% of all trust fund customers were subscribers 4. Increased productivity due to the ability to reuse interfaces from Trust Fund back office operations			

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**About this case study:**

Research and analysis for this study was conducted by IDC, an independent consulting firm, and was based on interviews with Banesco executives, review of planning documents, and searches of industry literature. ROI calculations use industry standard assumptions regarding the time value of money. Information contained in the publication has been obtained from sources considered reliable, but is not warranted by IDC. Copyright © 2007 Oracle