

## Measuring success

**INTESA**  **SANPAOLO**

**Intesa Sanpaolo S.p.A.**  
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Milan: ISP.MI

**Security Division**  
**Director IT Security**  
Orio Tomagnini

**Revenues 2006 Proforma:**  
€ 18, 4 Billion

**Employees:**  
~100,000

### ROI Study Highlights

- **223% ROI in five years**
- **76% IRR in five years**
- **€ 1.1 Million Initial Investment**
- **Payback within one year**
- **€ 4.7 Million Net Savings over five years vs. current solution**

### Key Benefits

- **Lower Total Cost of Ownership (TCO)**
- **Strong validation and authentication**
- **Cross-border capability through an inter-operable solution governed by internationally recognized and compliant legal, policy and operation standards**
- **High standards for vetting and certificate issuance**

### Study Scope

- **Consolidated Solution**
- **Banking applications enabled by digital signature**

## Implementing IdenTrust to expand Identity Management and enable trusted, efficient, global e-banking—yields 223% ROI for Intesa Sanpaolo

### Executive Summary

Banca Intesa and Sanpaolo IMI officially merged on January 1, 2007 to become one banking group, Intesa Sanpaolo. This combined entity is now the leader among banks in Italy and ranks among the top banking groups in all of Europe. With a network of more than 6,100 branches and 1200 abroad, Intesa Sanpaolo has a market capitalization of approximately € 68 billion and an average market share of more than 20% in all business sectors, including retail, corporate and wealth management. The Intesa Sanpaolo group offers its services to about 10.7 million customers in Italy and 7.2 million customers abroad.

Intesa Sanpaolo aims to be a leader in corporate banking for both Large and Small and Medium Enterprise (SME) clients and to be a proactive player in the evolution of Italian Banking and Italian society. The group invests in innovation to deliver benefits for all its customers by providing secure, streamlined, high-value services.

### An Innovator and Early Adopter of Digital Signatures

Intesa Sanpaolo was one of the pioneering banks in Italy to adhere to the IdenTrust platform back in 2001, inspired by the promise of added value and efficiency using Digital Signatures as an enabler to the bank's applications for online banking. Intesa Sanpaolo aims to facilitate strong security and authentication in a simple streamlined fashion for its corporate customers, thereby earning a reputation as an innovator offering all the latest functionality to its customers—both in-country and cross-border. Intesa Sanpaolo aims to be a recognized leader in efficiency and high value-add solutions, promoting widespread use of digital credentials as a means to ensure trusted commerce in a highly efficient fashion with strong authentication and audit trails.

With the IdenTrust Digital Signature solution, Intesa Sanpaolo is positioned to deliver a range of high-value benefits to its Corporate and SME clients:

- Globally accepted standards for authenticating and validating identities
- Globally enforceable contracts
- Limited liability and non-repudiation
- Straight Through Processing (STP) opportunities where previous wet signature required fragmented processes and increased costs
- Single solution that meets both in-country (CNIPA compliant) and global standards through the IdenTrust "two-sided coin" certificates
- Cross-border capability through an inter-operable solution governed by internationally recognized and compliant legal, policy and operation standards

***Intesa Sanpaolo, by using IdenTrust services with its consolidated infrastructure, will achieve a more flexible, cost-effective identity authentication capability that will enhance its growth and profitability opportunities translating into an impressive financial Return On Investment (ROI) of 223% in five years.***



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***“I want to maximize SECURITY and STP to avoid part-automated and part-manual processing. The goal is no paper at all—if we extend STP with Digital Signatures within the bank and to our customers for all transactions, thereby creating an end to end process with guaranteed security, the entire market will go in that direction”***

—Silvia Bianchi  
Head of Cash Management

### Challenges

- Perception of high complexity and increased costs of digital signatures; quite a lot of paper-based banking still exists
- Great resistance in mentality from SMEs
- Outsourcing solution slow to respond
- Limited flexibility in delivery and infrastructure
- Large investment required to refresh ageing infrastructure and significant increases in annual operating costs

### **Intesa Sanpaolo’s Long-Term Objective—Increase Widespread Adoption of e-Banking Services Powered by Digital Signatures**

Intesa Sanpaolo’s long-term objective is to create more secure corporate e-banking using a digital signature as a standard, embedded functionality, facilitating straight through processing and thereby reducing costs, time and risk. The Group wants to maintain a position of leadership in innovation and customer service for Corporate, SME and Private customers. At the same time, Intesa Sanpaolo plans to increasingly move from local to global capabilities and offerings by providing comprehensive solutions that meet both in-country and cross-border needs. In the end, the Group’s goal is to generate revenue through consolidation, scalability and penetration in order to offset costs.

### **Common Misperception—Digital Signatures Inaccurately Seen as Costly and Complex**

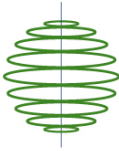
One of the biggest barriers to broader and more rapid acceptance of digital signatures is a common misperception that digital signatures are complex and costly to use. While untrue, this perception is pervasive. As a result, in Italy and across Europe today, one still encounters a considerable amount of paper-based banking. Leading-edge banks face particular resistance from SMEs, who are understandably fearful of unnecessary cost and increased complexity. SMEs can utilize Intesa Sanpaolo issued digital certificates with their Microsoft Outlook e-mail systems and Microsoft Word and Adobe pdf documents. This enables them to gain the advantages of digital certificates with the tools that they are already using for their businesses.

### **Strategic Decision—Consolidating two solutions into one**

The management at Intesa Sanpaolo has decided to consolidate the two running solutions by the old entities, Intesa and Sanpaolo and use IdenTrust solution both for domestic as well as cross border activities. By going forward with this strategic decision, relative to its Digital Signature solution, the bank will essentially achieve three strategic advantages, namely large cost saving through infrastructure consolidation, a streamlined and more efficient administration, and, finally, enhanced security standards.

### **Large Cost Savings—Infrastructure consolidation**

By consolidating the two solutions, standardizing on the IdenTrust solution, the new combined entity, Intesa Sanpaolo, anticipates it would save a sizable amount every year by eliminating unnecessary recurring costs. For example, in the area of software and hardware, Intesa Sanpaolo would cut cost in half as well as in the areas of integrator consulting services and ongoing management of the solution. With this new consolidated approach the bank can turn its focus to implementing important global standards for authenticating and validating identities not just meeting in-country requirements. By implementing standards like IdenTrust, Intesa Sanpaolo will be able to take advantage of IdenTrust’s deep expertise in e-Banking applications to accelerate its goal of straight through processing embedding digital signatures in its core processes to increase trust, efficiency and value for all.



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**“ The biggest challenge is to move people to e-banking. 8% of corporate customers do 90% of all on-line trading, 92% are responsible for the other 10%. Less than 20% of banking is electronic today. Most operations are still done physically at the branch! “**

—Andrea Marchesi  
Web Solutions

Goals
<ul style="list-style-type: none"> <li>● Create more secure corporate e-banking with digital signature as a standard functionality, facilitating STP and thereby reducing costs</li> <li>● Maintain a leadership in innovation and customer service for Corporate and Private customers</li> <li>● Increasingly move from local to global capabilities and offerings by providing solutions that meet both in-country and cross-border needs</li> <li>● Generate revenue through consolidation, scalability and penetration to offset costs</li> </ul>

### A streamlined administration—efficient and flexible

With the new consolidated solution, Intesa Sanpaolo will be able to streamline its administrative resources, for documentation and processing, which means that the bank could reallocate those human resources to work on value-add, customer-facing applications that generate revenue for the bank. This simplified process will benefit both the bank’s staff in setting up accounts, but more importantly it will provide a single, simplified solution for the bank’s customers in using digital signatures both in-country and cross-border. This increased simplicity in user experience promises to speed broader adoption and use of digital signatures, as customers recognize the value and ease of using a single solution for all their identity-management needs.

### Security levels—strictest compliance guidelines both in-country and globally

In an effort to strengthen the level of security operations and to offer the highest security and privacy possible, Intesa Sanpaolo—committed to stronger authentication—has put all activities under the authority of one department, the IT Security department, aiming to increase adoption by online customers and moving from the physical branch to the virtual one. By enhancing strong security rules, the bank is looking to expand its IdenTrust implementation to include the full “Four Corner” model (including the four key elements of policies, legal framework, trusted operations and technology). With the IdenTrust solution, Intesa Sanpaolo will be able to offer consistency in its security operations, with a single and globally interoperable framework.

### Intesa Sanpaolo's Over-Arching Strategy—Foster Innovation and Improve Customer Experience via e-Banking Applications

At the highest level, Intesa Sanpaolo’s strategic approach centers on fundamentally improving the customer experience by strengthening security and offering innovative e-Banking services at lower costs with greater efficiency and capabilities for the customer. With IdenTrust, Intesa Sanpaolo can greatly simplify the user experience by embedding digital signatures, including eliminating software conflicts, offering flexible media options for the credentials (USB, Smart Card, soft certificates) and making it easier to manage and update the credentials over time.

By setting the standard of digital identity credentials, Intesa Sanpaolo believes it can fundamentally change the culture and market perceptions around digital signatures. The bank is on a path to educate both internal and external customers on the ease and efficiency of using digital signature-enabled services.

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### Economic Benefits

- A lower Total Cost of Ownership (TCO)
- Automated solution with the help of a PKI protocol provides real-time validation of a certificate's status resulting in fewer fraud and breach incidents
- A model that supports and strengthens Intesa Sanpaolo's reputation as a highly trusted leading bank
- Unique legal framework for in country and cross-border activities avoids long disputes, adjudications and settlements
- Highest security possible, Intesa Sanpaolo can increase penetration of online customers, moving them to the virtual branch

### Strategic Benefits

- Flexible platform enabling growth of business through new applications and capabilities and foster STP internally as well as for customers
- Strong partnership and support to deal with current and future regulatory and legal issues (CBI2, BASEL II, SEPA)
- Wrap Identity around core bank services—moving beyond Identity as a stand-alone solution to an integrated financing and transaction business

### Strategic Benefits of the IdenTrust Approach

In addition to significant economic benefits, Intesa Sanpaolo anticipates a range of strategic benefits that would positively impact the bank's business and its prospects for growth and expansion moving forward:

- Flexible platform to launch new applications and capabilities that can supplant wet signature and foster STP internally as well as for customers (e.g. the European-wide initiative for e-Invoicing)
- Ability to wrap identity credentials into core bank services, moving beyond Identity as a stand-alone solution so that it becomes an integrated financing and transaction business to drive growth
- Opportunity to focus on financing solutions that require identity credentials as a standard (lending, e-invoicing, contracts) with the main benefits being security and STP (less paper, expedited processing, lower costs)
- An identity solution that can be reliably used within the Electronic Banking platform to promote secure online commerce, eliminating security breaches and thus the risk of losing clients or directing them to higher cost channels
- Faster time to market for new "Trusted" services since global governance is covered by IdenTrust solution
- By offering the highest security and privacy possible, Intesa Sanpaolo can increase penetration of online customers, moving them from the physical branch to the virtual one. This could translate into enormous economic gains.
- Easy accommodation for "White Label" customers who want to take the solution to market, offering Intesa Sanpaolo a potentially lucrative "sell through" market opportunity.

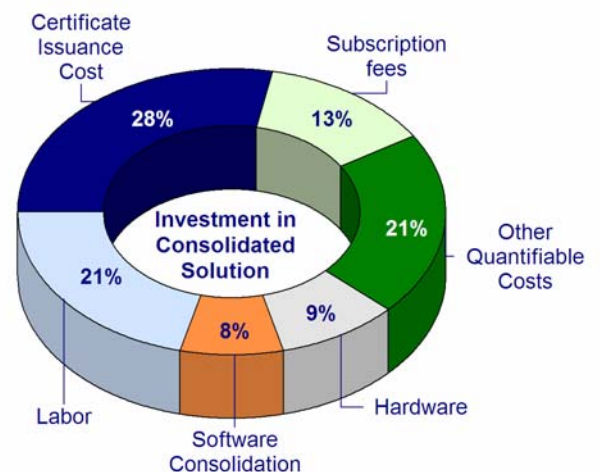
### Quantifying the new consolidated solution

#### Setting up the consolidated solution

17% of the overall investment cost is for setting up the consolidated infrastructure in software and hardware

#### Certificate Issuance

Based on the new integrated model, the cost for issuing digital certificates consists of 28% of the investment for a 5-year period. Cost per certificate decreases as Intesa Sanpaolo generates more certificate volume



#### Other Quantifiable Cost

Other quantifiable cost make up the other 21% which includes, Legal cost, Internal labor cost and Insurance.



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*“If we offer a solution that is fully automated and if we push clients to use an Electronic Banking platform with digital signature, that should push the market. STP can only happen with Digital Signature. “*

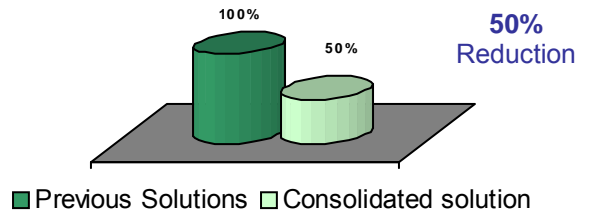
—Silvia Bianchi  
Head of Cash Management

### Operational Benefits: Operational Gain and Greater Efficiency

#### Operational Gain

Under the previous solution (for Intesa and Sanpaolo) the cost for software and hardware was more than double the new consolidated solution for Intesa Sanpaolo

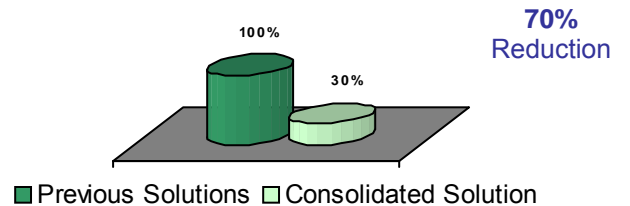
Infrastructure Cost (Software/Hardware)



#### Greater Efficiency

With the consolidated solution, Intesa Sanpaolo will realize a sizable savings in external consultation and decrease in administration expenses. Under the old approach both (Intesa and Sanpaolo) spent a sizable amount on external consultation fees and administering two solutions, whereas in this, need is decreasing substantially

External Consultation and Administration streamline



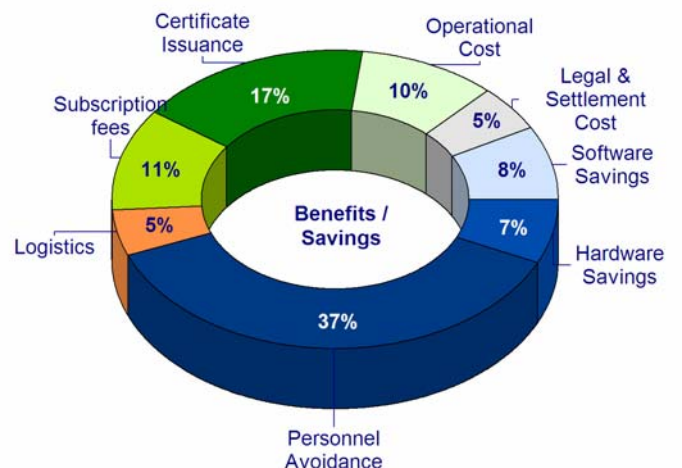
### Benefits Achieved from Intesa Sanpaolo's Investment in single, integrated solution

#### Software and Hardware Saved

15% of the calculated benefits will be derived from savings in the software and hardware used.

#### Streamline Administration and External Consultancy savings

Approximately 37% of the benefits will be derived from decreasing human resources for handling the two different Identity Management solutions.



#### Subscription fees and Operational Cost

Around 11% of the benefits will come from reduced subscription fees for identity credentials and new compliance rules while 10% of the benefits are from the operational cost.

### Technology Benefits

- Increased security to the highest level possible through multi factor authentication and not just to meet the basic compliance guidelines
- Uniform technology standards would assure technological interoperability and consistent deployment
- Open-standards, multi-factor platform would allow Intesa Sanpaolo to move to an approach that embraces all the latest standards
- A four corner solution decreases the likelihood of hacking and fraud

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**“ We’re not covered by the IdenTrust model for now but we are ready to adopt it. We want to go from a domestic idea to opening up to a global reality. “**

—Luca Leone  
Product Manager

### FINANCIAL MEASUREMENT EXPLAINED

#### ROI (Return on Investment)

- Quantifies how much profit or cost savings will be achieved as a result of the investment
- Discount any future costs/benefits by the Weighted Average Cost of Capital (WACC)
- WACC is an average cost of capital using a combination of equity and debt borrowing
- Demonstrates the overall value of an investment; e.g., is breakeven achieved (100%) or is positive value achieved(101%+; investment plus value)

#### WACC (Weighted Average Cost of Capital)

$$WACC = E/V \times Re + D/V \times Rd \times (1-Tc)$$

- Re = Cost of Equity
- Rd = Cost of Debt
- E = The market value of the firm's equity
- D = The market value of the firm's debt
- V = E + D
- E/V = Percentage of financing that is equity
- D/V = Percentage of financing that is debt
- Tc = The corporate tax rate

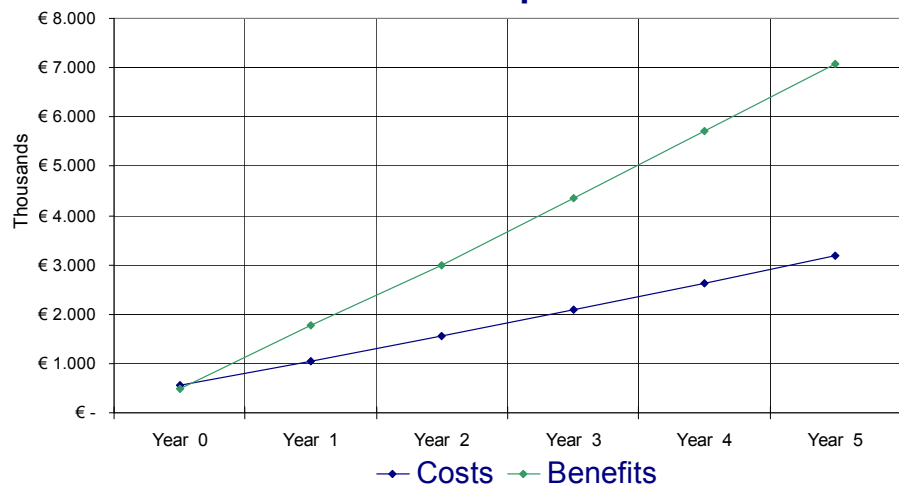
#### IRR (Internal Rate of Return)

- Discounted cash flow measure of valuation and investing. IRR is the true interest yield of an investment
- Net benefits restated as an interest rate
- IRR demonstrates how quickly an investment generates positive net benefits

## Summary of Intesa Sanpaolo's Return on Investment (ROI)

The low initial investment combined with the lower run rate costs result in an exceptional ROI of 223%, while providing Intesa Sanpaolo with greater efficiency, security and increased capability. Overall, Intesa Sanpaolo is in a position to harvest increased opportunities for its consolidated solution as illustrated by Intesa Sanpaolo's ability to achieve breakeven in year one.

### Break Even Analysis Intesa Sanpaolo



## Providing Innovative Services Backed by Digital Credentials

Among top managers at Intesa Sanpaolo, there is growing consensus that identity credentials should no longer be treated as a self-standing solution, but instead should be utilized as a powerful, integrated enabling tool that is embedded into all online commerce. The advantages inherent in this approach are numerous:

- Corporate clients and SMEs want ONE multi-banking digital identity solution to reach all their banks for secure and cost effective e-commerce
- Unique digital identity credentials eliminate the risk of not knowing the counterparties over the web and allow for accurate audit trails, also significantly decreasing fraud
- By consolidating into a single, unified Certification Authority for both Italian CNIPA certificates and globally with IdenTrust, Intesa Sanpaolo plans to operate in a technologically safe and legally recognized environment

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### About the Value Measurement Series

This case study is based on original research and analysis conducted by Thoughtware Worldwide, LLC., an independent research and information services firm. Thoughtware Worldwide's research included on-site interviews with members of Intesa Sanpaolo's management team and reviews of company financial and planning documents.

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For more information about this study, please visit [www.ThoughtwareWorldwide.com](http://www.ThoughtwareWorldwide.com)

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### Intesa Sanpaolo closes in on its vision with the IdenTrust solution

As one of the pioneering members of IdenTrust, Intesa Sanpaolo has a strong commitment to Identity Management and the role it plays in enabling secure, reliable electronic commerce with real time validation.

As the IdenTrust global community expands, Intesa Sanpaolo will be able to increase its benefits from the policy and legal components of the scheme; especially increasing cross-border activities in Europe with SEPA — all while maintaining high operability in-country with CBI2.

### Summary

With IdenTrust, Intesa Sanpaolo will be able to offer multi-national corporations the highest level of identity credentials using multi-factor authentication with real-time validation performed across all levels. Compared to other static environment procedures like Italy's in-country CNIPA standard, the IdenTrust solution ensures a far more sophisticated certificate-validation process using real time processing. Using the IdenTrust solution, Intesa Sanpaolo will actually lower its risk by leveraging IdenTrust's long track record of providing leading financial institutions with a globally vetted, market-tested solution that is flexible and forward-looking. Intesa Sanpaolo will also gain a full spectrum of trusted identity services via IdenTrust's partnerships with e-Banking solutions using digital credentials that are incorporated to enable straight through processing while providing a single solution that governs domestically and internationally, with non-repudiation for transactions processed through the IdenTrust platform.

In short, Intesa Sanpaolo has the opportunity to expand its global reach and recognition to serve the needs of a growing "virtual" community of global corporations who are seeking non-repudiation in a secure, interoperable solution backed by "Trust".