Unique Identity Services

Helping border agencies and citizen identification authorities improve service, speed, and security to achieve high performance

High performance. Delivered.
When the talented filmmaker, Alfred Hitchcock, created a world where the suave actor, Cary Grant, falls foul of a nail-biting case of mistaken identity in *North by Northwest*, the consequences of the plot gave birth to an iconic cinematic thriller. In today's world, despite the intervening half a century since the movie was made, unique identification is all too often far from straightforward.

With seven billion people on the planet and the rapid growth in international travel and trade, verifying identities at country borders is more demanding than ever. Globalization, combined with the proliferation of information, has increased the need for accurate identification of individuals and a more efficient, open movement of travelers and goods. Governments are faced with tough choices: how can they balance prevention and protection with access and inclusion?
Removing barriers

As trade and travelers increase and growing digitalization leads individuals to migrate to online transactions, the need to reliably, securely and efficiently identify the individual on a worldwide basis—and to make that identification a positive experience—becomes paramount.

Removing the barriers to travel and trade offers fresh opportunities for growth, not only for public service agencies to provide better services at a reduced cost, but also to gain insights into the nature of the transactions being conducted that prompt the additional benefits from inclusion and access.

From the individual's perspective a more transparent approach to identification exposes personal privacy concerns—without the "opt in" controls they enjoy with their social networking profiles. It is vital for businesses and governments to communicate the beneficial aspects of universal identification, reassuring citizens of their commitment to preserving the privacy of the individual. For example, lack of trust is bound to lead to reluctance to participate in formal identity programs.

As countries increase their trade participation, the nature of borders themselves is changing. Shared borders and economic zones encourage greater mobility of people and transactions, making the need for unique identity to verify eligibility progressively more important. In addition, the transformation from being known locally to doing business globally is affecting every aspect of citizens’ lives.

Businesses such as banking benefit by offering options such as branchless banking and mobile payment solutions that open up new channels for transferring funds and processing transactions to those who do not hold their own bank account. Inclusion is also enabled through the advent of communications technologies, so that the auditing and verifying of identities can be conducted securely—for instance, a leading communication solutions provider in Kenya, Safaricom, doubled its total number of subscribers in just two years, eliminating the traditional barriers to commerce. As citizens adapt to a globalized world where they are more mobile and accessible, a new generation of "digital citizens" is changing the dynamic of the citizen-to-government relationship too. In a pulse survey conducted by Accenture, 51 percent of respondents believe that the ability to interact digitally with government would encourage them to be more engaged with government, while 49 percent say that digital interactions would make the government more transparent.

Across the world, being able to establish and verify an identity is not only an attractive proposition but also a pragmatic one. Using a network of shared information to confirm an individual’s "unique identity"—which helps answer the fundamental question "Who are you?"—is an essential prerequisite to realizing tangible benefits, such as offering new services to citizens and facilitating international trade.

Indeed, Accenture believes that public service agencies are facing an unprecedented opportunity to achieve the best of all worlds—the ability to enable faster, more convenient travel for citizens, to facilitate better access to services and benefits, to gain greater transparency of public services and to protect citizens and the associated technical, financial or physical infrastructures.
Since the world is getting both larger (in terms of population) and smaller (in that technology eases communications and physical barriers), border management and public service agencies need to do more than simply rely on smart technologies. Accenture believes these agencies must find ways to address the “big picture,” drawing on the latest biometrics and biographic information, effectively analyzing the wealth of available data, improving their decision making and linking trusted information sources for improved intelligence and control.
The case for unique identity

While many of us identify ourselves by what we do, we all accept that there are many layers to our identities. Whether we see ourselves as a work colleague, father, weekend soccer coach, tax payer, consumer or president of a local society, there are multiple dynamic dimensions that make up the person we are and the life we are living. With social media channels, identity factors multiply; from mobile devices to Facebook pages, digital identities can not only provide positive additional data sources for governments and agencies, but also serve to obscure the universal story of the individual and lead to inconsistencies in the process of validation.

A person-centric view of the individual can enable public service agencies to find new ways to make more informed decisions faster. Biometrics, biographical data and agency encounters allow enhanced data and information sharing at application, infrastructure and data element levels. To achieve this balanced view, unique identity solutions link data from various sources and trusted encounters or transactions to create a collaborative, data-sharing model. By using this shared content and applying simple analytics, public service agencies can draw a complete picture of the individual and gain insights that lead to better assessments of risk and eligibility. When compiling a person’s profile from multiple data sources, trust, speed and governance are essential factors. Public service agencies can benefit from today’s fast networks, lightweight messaging architectures (Web services) and centralized business rules engines to access distributed databases and systems. In this way, a hub of information can be collated through rapid, easier federated searches that are then relayed to those that really need it, when they need it.

In a world where fraud and identity theft is growing, public service agencies are seeking rigorous reassurance around identification. Unique identity leverages data about our identity from multiple sources. By tracking key events, changes and associations of identity data for an individual, border agencies and citizen identification authorities can create an emerging and current picture of a person’s identity. Accenture calls this an “emergent identity.” Intrinsically linked to a person-centric approach, Accenture believes this emergent identity and trust is a means to gain the reassurance that border agencies and identification authorities need.
Let’s imagine our visitor, Joe, arrives at Heathrow airport for the first time. All the border agencies know about Joe is that he has a valid passport containing a photograph that bears a similarity to the person in front of them; in other words, although an identity is established for him, there is an element of trust that seeing is believing. The border management agency staff needs to decide—is there a risk in allowing Joe to enter the country? Is there a reason why Joe may not be eligible to be here? With more detailed information, the border staff could have greater confidence they are making the right decision.

So let us steer Joe toward the electronic gates at the airport, to introduce biometrics into the identification process. Here, the border agency staff can more easily and accurately verify and validate Joe’s identity. Automatically scanning Joe’s face with facial recognition software and matching it to his passport, the biometric system allows information about a potential criminal history to be accessed from multiple databases and records, helping to confirm Joe’s background.

Let’s suppose that Joe has a busy schedule and, due a family health emergency, he inadvertently overstayed the terms of his 90-day tourist visa on his last visit to the UK. Using an emergent identity approach which aggregates interactions, encounters and transactions from many different sources, the border and immigration authorities see a flag for derogatory information associated with Joe’s online history. Refusing Joe entry at the main passport gate, he is taken out of the main queue and referred to a secondary officer.

This secondary border officer is able to access an electronic dossier that provides more detail on the derogatory information and Joe is asked to comment on the anomaly. Joe tells the secondary officer about the personal circumstances behind his previous overstay. The officer makes a judgment call that Joe is not an immigration violator and updates the record in the border management system to indicate that the matter is settled.

Joe will not be asked to substantiate this particular derogatory information entry again and can more easily enter the country next time around. By having a clearer definition of the emergent identity of Joe, border guards have been able to build a more complete picture without inconveniencing other travelers. With border agency staff and law enforcement agencies working more effectively together, the need for secondary referrals is reduced and decision making around the eligibility of those entering the country becomes more accurate.

As we can see, unique identity evolves beyond the here and now to a series of encounters that build insight into the individual—from establishing and verifying a unique identity, to linking and analyzing relevant information and then evaluating risk and eligibility. It is these insights which, in turn, offer greater agility to the agencies responsible for border and identity management, enabling them to move from a reactive to proactive approach.

Does emergent identity work? How can trusted encounters and transactions effectively bring together the pieces of an identity puzzle?
US-VISIT enhances security and reduces immigration fraud

Accenture is supporting the United States Visitor and Immigrant Status Indicator Technology (US-VISIT) program to implement a virtual border, which aims to extend immigration and border management to points within the physical borders of the United States and beyond. Decision makers are then better able to distinguish security risks from illegitimate individuals, stop them before they reach the United States or identify them while they are inside the United States. Accenture assumed operational responsibility for the legacy Automated Biometric Identification System (IDENT) in 2004. Since then, Accenture has helped the U.S. Department of Homeland Security transform the system into one of the largest biometrics-based programs in the world designed to record the entry and exit of non-US citizens to the United States, verifying the identity of incoming and departing visitors and confirming compliance with visa and immigration policies.

US-VISIT: An Agile Response to Evolving Needs

Facts around the world’s largest biometric database include:
- Handled more than 214 million identifications and verifications to date
- Returns ID matches in less than 10 seconds
- Cost 8 percent less than originally budgeted
- Performs searches across 140 million unique identities in seconds
- Increased the number of daily transitions from 75,000 to 400,000
- An automated 10-fingerprint system has 45,000 watch list matches that 2-print could not catch.

Every day US-VISIT identifies:
- 5,000 illegal visitors
- 2,500 immigration violations
- 50 wanted criminals
- 5 murderers

BAA/UK BA automated border clearance facilitates travel

In December 2008, the United Kingdom Border Agency and BAA opened a six-month trial of automated clearance gates at London Stansted airport. The Accenture-built system enables adult European Economic Area citizens who hold e-passports to enter the United Kingdom using one of six automated gates. At each gate, the system takes a photograph of the passenger’s face and compares it biometrically with the photo held in the e-passport chip; if these match, and other checks are satisfactory, the gate opens. This offers an efficient selfservice clearance system at the entry port, designed to process low-risk passengers quickly and free up immigration officers for more challenging intelligence-led border control activities.

Enhance security and protect privacy

Accenture has delivered successful operational unique identity solutions on a national scale.
Promote inclusion and reduce fraud

Accenture has handled some of the largest unique identity systems in the world, affecting more than 260 million identities across the globe.

Unique ID Authority of India Aadhaar program protects privacy

The Unique Identification Authority of India’s (UIDAI) Aadhaar program will provide a unique identification number for the nation’s 1.2 billion citizens. The aim is to use the program as an identification framework for various government schemes and provide financial inclusion for socially disadvantaged citizens.

The Aadhaar program is being rolled out over the next decade and aims to process hundreds of thousands of identity validation requests each second against the world’s largest database of individuals. The UID uses multiple types of biometric data for identification, including retina scans, fingerprints for all 10 fingers, and multiple facial images.

Since 2011, around 170 million citizens have been enrolled, making it the world’s largest biometrics-based database. The system is processing around 1 million enrolments every day at its peak, using the services of three different biometric service providers—including an Accenture led consortium.

Securing citizen identity management for the Portuguese Agency for Public Reform (ANA)

Accenture assisted the Portuguese government with an innovative program to replace five different forms of identification with a single national “citizen card” that promotes safer borders, enhances government services and facilitates more secure commercial transactions—while protecting privacy.

The AMA turned to Accenture for global program management, as well as for technology and integration expertise. Accenture worked on the implementation of an interoperability framework that allows identification across all the systems, while personal data remains within the various ministries.

The citizen card uses tokens—single use passwords—that are intelligible only inside their own systems and can be used across multiple channels. For Internet-based transactions involving government services or online purchases, a citizen relies on the card’s authentication or digital signature certificates. Over the telephone, people can use a password or token to identify themselves and receive fast and ready access to information and services. The card is also a physical document that can be presented in person at retailers or government agencies.

Portugal’s new citizen card was successfully piloted with 16,000 people and, by the end of 2011, six million people had received the single card. Portugal is now leading all 32 European Union-measured countries in the provision of online public services.

Promote inclusion and reduce fraud: Enables access and accurate entitlement to new benefits and services, encourages commerce and promotes financial inclusion.

Where are the benefits?

Applied holistically, unique identity services can address issues of inclusion, access, security and consumerism. Today, many policy makers, corporate leaders and development experts are realizing that collaborating to create a data ecosystem can not only serve the public good, but also help border and immigration agencies to achieve business value.
Why Accenture?

Operating worldwide, Accenture has a solid track record of delivery, working with more than 100 border management agencies, police, courts and other public safety and justice organizations to bring a differentiated perspective to unique identity services.

How are we different? We innovatively combine people, process and technology to promote economic stability and growth. Harvesting our extensive experience, we are able to provide a framework from which to tailor solutions that address critical border and identity management challenges.

Technology

Access tools and methodologies
Whether undertaking a technology gap assessment, determining a unique identity reference model or introducing automated border clearance, Accenture has experienced teams with tried and tested tools and techniques.

Hone in on the individual
Agencies need technological solutions that focus on person-centric data to determine the emergent identity. Accenture views the interaction between a border management agency or identification authority and the citizen applying for benefits as being a customer interaction. By treating travelers as customers, all the principles of good customer relationship management apply. Using CRM expertise as a tool for identity and case management, we can help agencies more readily streamline border interactions, making them more favorable for the traveler and more effective for the agency. Accenture is a recognized leader in Customer Relationship Management (CRM), both in execution and strategic thought leadership. By combining our CRM skills and our experience in identity analytics and resolution we can provide a market leading solution for border and identity management.

Integrate and innovate
Border management agencies can benefit from device abstraction, Web service integration and rules engines to develop an effective watchlist. Accenture brings experience in large-scale biometric and biographic matching, multi-modal biographic and biometric matching, fuzzy matching and score-level fusion and multiple biometric algorithms for superior performance. Accenture’s implementations of unique identity leverage cloud and grid computing techniques to achieve unprecedented scalability, flexibility and reliability.

Consulting

Determine where you are going and how to get there
A formal diagnostic assessment and gap analysis are natural precursors to determining the correct way forward. Accenture offers benchmarking to map targets and develops a roadmap to outline the path to building future business capabilities.

Plan to transform
Whether seeking an incremental approach or a wider program of transformational activities, Accenture helps define strategic business improvement initiatives, develop a business case and document the steps to achieve change.

Set and monitor goals
In tough times, agencies need to consider creative ways to achieve process efficiencies and reduce operations expenditure. Accenture recommends using advanced analytics, modelling and simulation to great forecast, plan, deploy and manage resources. Alternatively, we offer border analytics as a shared service across an organization or agency.

Outsourcing

Improve authentication and identity resolution
Achieve "Identity as a Service" with biometric-based authentication to help manage identity related de-duplication and verification requests from various entities. Accenture provides credentialing and identity management as a managed service.

Employ business process outsourcing
Define and establish process metrics and controls by outsourcing key business processes. Accenture can help capture enrollment data into the system (onboarding), validate data and verify authenticity (onboarding), provide de-duplication services or perform fraud analytics.

Enhance infrastructure performance
Go for growth by introducing an open and scalable architecture. Accenture can help organizations match performance and redundancy through application or infrastructure outsourcing, benchmarking and managing data quality for continuous improvement or providing a virtual operations center for total situational awareness.
Accenture Travel Security Services

Accenture has developed a biometric registered traveler solution that automates identity verification—improving security, simplifying travel processes and driving high performance. Based on automated, biometric-based identification, the solution allows passengers to be identified securely and authoritatively, opening the way for automated and integrated processes.

**Checklist for change**

Elements to remember when considering unique identity management:

**It’s not all about the technology.**
Linking software and systems is important but not the only success factor. Accenture focuses not only on the technology but also on process design to make it easier and faster for the individual, and more effective and secure for border management executives.

**Make the best use of what you have.**
Successful identification relies on linking historical data about the individual. Accenture helps evaluate existing data using a Service-oriented Architecture to aggregate data from various sources.

**Knowledge is power.**
Analytic results help facilitate decision making. Accenture looks to enhance the knowledge of officers to aid create a more powerful picture and improve the ability to resolve border issues.

**Where intelligence meets insight**

In the modern world, proving who you are has its own rewards, both from convenience or commercial perspectives. Accenture believes we are on the periphery of major change with respect to the business of unique identity, even if the specifics around how we tackle it remain uncertain. What is clear is that we need to take bold steps beyond technological solutions.

Unique identity challenges many different aspects of our lives. Are public service organizations agile enough to respond? Is the spirit of collaboration alive and well? Could the onslaught of “big data” be tamed to work harder for organizations and individuals? What is the impact on personal privacy?

Going forward, the ability to share all available data—fusing biometrics with biographic and contextual data, bringing together all the available information about a person, whether explicitly supplied or implicitly deduced—could open up new efficiencies. In other words, public service agencies could benefit from an inclusive view and more collaborative information-sharing to help redress the balance between certainty and responsiveness in identity matters—and, among other benefits, avoid future cases of mistaken identity and its consequences.
About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 249,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world’s most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US$25.5 billion for the fiscal year ended Aug. 31, 2011. Its home page is www.accenture.com.

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