Accenture Border Services Technology Vision 2016

People First: The Importance of People in Border Services in the Digital Age
The Accenture annual Technology Vision identifies the emerging IT developments that will have the greatest impact on people, businesses, government agencies, and other organizations in the next few years.
The Accenture annual Technology Vision identifies the emerging IT developments that will have the greatest impact on people, businesses, government agencies, and other organizations in the next few years. We are in the midst of a major technology revolution—specifically, a digital revolution. Digital is influencing all the world’s economies—the United States alone has a digital economy valued at around US$5.9 trillion, which equates to 33 percent of its gross domestic product.

We are also seeing an important new shift as the technology revolution begins to put people first. To put it simply, as businesses become digital, their people and cultures must become digital, too.

As technology advancements continue to accelerate at an unprecedented rate, dramatically disrupting the workforce, organizations that both utilize these technologies and enable their stakeholders to do more with them will have unmatched capabilities. As a result, these organizations will be better positioned to continuously create fresh ideas, increase efficiencies, develop cutting-edge products and services, and disrupt the status quo.

So what are the highlights for those working in the border services ecosystem (immigration, transportation, borders, and customs)? How will these changes help them to become the digital border agency of the future?
Immense volumes of data are now available to border agencies, and new technology innovations in the areas of analytics, artificial intelligence (AI) and systems are getting smarter. Weaving the data, people, and systems together creates an opportunity to develop solutions that will drive new levels of operational efficiency, provide border agencies with an ability to react to the changing nature of travel and trade, and help them understand and detect illicit behaviors in real time. Border agencies will be better equipped to react to a wide range of events—from health issues such as the Zika outbreak, to predicting illicit cross-border trade activity, to coping with changing legislative environments that result in new trade agreements and immigration policies.

Ultimately, these intelligent systems will not only enhance overall border integrity, but also initiate seamless customer experiences and a new level of predictive intelligence. By introducing more automation in tasks that are considered repetitive, dangerous, or too complex for human actors, staff can be better equipped with the right tools and information. In this way, border agencies can optimize the value added activities performed by their staff and focus on those people and things that warrant additional scrutiny.

### Trend 1: Intelligent Automation
The co-worker for the digital age

Examples of intelligent automation:

- A European police force used a Face-in-the-Crowd application and back-end matching (both part of Accenture’s Unique Identity Services Platform) to rapidly trial face capture, matching, and mobile alerting functionality, to inform their teams of the appearance of persons of interest.
Trend 2: Liquid Workforce

Building the workforce for today’s digital demands

As agencies being to adapt digital technologies into their day-to-day operations, they must also consider their staff. With increasing demands for “always on” and “instant” services from their customers, border agencies must leverage technology and the workforce to achieves new levels of operational efficiency:

- Agencies must be able to exploit technology to enable workforce transformation—from evolving skillsets, adapting training, and updating recruitment practices—to match the needs of a digital border agency of the future.
- Border agency workforces need to not only learn how to use new digital tools, but also learn how digital technologies impact their businesses, affect risk and security, and, ultimately, influence revenue streams and their operations.

Agencies that create highly adaptable and change-ready environments for their staff will reap the benefits of a flexible and competitive workforce. The ability to dynamically alter thresholds, based on risk, or alter inspection resources, based on traveler or cargo profiles and volumes, are examples of change-ready environments. Agencies that enable immersive integration between digital technology and staff in modern dynamic environments, will be able to embrace the strengths of both by creating a more liquid workforce.

Examples of a liquid workforce:

- Delta Airlines embraced gamification, developing mini games called “Ready, Set, Jet”, using social learning to help their call-center employees do more training and learn more. This approach led to Delta employees doing four years’ worth of training in a single year.
The days of border agencies procuring “standalone” technology systems that address only a single facet of processing (such as passport verification, video surveillance, biometric verification, declaration processing, tariffs and quotas and so on) are rapidly being consigned to the past. This approach only serves to silo valuable data and creates significant operations and maintenance expenses. To deliver a seamless experience at the border, agencies must evolve their focus from creating better applications to building an integrated digital platform inclusive of people, processes, and technology. The platform will serve as a new blueprint for how agencies build, connect, and deliver applications and services that address specific mission challenges, without being locked into particular vendors and “black box” solutions.

By building an integrated digital platform, a variety of stakeholders, including passengers, other agencies (such as port authorities), other governments, subject matter experts (for example, freight forwarders, or logistics experts), and even third-party developers, can connect themselves with the border agency, build additional products and value-added services, and co-create value. Enabling this capability forms the essence of “platform thinking.”

An example of the platform economy:

- Australia’s recent proof of concept for its border clearance system established one platform where workload forecasting, system maintenance, passenger watch-listing, and real-time threat alerts were all connected. The flow of data among these functions informed budget analysts about workforce demands for a year or more in the future, while also providing real-time alerts to the nearest officer about a potential threat within his or her proximity.

In addition to providing seamless experiences at the border through creating an open integrated platform enabled with digital technologies, agencies will have a single holistic view of their customers as they interact with the agency. Having this holistic view will not only enable better risk management, but also enable agencies to provide their customers with better experiences and services the next time they interact with the border.
Trend 4: Predictable Disruption
Choosing digital ecosystems for the next wave of change

As digital platforms and ecosystems evolve, they create the foundation for the next wave of enterprise disruptions. With access to previously silo'ed data sets, pervasive adoption of digital technologies, and open collaboration with a wider range of stakeholders, border agencies can create value in new ways while delivering efficient services. This predictable disruption is becoming common place in the private sector, for example, Uber is a taxi company that owns no vehicles, and is now branching out into other sectors such as logistics, or nurses on demand.

Agencies that are not only able to adapt to the future, but also that can effectively pre-empt and even become early adopters or enablers of these disruptors, will have a substantial competitive advantage. For example, Singapore has enabled its TradeXchange platform to become a center of B2B commerce, where traders, logistics providers, and other businesses can use the platform for their benefit. This kind of enablement creates an environment where predictable disruption is seeded and where both the agency and the trade can benefit from any co-created value. Border agencies that are forward thinking can proactively predict, take advantage of, and even enable enterprise disruptions.

Examples of predictable disruption:

• Singapore Customs developed a TradeXchange platform for B2B transactions, creating an environment where business-to-business (B2B) and business-to-government (B2G) interactions and data can be used to create new value-added services for both the agency and businesses.
Trend 5: Digital Trust
Stronger customer relationships through ethics and security

As agencies and their stakeholders begin to adapt digital technologies more widely, trust becomes an essential ingredient of the digital border agency of the future. Individuals need to trust the agency and the agency needs to be able to trust individuals. Trust dictates everything from identity, access, user roles, individual rights, and personalized user experiences. Advances in technology have not only changed how business is conducted in a digital age, but also have redefined what trust means for a digital border agency; for example, moving from manual, at-the-border, examination of paper identification to secure facilitation through advanced processing of information of cargo, conveyances, and people, along with biometric identification, digital manifests, and digital payments and so on. Digital trust at the border is currently established from a range of sources, such as electronic travel authorization (ETA), visa issuance (eVisa), registered traveler programs, trusted traveler and trader programs, Advanced Passenger Information (API), Passenger Name Records (PNR), electronic declaration (Imports, Exports, Transits, Manifests), previous encounters, self-assertions, bi- and multi-lateral data sharing agreements, and publicly available information. Trust is also enhanced with each positive encounter at the border. Trust needs to be embedded in the end-to-end management of passengers and trade, into the supply chain life cycle, evident in both physical and digital elements, and also part of electronic or manual interactions at the border. This approach includes the IT infrastructure itself; what assurances do agencies have that technology being introduced (or technology that exists today) is not vulnerable to cyber threats, both external and internal? Newer technologies such as blockchain are enabling the private sector to reach new levels of digital trust of individuals and their online transactions. It is only a matter of time before these technologies are adopted more widely in the public sector. For border agencies, being transparent about trust, and being open about how it applies to their customers, affords agencies the opportunity to educate their customers.

Examples of digital trust;

- The United Nations High Commissioner for Refugees (UNHCR) is rolling out a breakthrough Biometric Identity Management system (BIMS) – using Accenture’s Unique Identity Services Platform – that rapidly registers, de-duplicates and verifies the identities of refugees, ensuring that the right people receive assistance where and when they need it.
Agencies can have more open relationships with each customer, and guarantee a level of trust, service, and personalized border experience, as long as:

- the customer is willing to share personal data
- the customer is informed about what data is being collected, by whom, for how long, for what purpose, how it will be shared, and what redress options are available for remediation of errors.

Based on the amount of personal data being shared by the customer, agencies can often provide better, more streamlined experiences at the border; for example, giving access to trusted passenger or trade lanes, where there are few or no formalities.

To become the digital border agency of the future, agencies should embrace these five technology vision trends. Leading agencies will not only be better placed to adapt to these changes, but also exercise both their industry expertise and digital capabilities. In short, border agencies have an opportunity to be in the driving seat for the next generation of products, services, and business models within the border services ecosystem.
About the Technology Vision Research

The research process began during 2015 with gathering inputs from the Technology Vision External Advisory Board, a group comprising more than two dozen experienced individuals from the public and private sectors, academia, venture capital, and entrepreneurial companies. The Technology Vision team conducted interviews with technology luminaries and industry experts, as well as with nearly 100 Accenture business leaders.

The team also tapped into the vast pool of knowledge and innovative ideas from professionals across Accenture, using our collaboration technologies and a crowdsourcing approach to run an online contest to uncover the most interesting emerging technology themes. More than 3,200 participants actively engaged in the contest, contributing valuable ideas and voting on others’ inputs.

As a shortlist of themes emerged from the research process, the Technology Vision team reconvened its advisory board. The board’s workshop, involving a series of “deep-dive” sessions with Accenture leadership and external subject-matter experts, validated and further refined the themes.

About Delivering Public Service for the Future

What does it take to deliver public service for the future? Public service leaders must embrace four structural shifts—advancing toward personalized services, insight-driven operations, a public entrepreneurship mind-set and a cross-agency commitment to mission productivity. By making these shifts, leaders can support flourishing societies, safe, secure further refined the themes.

If you would like to know more about the Accenture Technology Vision visit www.accenture.com/technologyvision or join the conversation #techvision2016

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About Accenture

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