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Borders 2030: From vision to reality

Trends shaping the future of border services

Border agencies are continually challenged to adapt to the social, political, cultural and economic forces that shape what they do and how they do it. They serve stakeholders across trade, security, immigration and tourism mandates under unyielding pressure to provide excellent services and facilitate the safe and rapid transit of people and goods.

Accenture recently conducted global research with travelers and traders to better understand challenges and opportunities for borders agencies in the years ahead.

Seventy-five percent of traders say customs agencies are helpful. They are satisfied with understanding entry/exit requirements (82%), the export/import declaration process (83%) and paying export/import duties, including VAT (82%), according to Accenture research.[1] Also, travelers tell us they are satisfied with recent border security (81%), customs (77%) and visa and immigration (76%) experiences.[2]

They have had to meet rapidly expanding expectations with finite resources—and in the face of disruptive forces that dramatically and unpredictably impacted the flow of people and goods. Agencies have had to fulfill security and revenue generation missions despite the trifecta of a prolonged global health crisis, upended global supply chains and the most damaging cyberattacks in history.

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The export/import declaration process (83%)

Paying export/import duties, including VAT (82%)

Travelers are satisfied with:

Recent border security experiences (81%)

Customs experiences (77%)

Visa and immigration experiences (76%)

But here's the reality

Today's landscape is more dynamic and unpredictable than ever

New demands related to the lightning-fast pace of change continue to strain resources—in some cases, almost to the breaking point. The service improvements that border agencies made during the pandemic won't be enough to meet the demands of the future. About one-third of people plan to travel more internationally than they did before the pandemic.[3] The displacement of people due to extreme weather events is likely to increase as climate change worsens.[4] Global trade is likely to become more unstable due to macroeconomic trends as well as an increasing focus on protectionism and changing requirements. Considering this, it's no surprise that 85% of importers and exporters expect more volatility in the next three years compared to the last three.[5]

Pragmatic border leaders understand that it is an era of compressed transformation. They know they must evolve faster to lead with impact—and prepare for inevitable disruptions of all types. Many leaders have already begun to evolve their agencies. Last year, 85% told us that they would revise their organization's purpose and vision statement within 12 months.[6] Travelers too, are ready for change. More than three-quarters expect international border processes will look dramatically different in 2030.[7]

Border leaders don't have a crystal ball. But they do have many pressing questions about the future—and the best ways to prepare for it. How will traders and travelers want to engage? What opportunities will there be to deliver user-friendly, frictionless and fast experiences while upholding border protection and revenue collection? What technologies and processes will improve the security of people and products crossing the border? How will workforce skills and responsibilities change? How will the purpose of border agencies evolve?

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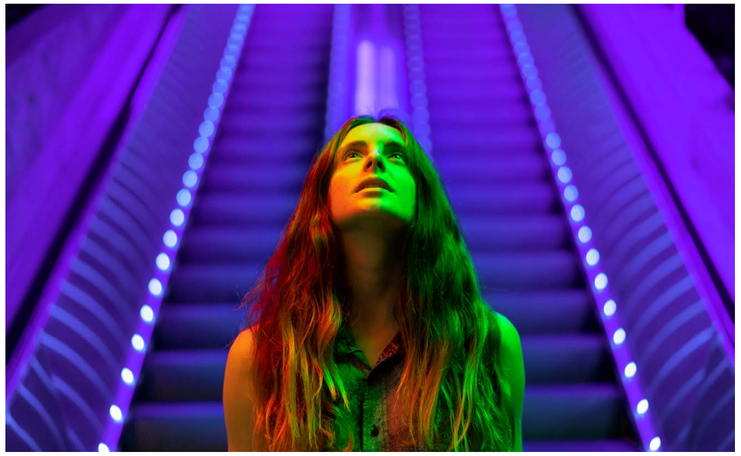
The future waits for no one

Fast forward to 2030

To explore these questions, we drew on our industry knowledge and broad understanding of disruption to create a vision for border services in 2030. This vision is grounded in insights from 5,000 international travelers, 1,000 importers and exporters, nearly 500 global border agency workers, more than 50 of our border experts and five of the world's top futurists.[8]

Three trends stand out. They are bound together by what's core to border agencies—human activity. Borders are places where we meet human needs and desires for traveling, seeking safety and security, and even discovering ourselves. These trends challenge agencies to rethink what they do and how they do it in profoundly human terms.

Border agencies that adapt and respond to these trends may be well positioned to lead with impact—operating effective and frictionless borders while enabling prosperity and security.



Trend 01

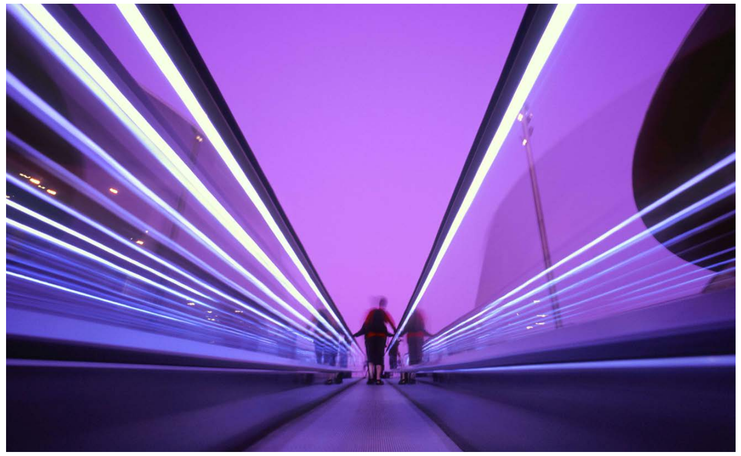
Frictionless by design

Border experiences are more frictionless and fully centered on satisfying human needs and desires for a more secure, faster and responsive journey.

Trend 02

From trust to truth

Border agents have near certainty that people and goods that arrive at the border are who and what they say they are.



Trend 03

Virtual frontiers

The metaverse is a familiar destination—a place that people visit regularly to connect, learn, make purchases and conduct business.

Trend 01

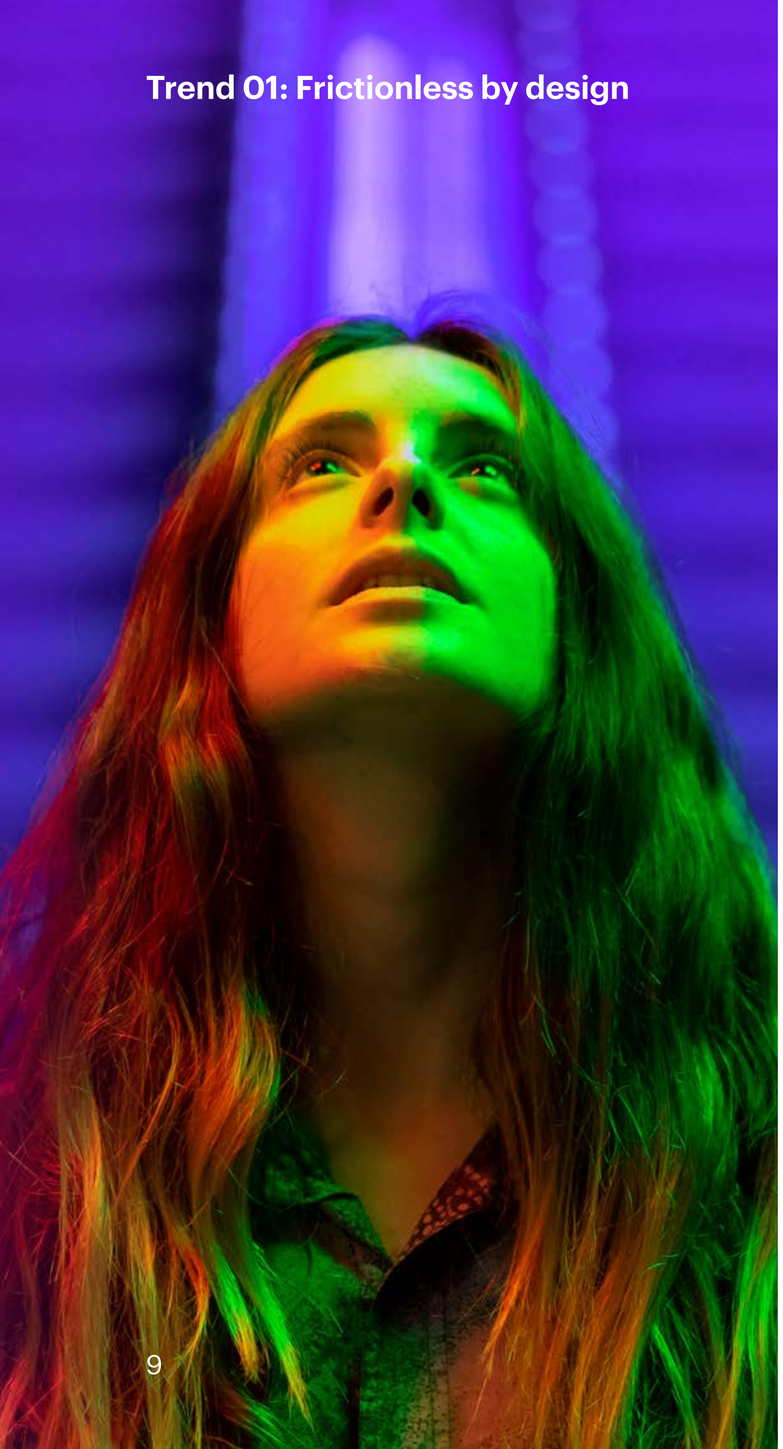
Frictionless by design

Frictionless by design is developing better experiences grounded in serving fundamental human needs and desires. It can happen by combining a deep understanding of stakeholders with technologies that make the art of the possible—possible. Think of it as meeting the mission with a laser focus on customer service. The goal is not mind-blowing experiences. It is delivering experiences that meet on users' desires for clarity, consistency, simplicity and predictability when interacting with border agencies.

Borders are national assets—gateways to economic activity, cultural exchange and shared understanding. But when people and goods cross borders today, the process can be cumbersome. And difficult border experiences often lead to lost revenue. Some people and businesses go elsewhere. Fifty-seven percent of international travelers tell us that they select their travel or layover destination based on whether they think the experience with border security will be seamless and easy. And 28% have changed their travel or layover destination because they anticipated a difficult border experience.[9] Importers and exporters act similarly—17% stopped contracts due to a poor experience with customs processes.[10]

The vision for tomorrow

By 2030, we imagine that border experiences are more frictionless and fully centered on satisfying human needs and desires for a more secure, faster and responsive journey.



Technology has the power to drive a massive shift in experience at the border, helping agencies focus on both compliance and experience. Think of it as a fundamental and continuous rethinking of border interactions in a technology landscape we can't yet fully imagine. Given the pace of digital advances, in 2030, smartphones could have embedded holographic projectors, people could be working full-time in metaverse workspaces and supercomputers could have surpassed the human brain's processing power.[11] Just imagine the possibilities for border experiences in a world like this.

Fast forward to 2030. Most transactions that travelers and traders must complete themselves today are preempted in the future as permission to travel is automated and granted ahead of time nearly instantaneously. It's not that compliance disappears. It's that the barriers that make it hard to comply are gone. That's everything from long lines to confusion due to language barriers.

With automated security checks, health checks and customs/duty payments happening before arrival, the physical border crossing is a welcoming and orienting space for international destinations.

Borders agencies often use automation, artificial intelligence (AI), cloud, data and analytics, machine learning, digital identity and blockchain technologies to join up all the pieces of the travel and trade journey, working more collaboratively and creatively across the ecosystem. Processing and validation of people and goods is integrated across multiple agencies to address identity verification, taxes, health and compliance. In fact, the dynamic and networked trade platforms that some countries are beginning to build to aid trade and compliance are an important step toward this future. Also, the physical checkpoints that do exist are dynamically configured and resourced to accommodate different levels of need.

What to think about today?

It's time to start building the future border workforce. Border agencies should assess workforce skills now to understand how ready they are to enable this experience shift. New skills and significant cultural changes are both essential.

Today, agents ensure compliance and uphold regulations. In 2030, border workforces will need to balance enforcement with an enhanced customer service ethos. Rather than build experiences based on generic personas, they will need to center their efforts on trader and traveler mindsets at different phases of the journey.

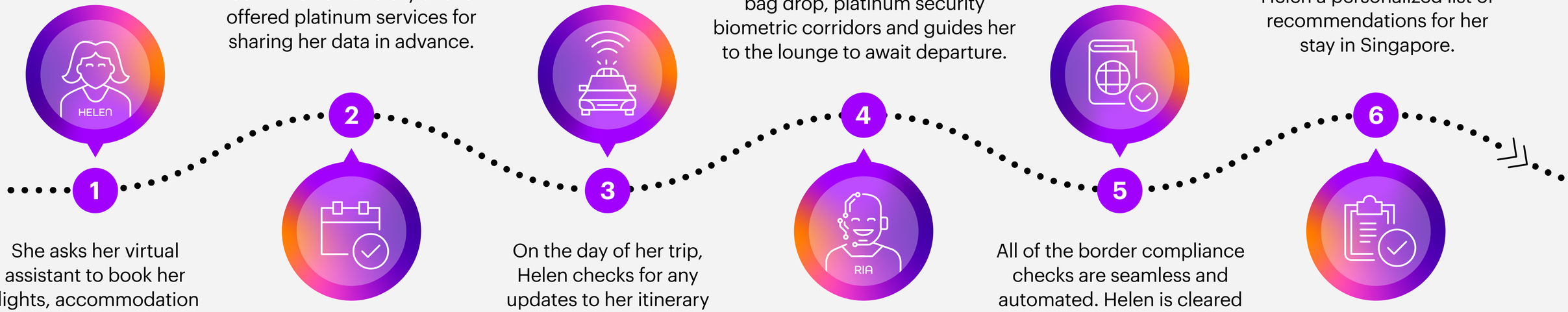
They will need to serve a largely digitally fluent population, interpreting data, training AI and designing personalized, digital experiences that meet stakeholders' needs and desires.

Doing this requires new skillsets and roles—from psychologists and sociologists to digital strategists, data scientists and designers. It also takes new approaches to recruitment and learning. This shift will mean competing with (and learning from) the private sector and other government agencies for highly sought-after skills in a very competitive talent landscape. What's more, executive leaders will need to sharpen their partnership skills, building relationships beyond traditional agency boundaries.

> As key as digital technology is to streamlining border experiences, travelers still appreciate the human touch. In fact, 60% still want some form of human interactions at the border in the future.[12]

Imagine it's 2030...

Meet Helen, an entrepreneur living in New York City in 2030.
Her best friend is getting married in Singapore next month.



1. She asks her virtual assistant to book her flights, accommodation and transfers using her saved preferences.
2. She selects the best options, confirms her itinerary and is offered platinum services for sharing her data in advance.
3. On the day of her trip, Helen checks for any updates to her itinerary during her auto-taxi journey to the spaceport.
4. Her travel concierge—an intelligent robot named RIA—greets Helen at her designated drop off zone. RIA helps her with self-check in, bag drop, platinum security biometric corridors and guides her to the lounge to await departure.
5. All of the border compliance checks are seamless and automated. Helen is cleared for travel and doesn't need to engage with border agents.
6. As she waits in the lounge to board her flight, RIA sends Helen a personalized list of recommendations for her stay in Singapore.

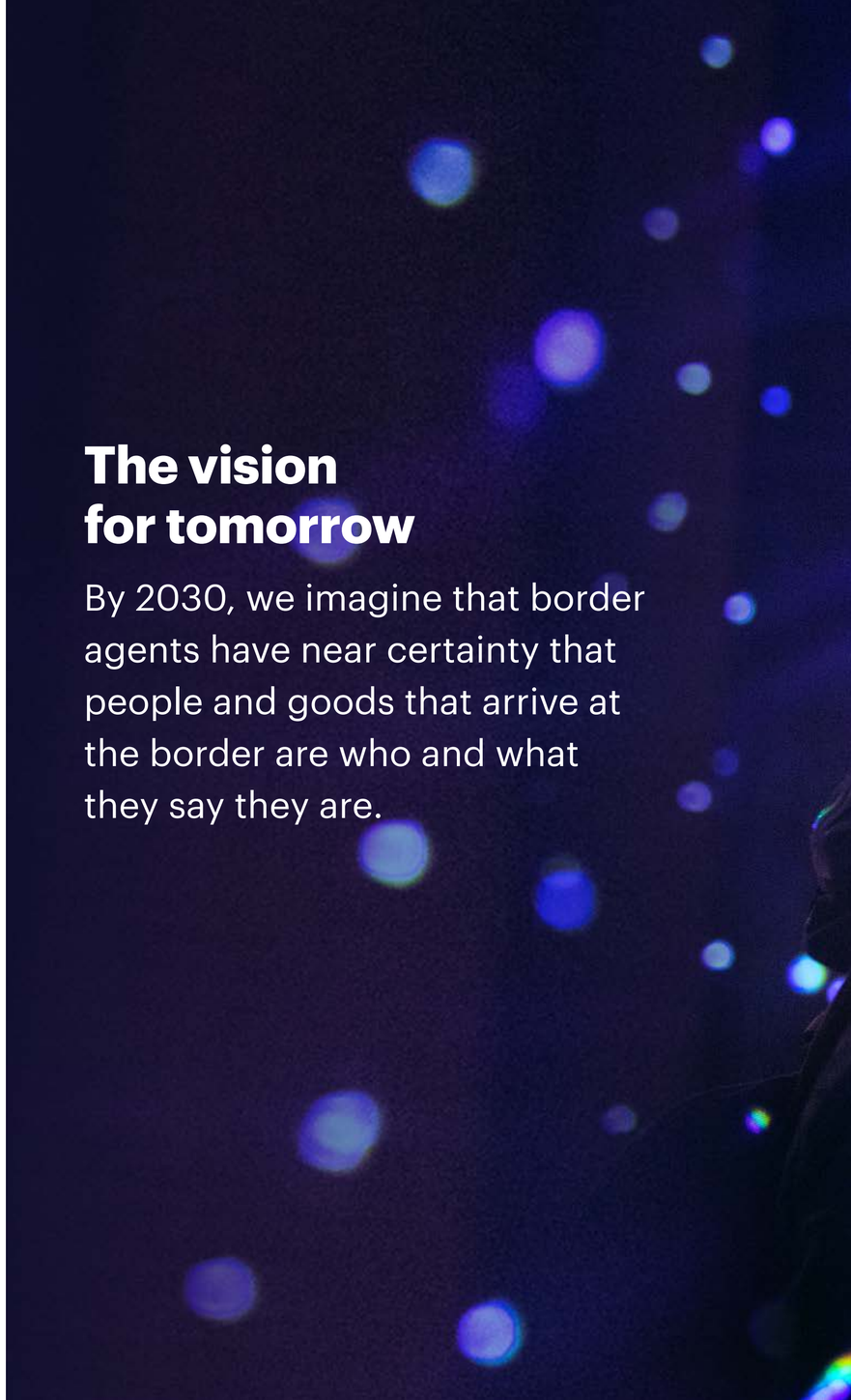
Trend 02

From trust to truth

From trust to truth is upending the model of securing borders that agencies have used for years. Instead of trusting that pre-cleared travelers and traders are being honest about their declarations, agencies can have more certainty about the truth. In addition to assessing the people and goods in front of them, border agents can also assess the relevant data in front of them. Everyone and everything is identifiable and traceable through an expansive view of reliable and easily accessible good quality data.

Border agencies assess the risk of anyone or anything that crosses the border. Agents verify all the information they can, but they don't have the resources to check everything. As such, they don't have full assurance that people are who their credentials say they are, or that containers hold what is listed on customs declarations.

Agency processes are so extensive and take so long because building trust takes care and time. So it's no surprise that 57% of traders tell us that border processes add unnecessarily significant time to shipments.[13] And 54% of travelers say that security checkpoint wait times need improvement.[14]



The vision for tomorrow

By 2030, we imagine that border agents have near certainty that people and goods that arrive at the border are who and what they say they are.

Digital identity is key for more secure and efficient border crossings based on truth. By 2030, the convergence of smart materials, biometrics, internet of things (IoT), blockchain and universal connectivity is likely to have revolutionized identity and supply chain traceability. Border agencies should track this revolution—even lead it in some cases. The goal is to bring digital identity data to decisionmakers. The veracity of the data is absolutely critical. Combining trusted and enriched data from across the ecosystem with emerging technologies, border agencies can move to extremely high levels of transparency, even truth. And they can do this while making data protection and security a priority. Just imagine how this could change border crossings.

Fast forward to 2030. When travelers arrive at a checkpoint, facial recognition technology powered by advanced biometrics and spoof detection confirms their identity with near complete certainty. Even today, 56% of travelers agree that facial recognition technology will help make future international travel faster and more seamless.[15] Border inspections of goods are very different too. For example, when agents inspect a container of dresses, they know every detail about the fabric, dyes, manufacturing process and shipping route. They can confirm that the garments' carbon footprint meets the regulations, and that unethical labor practices were not involved in making it.

The availability of data evolves in several ways to support this trust to truth strategy. One way is that data is available to agencies before people begin their travel or before companies ship products. Another way is through a "bring your own data" model for people and products. Travelers carry their identity credentials in digital wallets, sharing only the information that is necessary to share. And thanks to IoT and smart materials, products tell their own stories. Data exchange is instantaneous and real-time. Agencies don't store the data, and expiration dates for access fulfill data privacy requirements.

What to think about today?

The border has always been a data rich environment. But the actual value of that data is limited today as it is not always usable and not easily shared. It is often stuck in silos—gathered, stored and trapped due to privacy and competition concerns.

Agencies should prepare for a future when they dynamically use and gather data from many sources and partners. Doing this means evolving the data foundation, focusing on data quality, governance and policy. Predictable, usable data from international sources requires a level of standardization that does not currently exist.

Just as the world came together to adopt a passport standard, efficient processes require a common practice for identification, health records, travel history and much more. The goal is to have the data and digital fluency to process people with digital wallets and containers packed with smart products.

There is no doubt that travelers and traders alike will have to adapt to new ways that agencies access and share data. There will be complex privacy and security issues to untangle. However, it's heartening to know that even today 72% of travelers are open to border agencies sharing their data with other government agencies to improve security.[16]

> 73% of traders agree that over the next decade, all customs processing and duties, tax settlement will happen away from the border.[17]

Imagine it's 2030...

7

Helen is enjoying her week in Singapore. After the wedding weekend, she has time to find a new supplier for her thriving sustainable athleisure business in the United States.

8

She vets the new supplier quickly via the border agency's trusted foreign supplier portal. She confirms the supplier is a responsible business aligned with the values of her sustainable business.

9

Helen signs up the supplier using the blockchain, automatically adding them to the authorized supplier list on her business portal.

10

When Helen orders her first shipment, all import documentation is automatically shared with the border agency.

11

The agency pre-approves the imports and offers Helen trusted status for all subsequent imports because her supplier's goods are fully traceable and all stakeholders in their supply chain are identifiable.

12

The data being shared for the supplier integrity pre-check, import risk assessment and trusted trader status is all automated and has an opt-in model.

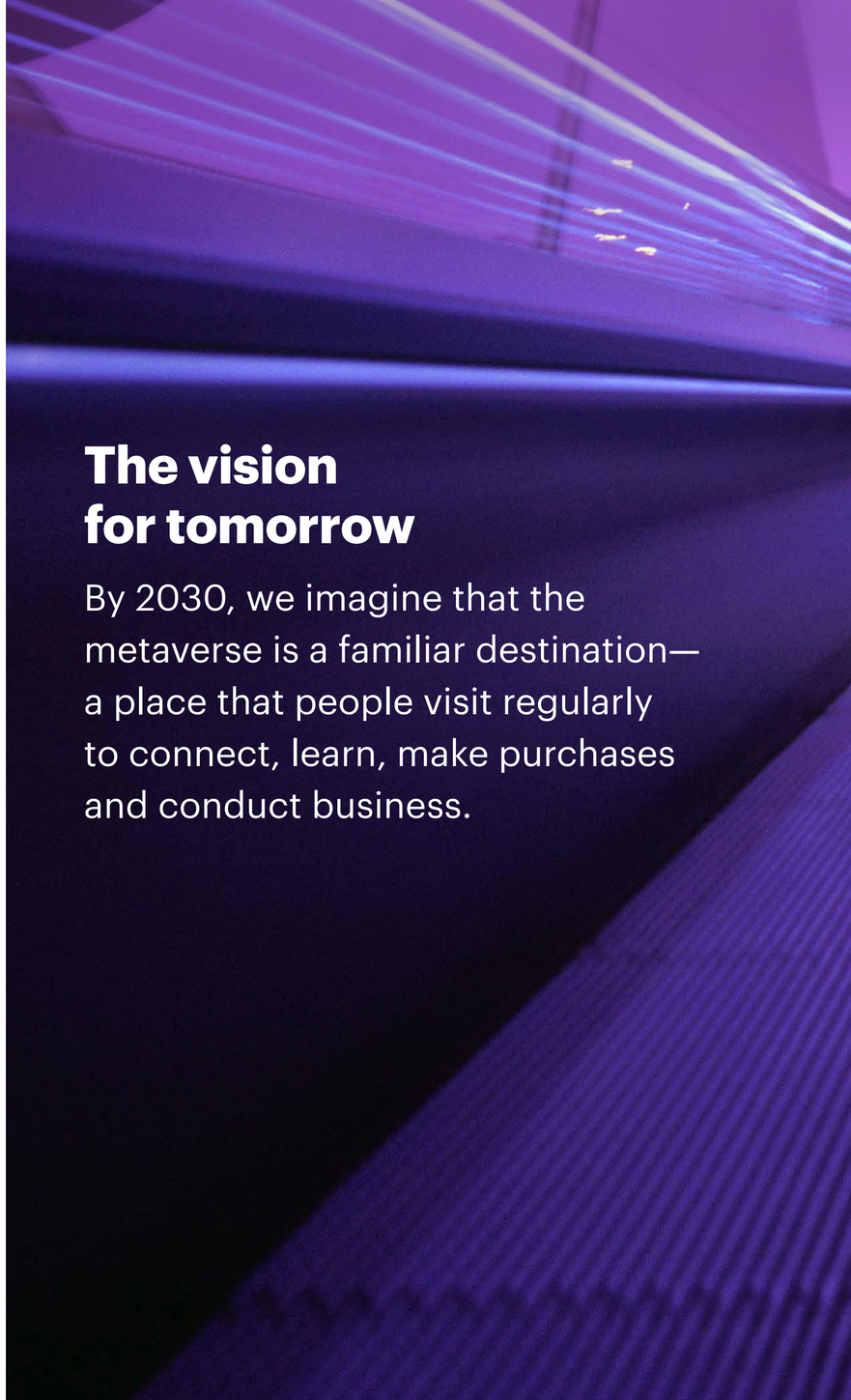
Trend 03

Virtual frontiers

Virtual frontiers relates to how the emergence and acceleration of the metaverse impacts borders. The metaverse is an evolution of the internet that enables us to move beyond "browsing" to "participating and/or inhabiting" in a persistent shared experience that spans the full spectrum of our real world to a fully virtual world and in between.[18] This emerging world is poised to redefine the notion of borders as cross-border comes to include physical and virtual destinations.

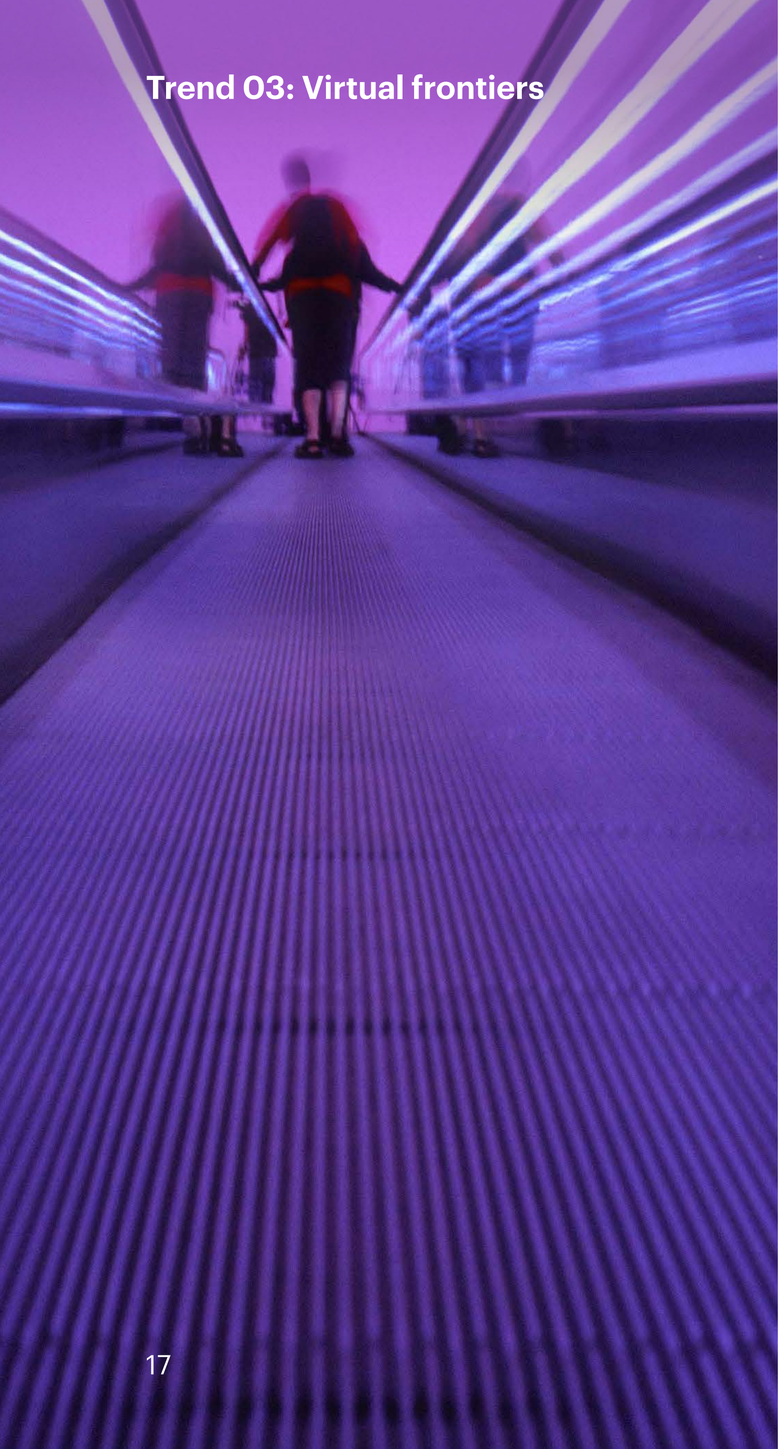
When digital commerce was in its early days, border agencies had to quickly adapt ways to protect society and support economic growth. They did it with zero precedent. The metaverse is likely to require similar action. It's a wholly new channel of interaction for business-to-consumer, business-to-business and business-to-government trade. It's uncharted territory that raises many complex questions that we cannot begin to fully answer.

How are products taxed when they aren't physical at the point of purchase? What are the immigration implications of a virtual trip? If people work virtually with a team in another country, do they need a work visa? Do national borders even exist in the metaverse?



The vision for tomorrow

By 2030, we imagine that the metaverse is a familiar destination—a place that people visit regularly to connect, learn, make purchases and conduct business.



The metaverse is already so much more than a virtual playground. Its evolution can be expected to drive reinvention of platforms, business models, partnerships, consumerism and more. Some aspects of tourism, immigration and commerce could move online, supported by digital platforms, tokenization, digital currencies and assets. Just imagine the ripple effect of so much monumental change on public service, let alone border agencies.

Fast forward to 2030. Travelers can preview destinations, learn about local cultures and augment—or even replace—actual trips thanks to extended reality technology. It's a whole new form of sustainable, affordable and culturally relevant travel. Virtual tourism pushes border offices into the metaverse, and most countries have entirely virtual functions. Barbados is working now to launch the world's first virtual embassy in the metaverse. Officials have said the move is one of diplomatic parity—an opportunity for the small island nation to provide the same services as larger, wealthier nations do.[19] With a presence in the metaverse, countries don't need as many in-country, customer-facing customs, immigration and visa offices. Travelers are already prepared to conduct this business virtually—65% prefer to apply for immigration and visas digitally rather than in-person.[20]

Border agencies also turn to the metaverse for training the workforce. Immersive experiences and interactive scenarios can help agents improve their decision-making skills. And the metaverse hosts multi-agency collaboration events to support mission readiness. The logistical barriers that make such complex collaboration difficult today disappear. And agencies get valuable experiences and insights quickly, with less expense and risk.

What to think about today?

Metaverse transactions are happening today. Instead of waiting for organizations with lesser intentions to write the playbook, border agencies should take an active role in shaping cross-border transactions in the metaverse.

While border agencies don't have the sole responsibility for determining how the metaverse will evolve in public service, they do have a role to play in it. As such, it is key for border agencies to work with other government agencies to ensure a cohesive metaverse experience for visitors, traders and citizens—and guide the development of regulations.

Doing this is key to potentially protecting public safety and strengthening cybersecurity while taking full advantage of revenue growth opportunities. It's also in line with border agencies' current role of monitoring illicit marketplaces like the dark web.

At the same time, agencies should begin building a digital twin of the ecosystems they regulate and facilitate. Digital twins are one natural and important point of entry to the metaverse. By 2030, entire global supply chains and migration flows could be managed by massive data doubles that mirror reality. Digital twins make greater automation in inspections, better scenario planning and improved forecasting possible.

> 70% of global public service executives believe that the metaverse will have a positive impact on their organization. Half believe it will be a breakthrough or transformational impact.[21]

Imagine it’s 2030...

13

It’s always been part of Helen’s plan to expand her business internationally, and she’s seriously considering setting up a branch in Singapore.

14

She visits Singapore's business trade port in the metaverse to not only understand what it takes, but also to initiate the process for registering her business, applying for respective business tax numbers, and finding a suitable location.

15

Helen is thrilled to connect live with realtors, interview with immigration, speak with Singapore local government and exchange all information to setup her new branch seamlessly.

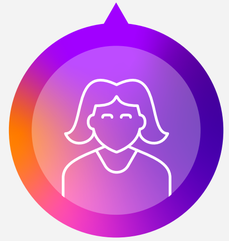
16

Like many business owners, Helen also plans to use the metaverse as a primary sales channel to reach new customers.

17

She sets up her own metaverse store and can advertise in many metaverse cities across the globe.

18



On the trip back home to New York, she’s feeling inspired and gets to work on designing next season’s virtual clothing line.

The world keeps moving; so will border agencies

We envision 2030 as a very different time for border agencies. Of course, physical borders to mark sovereignty will remain. But shifts in technology and the rise of the metaverse are likely to influence the very notion of borders. As accustomed as border agencies are to managing through disruption, this is a fundamental shift for the sector.

Border agencies should adapt to this environment to lead with impact. Everything from the purpose of these agencies to the roles, skills, partnerships and operating models should shift significantly.

While this next decade promises to be one of extensive changes, it also has the potential to be tremendously exciting for border agencies, travelers and traders.

Agencies that reinvent how they work on profoundly human terms—redesigning experiences, acting on truth and leading in the metaverse—will bring new opportunities to their nation. More economic competitiveness. More cultural awareness. More safety and security. More mission success. It all starts by taking steps to turn the vision into reality.

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References

1 Accenture Global Trader Survey, 2022
2 Accenture Global Traveler Survey, 2022
3 Accenture Global Traveler Survey, 2022
4 UNHCR, 2020
5 Accenture Global Trader Survey, 2022
6 Accenture Technology Vision 2021 for Customs & Borders, 2021
7 Accenture Global Traveler Survey, 2022
8 See About the Research for more information.
9 Accenture Global Traveler Survey, 2022
10 Accenture Global Trader Survey, 2022
11 Accenture, "Accenture Technology Vision 2022: Meet Me in the Metaverse."
12 Accenture Global Traveler Survey, 2022
13 Accenture Global Trader Survey, 2022
14 Accenture Global Traveler Survey, 2022
15 Accenture Global Traveler Survey, 2022
16 Accenture Global Traveler Survey, 2022
17 Accenture Global Trader Survey, 2022
18 Accenture, "Accenture Technology Vision 2022: Meet Me in the Metaverse."
19 Jim Wyss, "Barbados is Opening a Diplomatic Embassy in the Metaverse," December 14, 2021.
20 Accenture Global Traveler Survey, 2022
21 Accenture, "Accenture Technology Vision 2022: Meet Me in the Metaverse."

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About the research

To best understand the future of border agencies in 2030, Accenture conducted several primary qualitative and quantitative research initiatives. In March 2022, Accenture conducted two online surveys (Global Traveler Survey and Global Trader Survey) spanning nine countries: Australia, Canada, Finland, France, Germany, Saudi Arabia, Singapore, United Kingdom, and the United States. For the Global Traveler survey, the 5,000 respondents included those who had traveled internationally at least once in the last four years. The Global Trader survey included 1,000 exporters and/or importers.

Additionally, Accenture interviewed five of the world's leading futurists: women and men who publish and advise organizations on long-term future scenario planning. To help shape this paper, Accenture sourced and tested ideas from our more than 1,000+ border industry global practitioners. Lastly, this work builds on sub-industry cuts of previously published global surveys, including a Public Sector Worker survey conducted in 2020 of 500 border, immigration and customs workers across five countries (Australia, Germany, Singapore, United Kingdom and the United States).

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