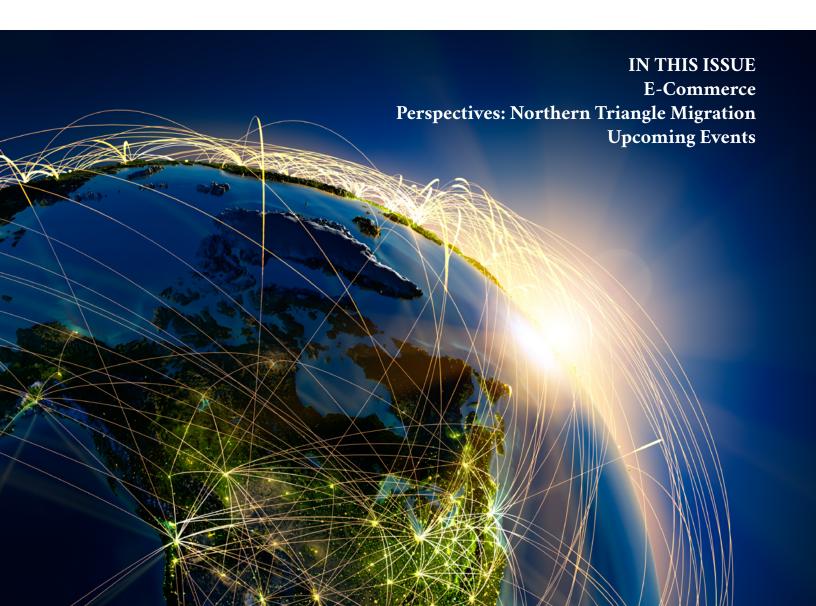
# BTI Institute

## Borders • Trade • Immigration

A Department of Homeland Security Center of Excellence

## Newsletter

January to March 2021 | Program Year 6 Quarter 3



#### **INSTITUTE STAFF**

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The Team at BTI would like to give a hearty "hooah" to Philip Boedeker as he prepares to deploy with his Army Reserve Unit in his continuing mission as "twice the citizen". While the Team will miss the invaluable contributions from Phil during his year-long deployment, we are comforted in knowing that people like Phil are on the front lines, we are proud to work with him as colleagues and we look forward to his safe return to BTI next year. Godspeed Major Boedeker!

This document, along with everything we do, is dedicated to the men and women of the United States Department of Homeland Security. We thank them for their tireless efforts to secure our Nation and safeguard our economic prosperity by facilitating lawful travel and trade.

## Addressing Cross Border E-commerce Challenges with Emerging Technologies

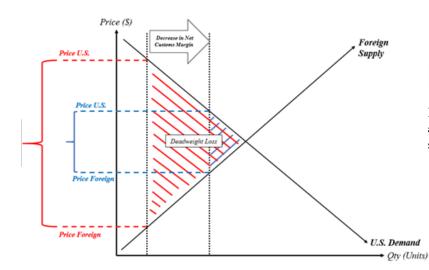
This information is excerpted from the full report at <a href="www.uh.edu/bti/research/ecommerce-shi">www.uh.edu/bti/research/ecommerce-shi</a>. Credit goes to the authors associated with this report.

What emerging technologies are available to meet e-commerce challenges that U.S. Customs and Border Protection and global e-commerce stakeholders face?

That is the exact question the collaborative team, led by Weidong "Larry" Shi, Ph.D., set out to discover.

U.S. Customs and Border Protection Office of Trade has the responsibility to facilitate legitimate trade while ensuring trade compliance and enforcement. This responsibility becomes infinitely more complex when you take into account the challenges associated with e-commerce. With research showing that, in 2018 alone, 1.8 billion people globally purchased goods online and 57% of online buyers purchase from foreign sellers, CBP's charge to manage the import and export of such parcels is nearly impracticable without advanced technologies.

Through their research, the project team shows how emerging technologies such as distributed ledgers, artificial intelligence and linked data-related technologies could augment and enhance data sharing among e-commerce stakeholders. The project team also assessed the costs and benefits for stakeholders of moving to a distributed ledger environment and found that, from an economic standpoint, cooperation would increase, the probability that CBP would obtain sufficient data for expedient entry would increase, and the economic efficiency of the importing process improves.

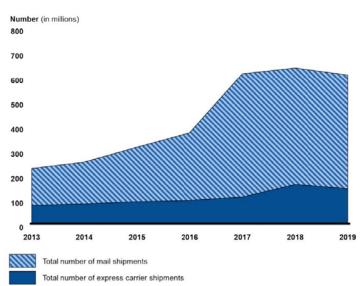








[Clockwise from top] Weidong "Larry" Shi, Ph.D., University of Houston; Christine McDaniel, Ph.D., The MacroDyn Group; Vincent Iacopella, licensed Customs broker, Trade co-chair of the 14th COAC Committee



Number of small packages sent to the U.S. through international mail and express carriers 2013-2019 (source: GAO report based on CBP statistics)



With a move to distributed ledger, the dwell time shrinks, the net customs margin improves, and there are efficiency gains.

## Mexican and Northern Triangle Perspectives on Migration: Identifying and Assessing Strategic Narrative Alignment

Can we use narrative theory as a framework to answer research questions related to migration from the countries of El Salvador, Guatemala, and Honduras?

By assessing over fifty migration policy briefings published in the last five years, conducting forty indepth interviews, and analyzing over 50,000 news media articles covering migration from the United States, Mexico, El Salvador, Guatemala, and Honduras, the research team led by Skye Cooley, Ph.D., did just that.

The study revealed numerous narrative commonalities across the three data sets including underlying causes of migration, the dangers of the transitory routes for migrants, the need for cooperation, and the need for a humanitarian lens, to name a few.

Exceedingly compelling is what can be learned from the words themselves. Notable findings related to the linguistic terminologies include the distinguishing terms of migrant, refugee, and asylum seeker; the need to reduce the use of terms such as illegal or alien; and the opportunity to capitalize on self-identifying terms used among migrants such as "asylees" and "new Americans."





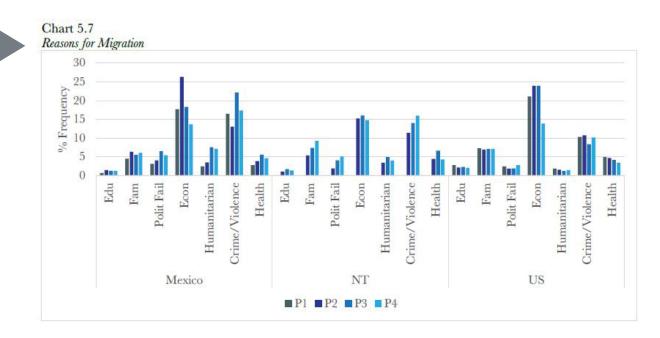






[From top left, clockwise] The project team: Skye Cooley, Ph.D., Oklahoma State University; Asya Cooley, Ph.D., Oklahoma State University; Sara Kitsch, Ph.D., Air University; Robert Hinck, Ph.D., Air University.

A sample graph that shows the primary reason for migration reported in all three regions (Mexico, Northern Triangle, US) during the four time periods covered in the research project.



4 - 6 May 2021

## **BTI Institute Annual Research Meeting**

We will host our Annual Meeting on May 4 - 6, 2021. This year's meeting will focus on research impact, results, and transition opportunities. Project teams will demonstrate their research methodology, findings and accomplishments, deliverables, and opportunities for applications beyond the completed project. Stakeholders across all Department of Homeland Security components and the Homeland Security Enterprise are encouraged to attend and discover how our research can benefit your organization's mission and goals.

Tuesday, 4 May 2021 (all times CST)

12 pm Mexican and Northern Triangle Perspectives

on Mass Migration: Identifying and Assessing

Strategic Narrative Alignment

Theme: Immigration

1 pm Developing a Regional Approach to Managing

Migration Flows
Theme: Immigration

1 pm

2 pm Tactical Mapping of Border Security Im-

pacts: El Paso Sector Theme: Border Security

3 pm Homeland Security Enterprise Curriculum

Development

Theme: Education and Training

Wednesday, 5 May 2021 (all times CST)

12 pm Assessment of Customs-Trade Partnership

Against Terrorism (CTPAT) Program Theme: Legitimate Trade and Travel

Addressing Cross Border E-commerce Challenges with Emerging Technologies Theme: Legitimate Trade and Travel 2 pm Measuring Border Wait Time at Land Ports

of Entry: Technology Assessment and Data Dissemination

Theme: Legitimate Trade and Travel

3 pm DNA Assays for Determining Honey Ori-

gins

Theme: Legitimate Trade and Travel

Thursday, 6 May 2021 (all times CST)

12 pm The Road Less Traveled: Bolstering the Absorptive Capacity of Southern Central American

States to Facilitate the Southern Flow of North-

ern Triangle Immigrants

Theme: Immigration

1 pm Economic Motivations of Migrants from the

Northern Triangle Theme: Immigration

Register at <a href="https://www.uh.edu/bti/annualmeeting2021/">www.uh.edu/bti/annualmeeting2021/</a>



19 - 20 May 2021

### Registration is Open

U.S. Department of Homeland Security

Centers of Excellence Summit 2021

When: May 19 - 20, 2021 Where: Virtual Event

How: register2021.coesummit.org

University Research and Workforce Development for a Safe and Secure Homeland

Hosted by the DHS Centers of Excellence, this event is a unique opportunity for COE researchers to connect and network with DHS components, federal, state, and local stakeholders, as well as industry partners to present current and emerging solutions to threats and challenges faced by DHS.

### Choose a combination of sessions

Hear keynotes and panels complemented by attendee selected sessions from two tracks.

#### Panels and Roundtables

- DHS Senior Leadership: Emerging Threats and Challenges
- Mitigation Strategies for a Pandemic
- Building Workforce Capability: Innovative Homeland Security Learning Program
- DHS Senior Leadership Panel: Workforce of the Future

Track 1: Protecting the Homeland from catastrophic risk

- Assessing the Economic Impact of COVID-19
- Countering Developing Risks to the Maritime Transportation System
- Domestic Extremism Threats to the U.S.

Track 2: University research and public/private partnerships for enhanced Homeland security

- Centers of Excellence Models of Public/Private Partnerships
- Network Discovery from Data
- Tools to Aid Decision Makers

### Capabilities Showcase and Student Research

Join us and the other COEs as we share our research breakthroughs, new products and tools, and our dynamic solutions to help secure the Homeland.





Arctic Domain Awareness Center (ADAC)



Awareness and Localization of Explosives-Related Threats (ALERT)



Borders Trade and Immigration Institute (BTI)



Center for Risk and Economic Analysis of Terrorism Events (CREATE)



Center for Advancing Microbial Risk Assessment (CAMRA)



Center of Excellence for Emerging and Zoonotic Animal Diseases (CEEZAD)



Coastal Resilience Center (CRC)



Command, Control and Interoperability Center for Advanced Data Analysis (CCICADA)



Criminal Investigations and Network Analysis Center (CINA)



Critical Infrastructure Resilience Institute (CIRI)



Cross-Border Threat Screening and Supply Chain Defense (CBTS)



Food Protection and Defense Institute (FPDI)



Institute for Infectious Animal Diseases (IIAD)



Maritime Security Center (MSC)



National Counterterrorism Innovation, Technology and Education (NCITE) Center



Security Technology Transition (STT)



Study of Terrorism and Responses to Terrorism (START)



The Center for Accelerating Operational Efficiency (CAOE)

## VACCINE

Visual Analytics for Command, Control, and Interoperability Environments (VACCINE) 2 - 4 Nov 2021

#### 2021 Maritime Risk Symposium

Hilton University Houston Houston, TX

www.MaritimeRiskSymposium.org

The College of Technology University of Houston will host the 12th Annual Maritime Risk Symposium. This symposium is currently planned to be an in-person event. MRS 2020 was hosted by the Critical Infrastructure Resilience Institute (CIRI), a Department of Homeland Center of Excellence in collaboration with the National Academy of Sciences. Government and maritime industry leaders, port representatives, researchers, and solution providers convene to examine current and emerging threats to maritime security and the maritime transportation system.



## **From Our Partners**

Hunt Institute for Global Competitiveness

Newsletter

utep.edu/hunt-institute/newsletter/index.

<u>html</u>

Migration Policy Institute

Research Publications

migrationpolicy.org/research

Texas A&M Transportation Institute

**Publications** 

tti.tamu.edu/publications/

National Consortium for the Study of Terrorism and Responses to Terrorism, University of Maryland **Publications** 

start.umd.edu/publications

National Center for Risk and Economic Analysis of Terrorism Events, University of Southern California **Publications** 

create.usc.edu/publications-recent/

For more information on the Department of Homeland Security Science and Technology Directorate and the DHS Center of Excellence Network, visit www.dhs.gov/science-and-technology/centers-excellence.

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Disclaimer: The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Department of Homeland Security.

