

2024 OVERVIEW



HOMELAND SECURITY
STARTUP STUDIO

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"Exceptional experience! As an experienced entrepreneur and having done all of the work that goes into launching a startup, this program was a fast track of getting to market while being supported and establishing meaningful connections along the way."

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Program Goal

Identify, accelerate and deliver commercial applications of technologies from US laboratories and research centers in support of the Department of Homeland Security's mission.



HOMELAND SECURITY
STARTUP STUDIO

DHS S&T Snapshot



Science and Technology

As the research, development, testing, and evaluation arm of the Department of Homeland Security (DHS), the Science and Technology Directorate (S&T) ensures that the Department has the capabilities to secure our nation in the face of natural and human-caused threats.

S&T leverages a broad network of partners in its mission to deliver effective and innovative insight, methods, and solutions for homeland security challenges. S&T's Office of Industry Partnerships, Technology Transfer and Commercialization Branch (T2C) offers a variety of tools and mechanisms, like the Homeland Security Startup Studio (HSSS), that allow S&T to partner with the private sector to develop and deliver technology solutions that meet the needs of homeland security end users.

Program Highlights



Through customer/stakeholder discovery, entrepreneurs defined their company's mission, empowering them to persevere through challenges and launch seven mission-driven companies.



Enhanced focus on customer and stakeholder discovery, along with the introduction of new tools, led to an increased number of interviews completed. The feedback gathered from these interviews contributed to the accelerated progress and growth of the companies.



With a focus on alignment to DHS missions, ten advanced technologies were sourced from eight different labs. Tech transfer offices and inventors engaged closely with the participating HSSS teams and are now working to license the technologies to seven of the participating companies.



Six teams presented their companies at Converge to a hybrid audience of over 250 attendees. Enhanced focus on pitching with more opportunities to practice led to more impactful presentations.

HSSS'24 Program Overview

Phase I launched with a half-day bootcamp in January 2024 where 10 teams began exploring the commercial viability of 10 technologies developed in U.S. labs, research centers and universities.

Phase II concluded in May 2024 with **Converge**, the hybrid pitch competition hosted by DHS S&T.

Phase I

Identify Use
Cases &
Assumptions



Conduct
Interviews &
Generate Leads



Analyze Relevant
Markets &
Industries



Define Value
Propositions &
Explore Licensing

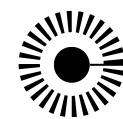


Phase II

Develop a
Commercialization
Strategy



Explore
Funding
Opportunities



Develop a
Go-To-Market
Plan



Deliver an
Effective
Company Pitch



Program Metrics

As of July 2024

150+
Program applications

8.8/10
Positive Experience
Phase I*

9.3/10
Positive Experience
Phase II*

*Median scores out of 10
on overall cohort participant
experience

HSSS'24 10 Participating Teams

● **Seven new ventures** have been formed within HSSS, while **one is in the process of incorporating**

● **Seven ventures** are actively pursuing **licenses** in 2024

● Next steps include **licensing the technology, applying for grant funding, identifying pilot opportunities, and acquiring initial customers**

● Future support for the ventures includes support with **commercialization, go-to-market planning, and funding opportunities**

8 Lab & University Partners Represented

The Homeland Security Startup Studio is a diverse, location-agnostic, open call for any U.S. entrepreneur seeking to build their next venture around an innovative technology from a U.S. lab or research center.



Loyola Partnership



Fostering the emergence of a
new breed of entrepreneurs

HSSS'24 continued its collaboration with Loyola University New Orleans' top 20 MBA Entrepreneurship program for the third consecutive year.

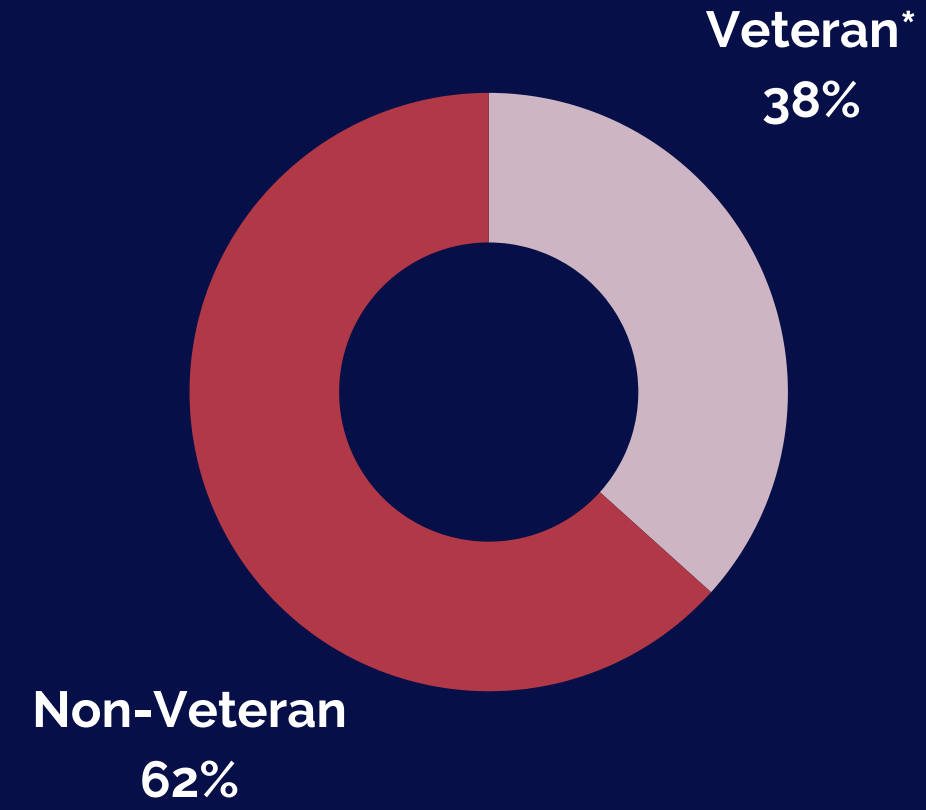
This year, 11 MBA students from Loyola played a significant role as consultants to HSSS companies. Their contributions included conducting market research, engaging in stakeholder interviews, and performing competitive analyses. They also provided vital support in the use case development process.

This year, the improved matching process between consultants and startups led to higher quality submissions. Above all, the strength of this partnership grew, as - for the first time ever - **a studio company welcomed a consultant as a co-founder.**

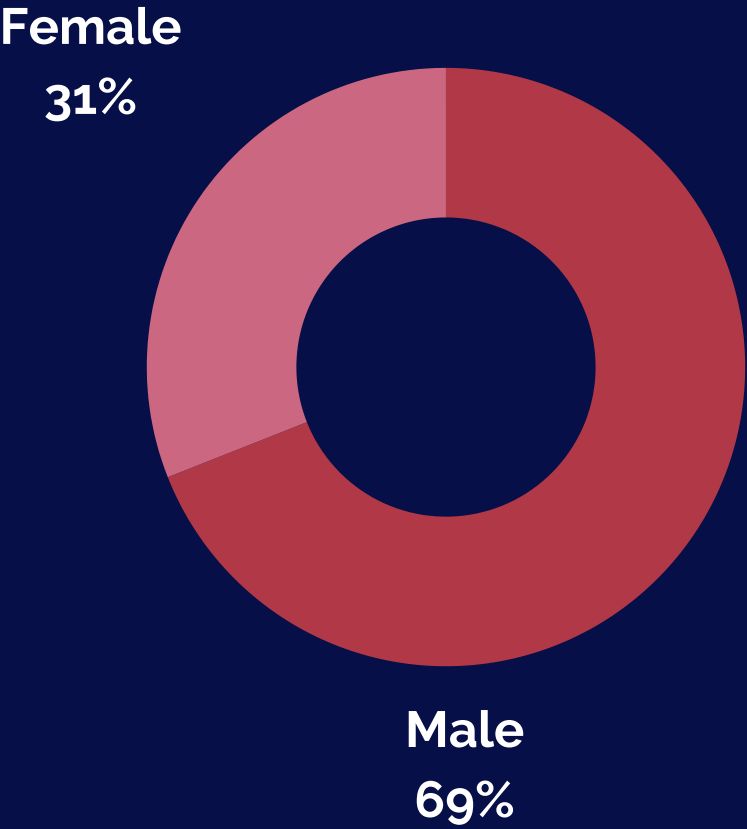
Cohort Demographics

Cohort Size: 30 individuals at the launch of the program

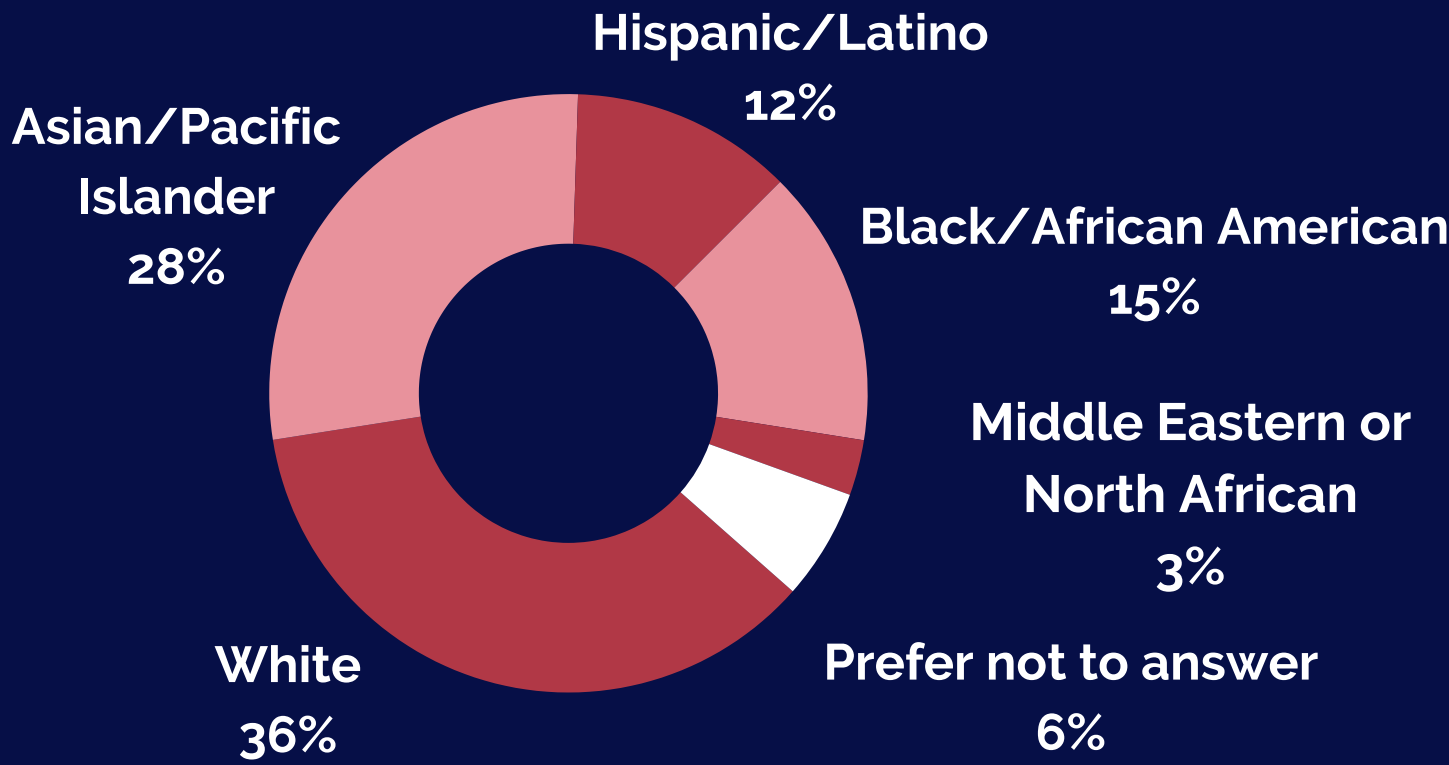
Veteran Status



Gender



Race



*HSSS'24 had more than double the number of veterans when compared to HSSS'23.

Phase I Pitch Day

May 4, 2024

Nine teams presented their Phase I journeys to an expert feedback panel from DHS and FedTech. The panel evaluated each team's business model, team/founder aptitude, technology plans, and product market fit. They also provided feedback that helped shape the teams' approaches for Phase II.

Feedback Panel



Dana Saft

S&T Portfolio Manager for U.S. Immigration and Customs Enforcement and U.S. Citizenship and Immigration Services
Department of Homeland Security



Nathan Grebasch

Attorney-Advisor
Office of the General Counsel
Department of Homeland Security



Robyn Brazzil

Partner
FedTech



Phase II Teams



The Canary is a cutting-edge device that integrates existing handheld hazmat sensors with commercial drone platforms. Its adaptable modular design allows multiple interchangeable sensors to be integrated to match the requirements of the situation. By carrying these sensors into hazardous environments via drone, the Canary eliminates the need for first responders to risk entering contaminated areas.

www.detectix.io

Infoshield.io offers an Artificial Intelligence (AI)-driven 'Early Threat Detector (ETD)' platform – protecting critical infrastructures against threats through Application Programming Interface's (APIs) and other hidden attacks like ransomware, APTs, phishing and insider threats. This AI-driven front line SaaS platform detects cyber threats at reconnaissance stage (insider and foreign originated) with precise confidence and context-driven approaches, providing real-time actionable alerts and insights that allow users to swiftly predict, prepare, and protect against brewing and continuously evolving threats, shielding the nation's critical systems from unauthorized access and other security risks.

www.infoshield.io

Pressure Medical serves the mission to stop uncontrolled bleeding in challenging environments, saving life and limb. With a patented technology, this device creates smart pneumatic tourniquets that first responders can safely apply with minimal training. When secondary care is delayed, due to combat situations, remote locales, or difficult extractions, stopping blood loss to preserve life while gently managing limb integrity to prevent tissue damage is essential for the best patient outcomes. Pressure Medical envisions a world where everyone survives severe trauma intact.

<https://pressuremedical.com/>

Phase II Teams (Cont.)



The Tamper Evident Container helps safeguard sensitive or high value assets by continually monitoring access attempts and providing actionable information about the security of its contents. It incorporates tamper detection technology directly into the container shell, providing 360 degree protection for the container contents. The technology can be customized and scaled for containers of all shapes and sizes, and equipped with sensors and communication methods, as needed.

<https://traxemetry.com/>

EAPunlocked is an evolutionary electronic health record platform. The key benefits of this technology include state-of-the-art data collection, security, and reporting, all included in a mobile application. The technology is designed for remote healthcare engagements that take place outside of hospitals, such as corporate clinics and home care. This technology fills a growing need for a secure and decentralized health data capture process at the point of care. The target markets are corporate health settings (EAPs) and county and state public health providers.

www.eapunlocked.com

CyberShield is a cutting-edge cybersecurity solutions provider offering a comprehensive cybersecurity ecosystem to protect critical infrastructure from evolving threats. Flagship products deliver advanced threat detection and response, real-time vulnerability assessment, and enhanced firewall protection. CyberShield provides a proactive and responsive security posture for organizations in critical infrastructure industries.

www.aceadvising.com

Phase II Teams (Cont.)



AltiSense provides early detection and actionable insights for national security assessments, crime prevention, and humanitarian aid efforts using AI predictions. AI-enabled models leverage satellite imagery, socioeconomics, social networks, and other transaction data to predict emerging threats and trends. Federal agencies such as the Department of Defense, Department of Homeland Security, Department of Justice, the United Nations, and commercial enterprises can use these insights to make informed decisions and implement targeted interventions, improving safety, security, and aid efficiency worldwide.

www.altisense.ai

Adversary Unknown is a Multi Domain Vulnerability Assessment (MDVA) toolkit with a robust vulnerability assessment suite and a range of client-tailored scanning and cybersecurity risk management solutions. The complete offerings include uniquely external, multi-modal, and passive vulnerability analysis of client infrastructure, enabling the rapid classification of vulnerabilities within a company's network, including 5G, Bluetooth, and Wi-Fi. These results are presented in a graphical, easily communicable format, prioritized by severity and comprehensive risk score.

www.adversaryunknown.com

Yottasecure's data-driven machine learning approach achieves better accuracy in predicting risks compared to methods relying on current standard metrics, thereby keeping networks secure while reducing costs in time and resources. Yottasecure's out-of-bandwidth cybersecurity approach empowers security teams to safeguard operational systems effectively, bolstering security posture while optimizing operational resilience. By intelligently and efficiently mitigating vulnerabilities, Yottasecure ensures that critical systems remain secure and operational under all conditions.

<https://yottasecure.com/>

Converge

May 29, 2024

The Homeland Security Startup Studio 2024 concluded with Converge, the program's public-facing pitch event, held in Arlington, Virginia. The six finalist teams presented their commercialization plans to a hybrid audience of over 250 attendees.



Keynote Speaker: Steven Parker

Chief Innovation Officer
Transportation Security Administration

“To this year's entrepreneurs, I commend you for all your hard work and your continued efforts to help us achieve the DHS mission of keeping our country safe, secure, and protected.”



Converge Judges

The expert panel of Converge judges came from backgrounds in the private sector, as well as the government.

The judges used a detailed scorecard to evaluate the six pitching teams, considering factors such as product-market fit, market potential, team strength, and more. Their evaluations determined the overall winner of Converge.



Craig Zarnary
Director
HSWERX
DEFENSEWERX



Frances Lanzone
Senior Manager
Global Executive Relations
Amazon Web Services (AWS)
Returning Judge from Converge'23



Ted Davies
Managing Partner
Attain Capital



Converge Winners

May 29, 2024



Judges' Choice

Detectix is a system for adapting unmanned aerial vehicles (UAVs) to remotely assist first responders working in potentially dangerous environments.



Audience Choice

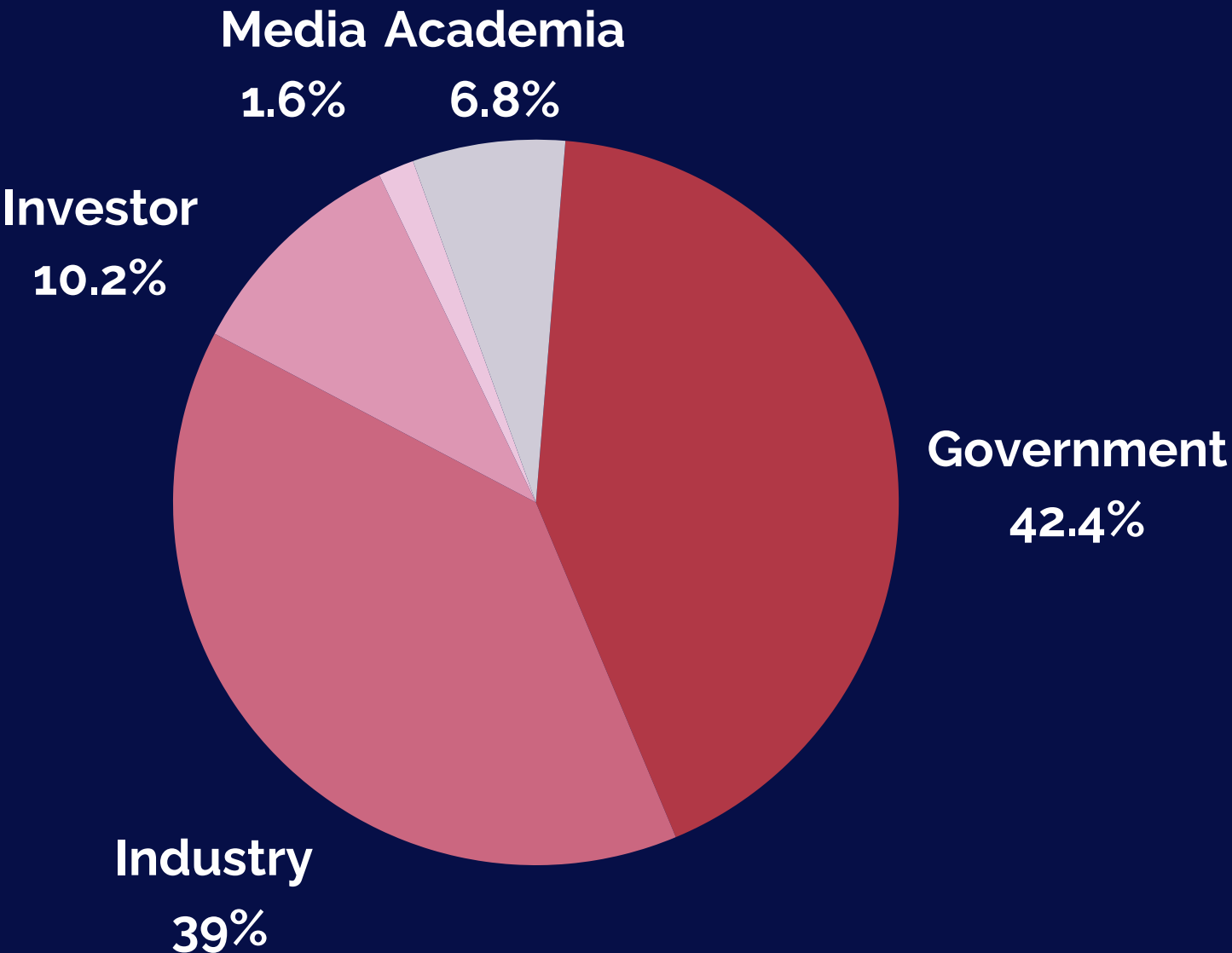
Pressure Medical is a portable pneumatic tourniquet designed for on-site wound treatment and effective blood loss control.

Converge: Final Pitch Day

Metrics



Attendees



Alumni Program

The HSSS Alumni Program returns this year with an **expanded set of services aimed at providing customized support to HSSS alumni companies.** New offerings include grant writing services, website building support, technology identification, and co-founder matching.



Expert Led Virtual Roundtables



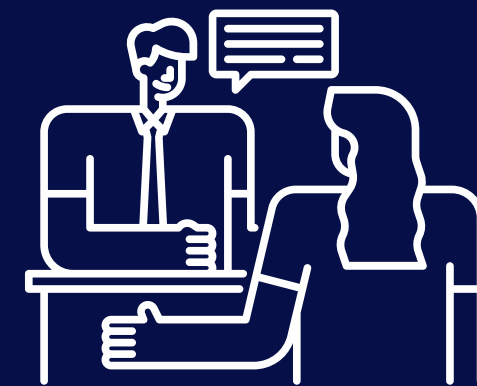
1:1 Subject Matter Expert (SME) Advisory Services



Monthly Check-Ins with FedTech



Collaborative Support



Customized Consulting Services



Weekly Tech Office Hours



Science and Technology

About Technology Transfer and Commercialization (T2C)

The Department of Homeland Security (DHS) Science and Technology Directorate's (S&T) Technology Transfer and Commercialization Program (T2C) serves as the centralized point to manage technology transfer activities throughout DHS and the DHS laboratory network. Technologies developed and evaluated within the department can have tremendous potential for commercial applications throughout the nation, enhance the competitiveness of individual small businesses, and expand areas of exploration and cooperation for all non-federal partners.

About FedTech

FedTech is a venture builder that thrives at the intersection of U.S. entrepreneurship, breakthrough technologies, and mission-driven organizations. Since 2015, we have been driving forward deep tech ventures across NASA, DoD, DOE, universities, and federal labs. Through our startup studios, accelerators, internal innovation curriculum, and corporate venture programs, we work with individuals, companies, and government agencies to stay ahead of the curve of innovation.



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