



Are you ready for the **FUTURE NOW?**

October 25, 2023
Reston, Virginia

Actionable Findings

Useful observations from OODAcon to inform strategic planning and stakeholder conversations. Prepared for OODA Network Members. November 2023

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Introduction

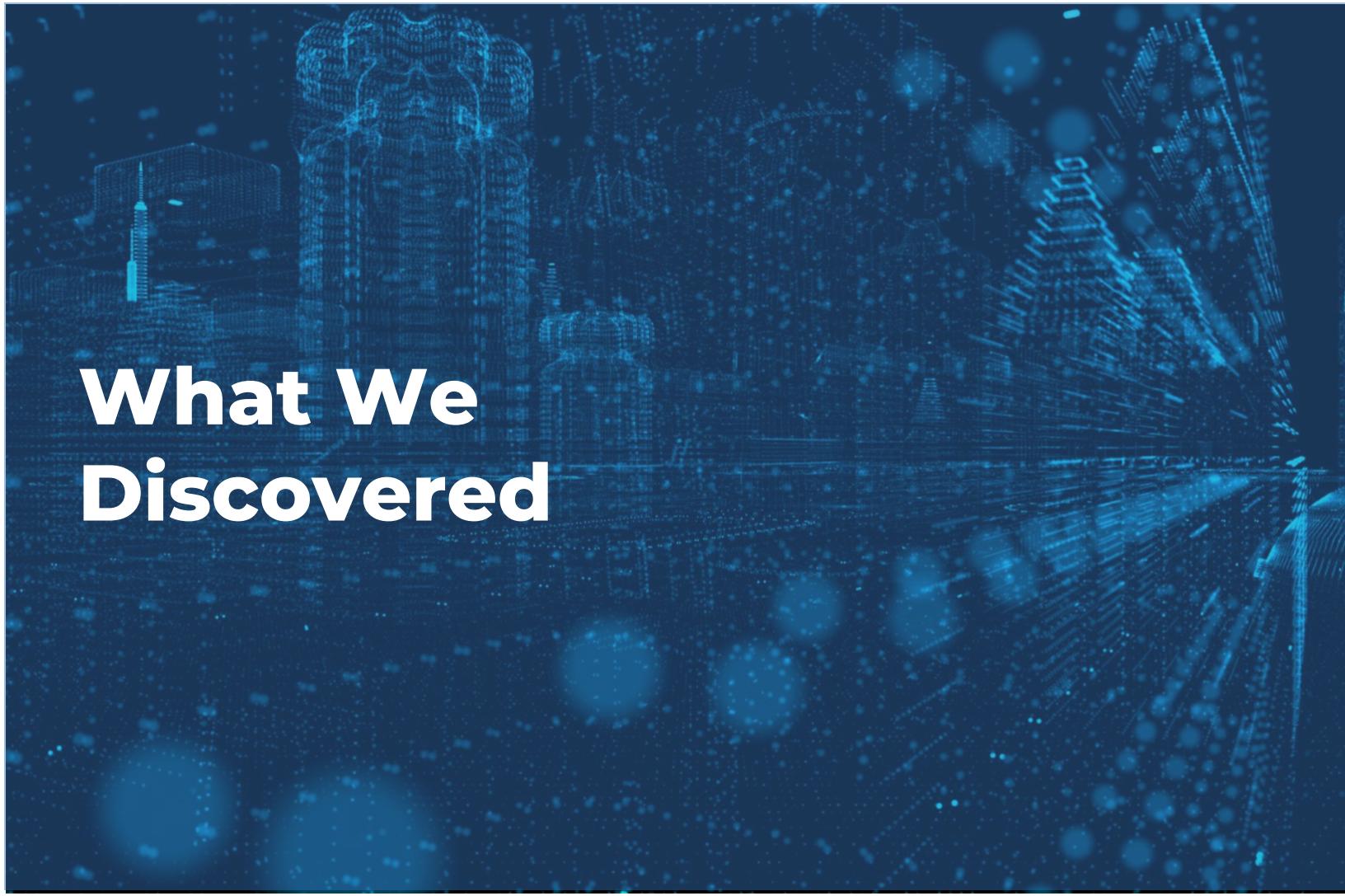
The theme of the 25 Oct 2023 OODAcon was **FUTURE NOW**, a term meant to focus on the fact that there are technologies, ideas and risks that exist right now that deserve our focus.

The anticipation of disruptive technologies has always had an allure for those of us trying to develop informed strategies, but there is now so much disruption occurring today it is clearer than ever that the future is here now, and we need to spend more time focused on what is available to us right this minute. It is time to stop treating the future like it is some distant possibility and address the inherent reality of the innovation that exists today and will impact your organization.

This summary captures some of the insights generated during the event and invites your continued inputs on where these trends are taking us.

MATT DEVOST & BOB COURLEY

Co-Founders, OODA LLC



What We Discovered

The dynamic interactions between attendees and speakers at OODAcon, both during and post-conference, sparked the development of numerous practical ideas. We delve deeper into many of these ideas in this report. The top ten we examine include:

- 1. Track The Changing World**
- 2. Make Trust Your Differentiator**
- 3. Remember The Adversary**
- 4. Track The Space Economy**
- 5. Know Blockchain**
- 6. Learn what is real in AI**
- 7. Understand Bio Tech**
- 8. Consider Robotic Use Cases**
- 9. Track Geopolitics**
- 10. Use these insights and your community to drive change**

We expand on each of these below.

The OODAcon Imperatives

Track The Changing World: The evolving landscape of technology, ideas, and risks demands discerning leaders to identify and integrate the most valuable ones into their enterprises or products.

Make Trust Your Differentiator: Amidst technological disruption and the rise of virtual collaboration, the importance of maintaining personal connections with trusted partners and clients remains paramount.

Remember The Adversary: Our adversaries, always active, exploit disruptive technologies for malicious purposes. To stay ahead, we must leverage the most advanced technologies.

Track The Space Economy: The growth of space technology is creating new opportunities across various sectors, underscored by the emergence of space debris removal, space situational awareness and drug/other manufacturing in space.

Know Blockchain: Despite the waning buzz, the maturation of Web3 and Blockchain solutions is significant, offering innovative applications in distributed finance, scientific research, and ownership solutions.

Learn what is real in AI: The end of the AI winter heralds a new IT revolution, marked by software that disrupts and displaces on a scale comparable to the internet revolution.

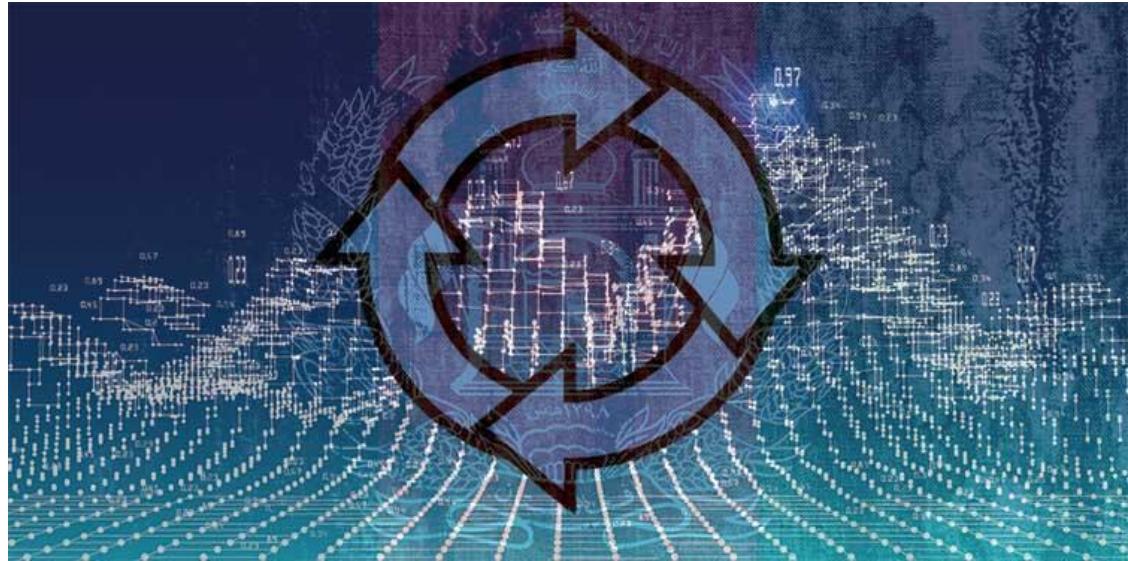
Understand Bio Tech: The revolution in biological science and bio-engineering is set to impact every industry, necessitating a comprehensive understanding of key concepts and applications of bio tech.

Consider Robotic Use Cases: The impending surge in robotics, already transforming business and government, will soon permeate every domain of human activity, with far-reaching impact.

Track Geopolitics: The complex interplay between technology and geopolitics necessitates that business leaders stay informed to navigate effectively in the current international environment.

Adapt or Else: Enhancing capacity for independent action in disruptive times is critical for survival. As John Boyd noted, adaptability to change is key to survival.

Jump ahead to page 14 for a deeper dive into lessons learned which can inform your product strategy and improve dialog with potential clients and partners



What Is OODAcon?

OODAcon is co-chaired by Matt Devost and Bob Gourley as an event focused on the OODA Network.

Topics for OODAcon come from a variety of sources including our continuous tracking of technology and concepts at OODA Loop and in our continuous dialog with members of the OODA Network. This Network is comprised of leading global experts, business executives, and strategic advisors focused on managing the next generation of disruptive innovation, emerging technologies, and global geopolitical and cyber risk.

OODA Network Members participate in monthly meetings, strategic forecasting events, and in-person networking events in Washington DC, San Francisco, Las Vegas, and New York City.

Our approach is to formulate topics for OODAcon first, then seek the right people to help us address and learn more on these topics.

For more information and to apply to join the OODA Network, visit:

<https://www.oodaloop.com/subscribe/>

Who Sponsors OODAcon?

OODAcon requires a unique breed of sponsor: we seek firms who know the importance of a rigorous examination of the business impact of technology and a critical examination of ideas and existing processes with an eye towards accelerating change. Sponsors not only engage with potential clients, partners, and subject matter experts, they look to inform their own product and service strategies based on the insights from the event.

OODAcon Sponsors

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Hubble: Technology asset visibility and cyber posture management solution that gives you the information you need to stop breaches and remain compliant.

Accenture: Creating value through strategy and consulting in the public and private sectors.

Fortem Technologies: The leader in airspace awareness, security, and defense for detecting and defeating dangerous drones.

General Systems/Excession: Understanding machine data in real time to enable better faster decisions.

Cooley: Where innovation meets law.

MissionLink: Connecting passionate problem solvers with the right resources to solve national security concerns across commercial and federal sectors.

Innovyz USA: Turning great ideas into great companies.

NXTI: The developer's platform to build and operate secure SaaS

Hack Factory: A start-up studio and growth lab in Reston, VA.

Who Attended OODAcon?



The OODAcon conference series brings together the hackers, thinkers, strategists, disruptors, leaders, technologists, and creators with one foot in the future to discuss the most pressing issues of the day and provide insight into the ways technology is evolving. OODAcon is not just about understanding the future but developing the resiliency to thrive and survive in an age of disruption. This year attendees made use of Slack to dialog directly with each other and speakers during the event. This dialog is still persisting in Slack today and provides a way for attendees to stay connected after the event.



OODAcon 2023 Topics

OODAcon follows the Chatham House rule to allow for candid conversations. The following represents an overview of the event sessions.

Keynote Conversation: Backing the Mavericks and Mad Scientists the Nation Needs Now

This conversation explored the current state of disruptive innovation and how the next generation of solutions could emerge from unconventional channels to include non-institutional entrepreneurs, mad scientists, and basement hackers. Michael is the author of the book Paper Belt on Fire and currently a general partner at the 1517 Fund. Prior to that he established the Thiel Fellowship program which paid young adults to work on disruptive ideas instead of attending college. Notable awardees of the Thiel Fellowship include Vitalik Buterin (Ethereum inventor) and Dylan Field (CEO of Figma).

[Matt Devost](#), CEO, OODA

[Michael Gibson](#), author of Paper Belt on Fire and founder of the 1517 Fund

Zero Trust Societies and Disruptive Technologies

How do we maintain societal trust as individuals migrate from platform to platform, identities get impersonated, and technologies like ChatGPT and Midjourney produce conversations and images indistinguishable from the truth through malicious prompts or hallucinations. This session will explore the trust threats and emerging trust wars and look to identify solutions that help alleviate these risks.

[**Heather McMahon**](#), UMD Applied Research Lab for Intelligence and Security

[**SJ Terp**](#), Cognitive Security Expert

Cyber is the New Cyber – Managing Emergent Risks

While the field of cybersecurity is easily over 30 years old, it continues to be a nexus for significant risk in emerging technologies. This session will explore how threat actors are adapting to new environments and adopting disruptive technologies to achieve their goals.

[**Kristin Del Rosso**](#), Field CTO, Public Sector, Sophos

[**Juan Andres Guerrero-Saade**](#), Sr Director of SentinelLabs, SentinelOne

Sarah Jones, Senior Threat Intelligence Analyst, Microsoft

[**Visi Stark**](#), cofounder, The Vertex Project

The Space Edge – Defining New Opportunities, Economies, and Risks

After decades of stagnation, space innovation keeps pushing the boundaries of the possible with new firsts emerging on a monthly basis. This session will dig deep into the emerging opportunities, economies, and risks associated with the rapid development of space-based technologies, resource acquisition, and shift from the public to private sector.

[**Ryan Westerdahl**](#), CEO Turion Space

[**Sita Sonty**](#), CEO Space Tango

Building Trust Back into Blockchain

Blockchain technologies have experienced a period of Creative Destruction as fraudsters and opportunists exploited an environment with lots of misaligned economic incentives and lagging regulatory oversight. Despite the hurdles, blockchain technologies continue to be incredibly disruptive in the market and offer new opportunities in both the public and private sectors. This session will explore leading blockchain innovation with a specific focus on how it might enable new models for business and governance.

[Angela Dalton](#), CEO and Founder, Signum Growth
[David Ackerman](#), CCO MobileCoin
[Mohsan Farid](#), Co-Founder, LedgerOps

The Generative AI Surprise

During our 2022 conference, we predicted that ChatGPT would take the business world by storm and included an interview with OpenAI Board Member and former Congressman Will Hurd. Today, thousands of businesses are being disrupted or displaced by generative AI. This session will take a closer look at this innovation and the impact it is having on business, society, and international politics.

[Pulkit Jaiswal](#), Co-Founder NWO.ai
[Bob Flores](#), former CTO, CIA

Hacking Humans – The New Genetic Frontiers

There have been groundbreaking advancements in genetic engineering and new medical technologies are poised to disrupt the dialogue on health, ethics, global security, and the future of humanity. This session will explore disruptive technologies, such as the revolutionary CRISPR gene-editing tool, breakthroughs in synthetic biology like Xenobots, and the emergence of exponential medical treatments that demonstrate rapid adoption properties.

[Natalie Barrett](#), Phaedrus Engineering, Biomedical Engineer
[Marc Salit](#), MITRE Fellow, Synthetic Biology
[Andre Watson](#), CEO, Ligandal, Biomaterials Scientist

Robots, Automation, and Autonomy

From Amazon warehouses to military conflict in Ukraine we have become increasingly dependent on automated and autonomous platforms. This session will explore the current state of the field with a specific focus on the impact to national and economic security.

[Matthew Steckman](#), CRO, Andruil Industries
[Duyane Norman](#), DIU

OODA Global Risk Briefing

Drawn from our OODA Network of Experts, this global risk briefing will update you on the latest conventional and cyber threats and geopolitical considerations that should inform your decision making.

[Johnny Sawyer](#), CEO the Sawyer Group

[Jen Hoar](#), Corporate Intelligence and Investigations

The New Space Rush: The Final Frontier for the Economy and National Security

Humanities high water mark in space was in 1972 with the last of the Apollo missions. Since then no humans left Earth's orbit and all efforts on the ISS or from our Satellites seemed so very linear and exploratory. All indications are that we are entering a new age of exploration and human expansion into space with humans soon returning to the moon, Mars and perhaps soon afterwards even the asteroids. Explore the new national security and economic realities of this new space rush in our closing keynote discussion with the Chief Technology and Innovation Officer of the US Space Force.

[Bob Gourley](#), CTO, OODA

[Lisa Costa](#), Chief Technology and Innovation Officer of the US Space Force

The Take-Aways from OODAcon



The Take-Aways:

Reflecting on the discourse at OODAcon, it's clear that the pace at which disruptive technologies - BioTech, AI, Quantum Tech, Robotics and the like - are advancing is nothing short of exponential. These technologies are not just promising; they are pivotal for our government's ability to execute critical missions and for our economy's resilience in times of global unrest and crisis. But can technology be our savior from chaos? The hopeful and seasoned practitioners in the OODA network suggest that these technological leaps could indeed catalyze profound positive transformations, but only if we step up and take the lead.

To navigate this technological domain, we need leaders with vision, strategic insight, and the ability to inspire others to see how technology can revolutionize both business and government. But it's not just about leadership - it requires a collective commitment to ethical action, collaboration, and risk mitigation. Everyone within the tech ecosystem has a role to play in ensuring the most potent technologies are harnessed for the most challenging missions, thereby fostering the best environment for our community.

OODAcon offered a deep dive into numerous innovation sources, starting with keynote speaker Michael Gibson illuminating how we can foster innovation from unconventional avenues. These insights are not just relevant, but crucial for leaders across all industries and government sectors. A word of caution, though - don't conflate credentials with character or capability.

The Adversary Gets a Vote

It's also crucial to acknowledge that our adversaries are not standing still. They too are harnessing these disruptive technologies, often in ways that pose threats to businesses, governments, and even our democratic fabric. This includes threats from cyber-attacks and misinformation/disinformation campaigns. The practitioners at the event provided valuable context on these threats, drawing on their decades of experience. Both government agencies and commercial enterprises should not just bolster their defenses, but also prepare for the unexpected and ensure they have robust incident plans. This applies to a broad spectrum of threats, from misused AI systems and adversary use of AI to bioweapons, pandemics, cyber espionage, cyber-attacks, and misinformation/disinformation.

Space is Flourishing

The space domain is flourishing, both in terms of investment and technological development, with many innovative space firms present at OODAcon. The potential impacts of space on humanity span a multitude of missions, including health, energy, communications, and remote sensing. Debris removal is a burgeoning area. Mining on the moon is on the horizon, promising to enable manufacturing and rocket fuel production in space. This isn't just a part of NASA's Artemis project; numerous startups are also pursuing this avenue, including one at OODAcon. Space situational awareness is crucial for military and defense missions. The US Space Force, the newest branch of the US military, contributed

to OODAcon by sending their CTO, who not only addressed the network but also stayed late into the evening to help attendees understand how to engage with the Space Force.

Web3 and Blockchain Serves More Silently

The tech media and boardroom discussions around Blockchain technologies seem to have quieted, replaced by a relentless focus on AI. However, the builders and developers in the Web3 world are continually innovating, creating, and delivering value. New technologies are facilitating novel approaches to distributed finance, distributed scientific research, and indelible distributed assertion of ownership that bridges physical and virtual environments. There are considerable gaps between the regulatory environment we need and the one we have, and this varies from country to country. This suboptimal regulatory environment is driving regulatory arbitrage, with builders seeking out regions that allow them to do what they want. From a national and economic security perspective, this could drive critical innovation offshore. So, what's next for Web3? Expect further disintermediation and more mass-market moves, starting with increased use in entertainment and gaming.

The AI Winter Is No More

The AI revolution is essentially the new IT revolution, characterized by efficient code that can amaze and surprise. Its power is so dramatic that it's already causing displacement in the workforce, and more is on the horizon. Business models will need to undergo fundamental re-evaluation and reengineering as AI moves technology innovation from READ to WRITE mode often creating, coding, and building autonomously. Just after OODAcon our network members received early word of a new project demonstrating some of the incredibly useful aspects of AI for personal use, a large language model trained on the writings and presentations and style of Matt Devost. The result has proven to be useful for any seeking to learn Matt's approaches to cybersecurity, innovation, and entrepreneurship. A great example we are still writing about OODALoop.com. We have been leading the community in examination of new uses of the latest OpenAI, Microsoft, Midjourney, Delphi, and Vectara announcements and will continue to do so.

Every Executive Needs To Know of The Biology Revolution

The biology revolution is gaining momentum. Every leader across all industries and government organizations needs to keep an eye on this, as it will impact every human and therefore warrants tracking by every leader. In many cases, new capabilities from the bio

revolution will impact business models in unexpected ways. This revolution is leading to new human-machine interfaces, new methods to extract rare earth elements, new ways to produce fuels, and new ways to manufacture materials. It's also leading to new ways to enhance human performance and improve health and extend life. To derive benefits from these biology innovations, we will also need to make sure they are secure.

Robotics Will Go Exponential, But When?

Robotics, automation, and autonomy are reshaping both business and government. The military is a key focus area, with the DoD implementing multiple strategies to enhance the use of robotics and AI. The industry surrounding the DoD is undergoing a transformation, with companies like Anduril disrupting the status quo by innovating before customers even articulate their requirements. The intelligence community is also undergoing a transformation. Our adversaries are not exempt from this change, which underscores the points made earlier about the adversary use of disruptive tech. We must prepare for adversary use of AI-enabled robotic weapons. Additionally beyond these military and competitive uses of automation, robotics are coming into our daily life. It's conceivable that the robotics revolution will accelerate so rapidly that the current focus on AI will shift to the rapid proliferation of robotics. OODA CTO Bob Gourley believes the growth in robotics is going exponential so fast it will make the current attention being paid to AI to seem quaint. Robots give physical form to AI and they are coming!

Tech and Geopolitics Deeply Connected

The global geopolitical environment is more turbulent than ever, and it's never been more vital for business leaders to keep abreast of these complexities. Every continent has its own geopolitical dynamics, and in an interconnected world that relies heavily on free and open trade, unexpected developments can impact nearly every supply chain. Detailed insights from OODAcon will be shared in upcoming reports. Particularly concerning scenarios include the relationship between China and Russia and the implications for open societies like the EU, US, Japan, and other allies. Geopolitical instability is a significant driver of cyber risk, and it is influencing cybersecurity strategies across organizations of all sizes. As we navigate this increasingly chaotic global geopolitical environment, we must remain vigilant and adaptive, ready to respond to unexpected developments that could impact our supply chains and business operations.

Adapt or You're Toast

Organizational change is not just necessary; it's inevitable. When change stops organizations fail (this fact is likely second nature to any who have chosen to affiliate themselves with a group named OODA). Institutions that fail to adapt risk stagnation, and we're already seeing signs of this in various academic and government institutions. The best way to stave off decline is to self-disrupt and reinvent from within. If that doesn't happen, market forces will eventually compel dramatic change. We all need to evaluate where we stand and determine if we're part of an institution that needs disruption.



Concluding Comments: The Time to Take Action is Now

The essence of OODAcon lies in its capacity to forge a robust community of leaders, experts, and practitioners that serve as a collective force that can propel us towards a brighter future.

The world is at a transition point where technology is enabling rapid changes that can drive both positive and negative outcomes for humanity. It is also empowering many bad actors and posing new threats. Leaders like those in the OODA Network can play a pivotal role in guiding their organizations through this period of transition. This journey, while promising, will demand diligence, tenacity, and a lucid comprehension of the risks that lie ahead. The challenges may be daunting, but they become decidedly more manageable when we stand united as a team within the OODA Network.

The lessons from OODAcon underscore the need for us to remain adaptable, innovative, and vigilant in the face of rapid technological advancements and geopolitical uncertainties. We must lead with vision, embrace disruption, and foster a culture of learning and risk-taking. And above all, we must remember that everyone has a role to play in shaping a better future with technology.

Emphasizing the need for courage in learning and embracing failure is vital. We need to foster a culture that encourages risk-taking, as this approach is becoming increasingly

important for fostering innovation and problem-solving. The future will likely drive individuals and technologies towards increased specialization. This trend towards specialization is often driven by advancements in hardware and now software will also play a large role. In the future, perhaps even more so than today, we should all be on the lookout for talent in unconventional places. Of course, traditional sources will continue to be important, but we mustn't overlook the creative geniuses outside traditional organizations. Innovation and talent can and do emerge from garages, and we can expect to see more of this in the future. We need to broaden our horizons when it comes to sourcing talent.



About OODA Loop

OODA helps our clients identify, manage, and respond to global risks and uncertainties while exploring emerging opportunities and developing robust and adaptive strategies for the future. We are a global strategic advisory firm with deep DNA in global security, technology, and intelligence issues.

Powered by the OODA Network

The OODA Network is comprised of the world's leading global experts, business executives, and strategic advisors focused on managing the next generation of disruptive innovation, emerging technologies, and global geo-political and cyber risk. Members participate in monthly meetings, strategic forecasting events, and in-person networking events in Washington DC, San Francisco, Las Vegas, and New York City.

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