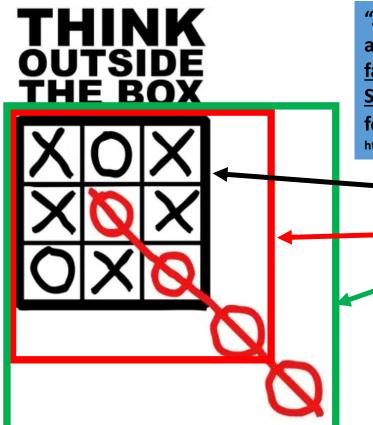
## The U.S. system created the world's most advanced military. Can it maintain an edge?

The United States, once the world's undisputed military superpower, has been struggling for years to efficiently update its arsenal and field new technology in cutting-edge areas such as hypersonics and artificial intelligence, at a time when some senior officials warn that China could be within five years of surpassing the U.S. military..... hardware and other ways to power major advances in software or AI. "Scale is going to be against us in almost every case against China," he said. "We're going to be looking for technologies that are leaps ahead." https://www.washingtonpost.com/national-security/china-us-military-technology/2021/03/31/acc2d9f4-866c-11eb-8a67-f314e5fcf88d\_story.html



"All of you are my change agents," said Selby. "Whether you're a large business, small business or academia, I need your help in helping the Navy and Marine Corps bring about change faster...Selby believes the concept of "the small, the agile and the many" represents a viable Strategic Hedge for supporting the large and complex platforms making up the bulk of today's force structure." Chief of Naval Research (CNR) Rear Adm. Lorin C. Selby, Apr 15, 2022 https://www.nre.navy.mil/media-center/news-releases/cnr-looks-future-naval-innovation-sea-air-space

DoD Weapon System Designers are Constrained by Using Outdated Hardware

- Using Currently Available Hardware Would Help
- But Fully Engaging Emerging Technology is the Needed "Game Changer"

Our world is at a strategic inflection point. As Andy Grove explained, "a strategic inflection point is a time in the life of business when its fundamentals are about to change. That change can mean an opportunity to rise to new heights. But it may just as likely signal the beginning of the end. <u>This is why I often speak of the "torrid" pace necessary</u>. " – Pat Gelsinger, May 20, 2022 https://www.linkedin.com/pulse/torrid-transformation-pat-gelsinger

Possible approaches to "broadening the vision of the possible" for DoD Weapon System designers

- Exposure of DoD Weapon System designers to tear-downs of correlated commercial systems
- Description of major commercial microelectronic components capabilities and adaptations for review
- Clear explanation of facilitated pathways through the DoD acquisition process to enable use of what they learn Distribution Statement A. Approved for Public Release, Distribution Unlimited