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# When Efficiency Harms the Mission

An Essay by Melissa Flagg, PhD

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# About the Author

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# When Efficiency Harms the Mission

## **I am declaring war on efficiency.**

Efficiency is very tidy. In peacetime, in normal times, one can have organizational charts, spreadsheets, and proxy measures. One can measure those, check the boxes, and pretend they mean something. The boss is happy, the boss's boss is happy; if this is a government program, everyone up to Congress is happy. Even if they aren't happy, they are still funding the project, so who cares?


In peacetime, it is very nice to have centralized, tidy coordination that is planned so well into the future that one can project that there will be a breakthrough in experimental physics at 8 p.m. Greenwich Mean Time five years from last Wednesday.

Efficiency is the illusion of control. It is finding the quantifiable optimum solution, even if one must ignore some complexity to get there. It is developing a spreadsheet and inserting formulas and concluding that the highest return on investment would come from doing A, B, and D while avoiding C and E. Spending a lot of money on different approaches to a problem does not seem very cost effective.

But what if the problem is not well defined? What if the environment is guaranteed to change? What if there is an adversary who gets a vote on what will work? I'm not speaking only about war, but of any competition. Different approaches lend themselves to success in different environments, and one cannot assume the environment will never change—in fact, the only certain thing about the future is that it will be different than the present. One cannot know what will turn out to matter in the future. Committing completely to any single approach will almost necessarily make it the wrong approach, as it incentivizes an opponent to shift the basis of competition. This can turn out to be a dangerous false economy.

In war, the adversary gets a vote. War is this deeply human endeavor. It is irrational and chaotic. A decentralized approach that allows many ideas to proliferate through different ideals, values, pressures, and supports has a higher chance of being resilient when there are shocks to the system. Efficiency runs counter to resilience. Efficiency is brittle. As soon as one determines a strategic priority, as soon as one commits to a single approach, that priority becomes a weakness an adversary can leverage. If everything is preplanned strategically, which is very nice and tidy in peacetime, the competitor has an outline for how to develop a counter to that plan.

Think about it in reverse. The number one thing I want to know about my adversary is what they are relying on in the future. That is how I develop a strategy that plays to my strengths and exploits their weakness. One of the most important things I can do at a strategic level is to treat the adversary's priorities or the capabilities they rely upon as targets, potential weaknesses, and vulnerabilities. And they want to know the same about me. If I lay out a plan, my competitor can find my weaknesses and leverage them. This isn't to say that



planning or strategy are bad, but instead that America can plan and craft strategies that embrace its culture of decentralized, competitive development.

The only guarantee about the future is that it will require the nation to adapt. A focus that prioritizes efficiency necessarily gives up some resilience and reduces options in the unknown future. An intentional diversity of investment may not be efficient in the short term, but it can offer resilience, which is more effective in the long term. Diversification is a hedge that makes it more difficult for the adversary to know how to cast their vote and retains options for when they do.

This is known in wartime. When people are dying, efficiency doesn't matter so much—it's the mission that matters. The focus is on completing the mission and getting those men and women home alive regardless of what it costs. It turns out that the money is there.

That same focus on mission over efficiency is needed in American policy today. Initiatives are nailed onto a risk-averse structure to keep people within a hierarchy where everyone reviews PowerPoints and reports. Every month, I need 20 new PowerPoint slides about my progress and whether I'm meeting my obligations, commitments, and execution goals. Every month, it seems someone wants to know what they can have for a little less money. Thus, I spend increasing amounts on contractor staff who collect data, draft reports, and create a never-ending stream of slides—all to make those in oversight feel better about efficiency and accountability.

**“The mission has become corporatized to the point where the mission to fight and win wars is secondary to the mission of squeezing out false efficiencies in the short term.”**

These incentives often run counter to the mission. The mission has become corporatized to the point where the mission to fight and win wars is secondary to the mission of squeezing out false efficiencies in the short term. The people are there. The infrastructure is there. Even the money is there. What is broken in the American national security community are the structures and incentives that surround the people and the infrastructure and the money and push them toward proxy measures that often do not align with actual agency missions.

So many smart people are simply avoiding risk in the name of efficiency while shouting, “We should all take more risks!” Everyone has been turned into an accountant—because it's peacetime. Accepting the risk that comes from trusting people to do their jobs without daily oversight is the type of thing that happens in wartime. When a crisis plays out, everyone comes together. The scientists and the engineers are out there in the field with the operators to see what's happening, to understand the problem, iterate on new options, get it back out there and see how it works—and repeat. America did this through the whole 2000s in Iraq. So, it does happen.

And it works.

Federal R&D has become so function oriented that people no longer know how to do their real jobs. People have lost track of the mission.

Here is the beautiful thing about DOD. When I was hired by the Navy, I was in a research job in London, and they sent me out for five days on a scientists-to-sea program. They told me to learn about the Navy and get an appreciation for the mission. Understand these young people are learning how to staff this ship to go to a war zone. They may not all come back. That is your job, help them accomplish their assigned mission and give them the best chance to come home alive. Respect it, love it. Be inspired by it. Be driven by it.

Then, when I would get grumpy working on some wonky research thing, my boss would say, "Do you remember being on that ship?" I'd be like, "You're right. I know this is not about me. I'm a part of something so much bigger than me."

### **We must focus people on the mission, not their function.**

Here's an example from the military of how the obsession with efficiency can drive negative incentives into the environment. If a service wants to open a new research location, it may pit five states against each other just like Amazon did. It will drive for the lowest bid: free land, free university access, free, free, free. This, instead of aiming for the bidder who can deliver consortia contracts and access to the largest number of researchers on Day 1. But that would cost more money! The desire to save \$500,000 in a Department of Defense with a three quarters of a trillion dollar a year budget has lessened the ability to tap American capability.

This relationship with efficiency needs to be reconsidered. What is being secured and what incentives are needed to secure it? What are the values and qualities being secured? The system needs to be restructured so the people at the top see themselves as being in service of this nation. People are willing to follow if they see themselves as being in common service. If they are being beaten with a stick and made to fight among themselves, they will not follow. They will not achieve that mission.

A far better approach would be to define the goal, bring a group of people together, and tell them they have seven years to demonstrate a solution that works. Bring theorists, experimentalists, and engineers together from industry, from academia, and from within government. Co-locate them, give them infrastructure and stable funding, but don't have them writing PowerPoint slides once a month.


Measure every single one of them against the same goal. Don't measure contracting officers on how many dollars they put on contract, measure them on whether they helped the organization get closer to the goal post as quickly (and legally) as possible. There are no supporting roles, every team member is critical: contracting officers, lawyers, HR, program managers, engineers, scientists, operators, etc.

To me, this type of structure is feasible without big changes in law or authorities. But to do any of this, one has to first decide what problem is worth spending all this money to solve. The country knew what it wanted to do in the moonshot, and government leaders were on board, at least publicly: Get there first, before the



U.S. Navy photo by Mass Communication Specialist 2nd Class Joseph R. Schmitt.





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Russians. There was no lack of clarity. There was urgency and a clear timeline. There was all the money that was needed and a very tightly scripted goal that was not wavered from: Get a person on the moon, preferably bring them back alive.

**Messiness is dynamism.**

The U.S. is fundamentally a decentralized system. It cannot be controlled without losing its most valuable aspects. But it feels chaotic. One wants to tell people what to do, fit them into a spreadsheet, and develop easy-to-measure performance metrics that make investment decisions obvious. But this decentralized system is America’s biggest asset when the worst-case scenario is at the door.

Everyone alive today was raised in this post World War II era when the federal government had a certain role. It was a large purchaser. Industry was focusing on it. New massive social support structures were being created, building on the New Deal. Medicare, Medicaid—the country created the social safety net everyone has now become accustomed to, but these things were all new in that period. It was new for the federal government to play such a large role in people’s lives.

Now I think society is going back to the relationship it had before World War II. Americans have always had a bit of a trust issue with large, centralized power.

My vision is an America that embraces its strengths. Its strength is found in a certain messiness, a bottom-up spirit of competition with some fighting and some dirt throwing. The U.S. is loud, the extroverted teenager of the world. America and Americans love to take risks.

At the same time, Americans don’t really like taking instructions and have issues with authority. People view those as negatives, but there are ways to structure organizations and infrastructure, ways to convene and engage and move and channel that kind of energy into outcomes that are good for the country. Right now, it’s unchanneled. People are filling that void with fear. Leaders and those aspiring to leadership are not articulating an optimistic vision for America.

I want Americans to celebrate this diversity of ideas and solutions, funding streams and implementation mechanisms, small companies and large companies, and philanthropies and academic endowments, and states and cities. The country is so dynamic that it feels messy, it feels overwhelming, it feels like it needs to be organized and put into little bins. Often, this results in ideas that try to force everyone into a common set of rules and beliefs. Many call this strategy. I call it avoiding reality.

This messy diversity—one of America’s greatest strengths—is also America’s largest challenge. I want the country to embrace it, understand it, and hear it rather than drown it out and pit people against one another. Dynamism and diversity suggest tension. I like tensions. Humans want to resolve tensions, but that is unrealistic. Tension is required in a biological system. Pressure stops cells from proliferating like crazy. The cells have

to push each other at their boundaries to stay healthy and contained. Without that physical pressure against each other in the right amount, the result is cancer.

Rather than a drive to consensus and tidiness and resolution, I want to see a structure that harvests from that creative tension, respects the tension, and somehow organizes for the tension. Utilize and leverage the tension, don't drive it out. Provide direction and allow compromise rather than requiring consensus. Accept that compromise just means everyone is equally annoyed by the outcome, but the country can then move forward. Somehow, Americans have lost sight of the fact that that messiness has a value that can be channeled into something really powerful.

But what is that powerful thing Americans want to achieve? What do Americans want the future of the nation to be? The country is focusing too much on beating others, as if it suddenly has self-esteem issues. It's as if the country is comparing itself to others and wanting to be skinnier or faster or have better technology. The country is allowing its adversaries to set the rules of the competition and literally define its own success through the lens of that competition. What would it look like to win? Competitive definitions established by competitors may make the nation less economically successful and will certainly cost lives.

America needs a vision for itself. What should the American people be able to do? What kind of life should they be enabled to live? What is being secured? National security isn't about beating someone, it's about securing the values and the lifestyle that Americans want.

If the country decided to prioritize, not just say it wants to be the world leader in everything, everywhere, all of the time, then it would likely create a host of approaches, and that beautiful chaotic decentralized system would deliver amazing results.



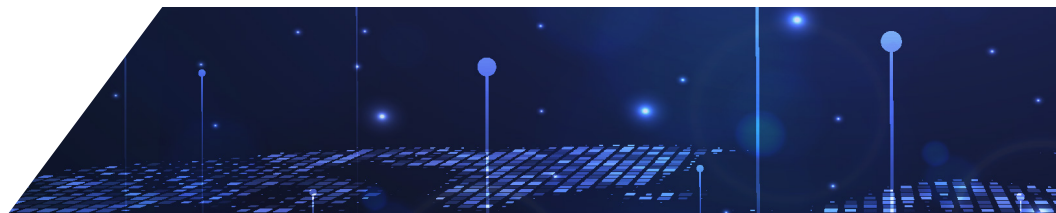
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