



From ancient stone discs to today's tires to tomorrow's marvels, the evolution of the wheel represents a history of innovation that will roll on into the future. The continuing development illustrates how creativity, reimagination, and adaptation to changing needs are crucial to success. Soldiers should never stop reinventing the wheel. (U.S. Army graphic by Dale Cordes)

Why You Should Reinvent the Wheel

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Scientists estimate the wheel has been around since about 3500 B.C. Originally used for milling, irrigation, pottery manufacturing, and as children's toys, the invention found a new use when someone figured out it would be great for hauling (the wheelbarrow). Then, someone else discovered it could be used for transportation (the chariot). From solid discs carved from stone and wood to spoked, metal-rimmed hoops to the basic pneumatic technology in use today, the simple machine of wheel and axle is timeless.

Yet, while the general principle of the wheel hasn't changed in about 6,000 years, the concept of the wheel has been reinvented countless times throughout history. The material compounds, design construct, tread efficiency, and longevity have all changed. And they will continue to change. These factors, including advanced digital components of future wheels, will be unlike anything we see on our roads today.

So why have humans continued to reinvent the wheel? To make things better.

Throughout my career, I've often heard the idiom, "Don't reinvent the wheel." I know I'm guilty of uttering the phrase, and I bet you are, too. It's a phrase often used at every leadership level, usually about some pending task, project, or planning effort. It's a caution against wasting time. It's a caution against doing what's been done in the past. It's a caution against creating redundancy.

There's no doubt this phrase is a valuable reminder that proven protocols, standard operating procedures (SOPs), or tactics, techniques, and procedures (TTPs) save time and, in many instances, save resources and lives. However, in the context of aspiring to create innovative, disruptive change, thinking about how to "reinvent the wheel" is exactly what may be required. How do we do something we already do better?

For operational and strategic leaders, encouraging subordinates to "reinvent the wheel" – particularly in the face of challenges and opportunities of future operational environments converging with advancing technologies – is critical and imperative.

In contrast, telling someone not to "reinvent the wheel" signals you're satisfied with the status quo – that you've resigned and accepted an assumption that improvement, advancement, and progress are wastes of resources. While the world is rapidly changing and advancing, maintaining the status quo is going backward in time. Imagine driving an Abrams tank mounted on the wheels of a Western pioneer's Conestoga wagon. Better yet, imagine the last few decades' battalions or brigade tactical operations centers – massive signatures, easily targeted – surviving in our next war. Ridiculous!

Yet, maintaining the status quo can be comforting for transient leaders who move in and out of leadership positions with little longevity beyond two or three years. "Don't reinvent the wheel on my watch!" After all, truly driving change means accepting risk. Unfortunately, risk avoidance is often instinctual when given limited time and resources to lead organizations through relatively short periods. To take a risk, even if well-mitigated, still involves

anxiously navigating the unknown.

We may find ourselves asking questions that can amplify self-doubt. If I take risks, how may I upset the organization I lead? If I take risks, how may I upset my boss? If I take risks, will I get promoted? If I take risks, will people complain about me to my leadership? If I take risks, how will it affect my reputation? How will it affect my career or family?

Why take all that risk when I can safely navigate an organization through a brief period by avoiding any attempts to "reinvent the wheel"? Why not just maintain the status quo?

We see this dynamic play out across our military every day. We see leaders come and go, in and out of leadership positions that can effect real, positive, disruptive, innovative change. Yet, they avoid decisions, slow progress, stifle initiative, and opt for the status quo. Or, in some cases, they disingenuously re-brand existing conditions as something new.

In a recent conversation with a colleague, we discussed the virtues and vices of rule-followers versus rule-breakers; the company man versus the maverick; dogmatic and principled versus pragmatic and realistic. My friend had recently read that dogmatic, principled leaders tend to be more successful in times of peace, whereas pragmatic, realistic leaders tend to be more successful in times of war. For me, it made sense, possibly explaining why we are so often accused or guilty of "fighting the last war" and tend to be more

inventive, resourceful, and creative in conflict – when lives are on the line. As Sun Tzu warned, one's victories in battle cannot be repeated – they take their form in response to inexhaustibly changing circumstances.

I fully understand that my argument isn't a black-and-white issue. Nuances and shades of gray determine how we approach organizational leadership and challenges at the operational and strategic levels. I'm endeavoring to communicate to readers a cautionary tale. Despite the transient nature of our assignments, we need to be aggressive and progressive in our leadership approach and philosophy. And it needs to be more than



Driving change means accepting risk. Those behind the wheel need to steer their teams via impactful decisions. (U.S. Army graphic by Dale Cordes)



Tomorrow's leaders must provide explanations that go deeper than sketches made via whiteboard, PowerPoint, or whatever future tech they have at their disposal. (U.S. Army graphic by Dale Cordes)

PowerPoint deep, more than something we sketch on whiteboards, napkins, or scratch paper.

Don't be afraid to make impactful decisions. Don't

be afraid to make meaningful changes. Don't be afraid to take well-mitigated risks. Don't be afraid to reinvent the wheel. ■

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