URL: https://stvp.stanford.edu/clips/a-lean-fighting-machine

Stanford Adjunct Professor Steve Blank explains how the terrorist tactics American troops faced in Afghanistan prompted the Army to create a special unit tasked with searching for solutions in private industry and rapidly acquiring and deploying them on the battlefield. Blank, creator of the Lean LaunchPad methodology, says the idea was the impetus for his course "Hacking for Defense: Solving National Security Issues with the Lean LaunchPad."
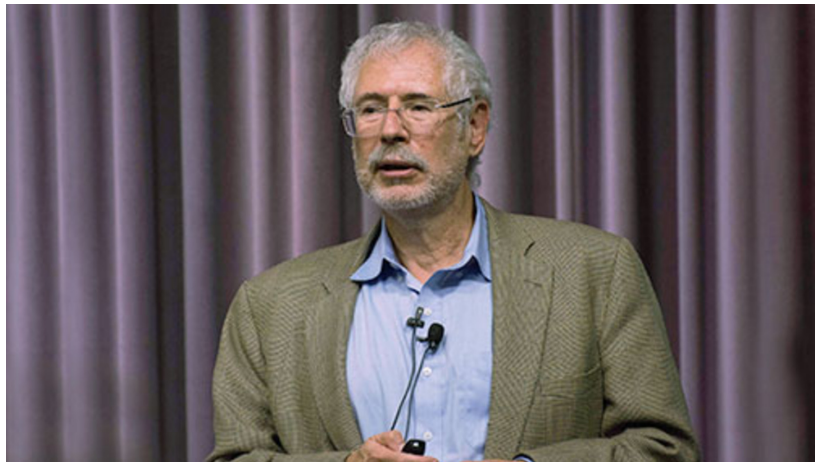
## Transcript

- In the Iraq and Afghanistan war, the U.S.. Army stood up, started a group called the Army's Rapid Equipping Force.. Their job was to search for problems that our soldiers and warfighters had on the ground and rapidly deliver commercial, off-the-shelf solutions to those problems.. Let me give you an example, and then I'll point out the colonel who, in the audience, who actually built this.. In 2010, what the Army were buying were these heavily-armed MRAP vehicles that solved the problem that soldiers in Iraq had, which were improvised explosive devices exploding outside their unarmored Humvees.. So we now delivered up armored vehicles to Iraq.. Solved that problem, or mostly.. Except, now our troops were in Afghanistan where they didn't have roads; and instead of driving around like this, this is how they got around the mountains.. Oops, no armor.. What happened? Well, what happened is, IED attacks against dismounted squads were pretty terrific..

The Taliban had a pretty interesting innovation cycle.. They'd start, we'd stop 'em, they'd innovate, learn, and change.. They'd start, we'd stop 'em, they innovate and change; until such that we were losing a lot of soldiers, because we didn't have a way to counter IEDs for dismounted troops.. Our innovation cycle looked like this: we'd learn, and then we'd change.. The problem is, guess whose cycle was faster: ours, or theirs? So the army decided, we needed to do something better because in between their cycle and ours, we took 4,900 casualties before we could respond.. The Rapid Equipping Force.... was a mission-focused group, was focused on problem sourcing and definition, and basically used networking and crowd curation, and basically something called the OODA Loop to rapidly get solutions out in the field; and it was run by Pete Newell.. Pete, why don't you raise your hand? Yep.. Colonel Pete Newell.. And you'll see his picture again next time, dressed up in something different than what he's wearing here..

Pete found that the real impediments to innovation in the army was we didn't understand: we didn't understand the problem, we didn't understand the threat or the environment.. Warfighters didn't know what they wanted.. They wanted to stop getting blown up, but they didn't know what the solution was.. We were delivering static solutions with no plans for a threat that was evolving.. "Yeah, here, we have a solution.. "That's great, but the enemy is constantly iterating." And we lacked collaborative information about what kind of development environment we should be using, and a good chunk of our organization didn't get promoted if they took any risk.. So in fact, people back home were getting pretty risk-averse, while people were getting killed on the battlefield.. Finally, we were hindered by outdated policies.. "No, you can't spend this money.. "Congress didn't budget it..

"Well, no, people are dying.. "No, but it's not in my spec for the money you could spend." So Pete and the REF put together a different philosophy that said be present, be predictive, be intuitive, be inclusive, be aggressive; and started delivering solutions now.. Pete went out across the country and found commercial, off-the-shelf solutions that could either be used right now, like a bulldozer with a new front end, or a Mini Portable Line Charge, or a small robotics device; and actually started deploying them, as rapidly as they can.. The casualties started to go down equally fast.. What Pete Newell and the Rapid Equipping Force did was essentially build a lean startup methodology.. If you don't recognize it, this is a lean startup.. But instead of building apps for the iPhone, it was actually building real-world solutions at speed.. At speed, and delivering them out on the battlefield...