Twitter Thread by Venkatesh Rao



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stacks are eating the world

business used to be easiest to comprehend via a) market-based logic of horizontal vs. vertical STRUCTURE, b) professionalization/specialization based FUNCTION c) core competencies based BEHAVIORS

this has pretty much collapsed in the last decade

Structure = sclerosis
Functional specialization = bureaucracy
competencies = inertial habits

"Stack" thinking instead lets technology structure (rather than market structure) drive business org logic

Companies seem to do well when they identify an entire stack of technologies they are good at (not just point bits) and organize to conform to its logic. There is a "full-stack" dimension of technical specialization that is the spine of the org

It feels buzzwordy, but it really is getting to be that way. AI stack, decarbonization stack, mobility stack, electrification stack... some end-to-end pathway of turning physics into economics via layers of tech artistically baked together like a cake

If you haven't seen enough examples to instinctively pattern-match what I'm talking about, think of a stack as somewhere between an industry sector like "aerospace" and a functional specialization like "marketing."

Is the drone industry part of aerospace? Yes and no... there's an aerospace renaissance on to be sure, and some of it overlaps with the old kind and with lots of FAA regulations and such, but really what we have is a "new aerospace stack"

covers the tech needed to build useful end-to-end capabilities for everything from delivery drones to surveillance to disaster relief search-and-rescue to even indoor toys/games/robotic assistance... yes, bits of it look like boeing, but lots of it do not...

Here there is a 1:1 correspondence. Old aerospace is retreating to high-end/high-cost "platform" organization. In other cases, it's entirely new. There's a "sidewalk stack" for example (scooters, bike rentals, hoverboards, delivery robots, inspection robots)

I'd probably call that the "smart sidewalk" stack or "low-power urban mobility stack" ... currently a half-baked cake of technologies that impact many current and potential markets and businesses/orgs