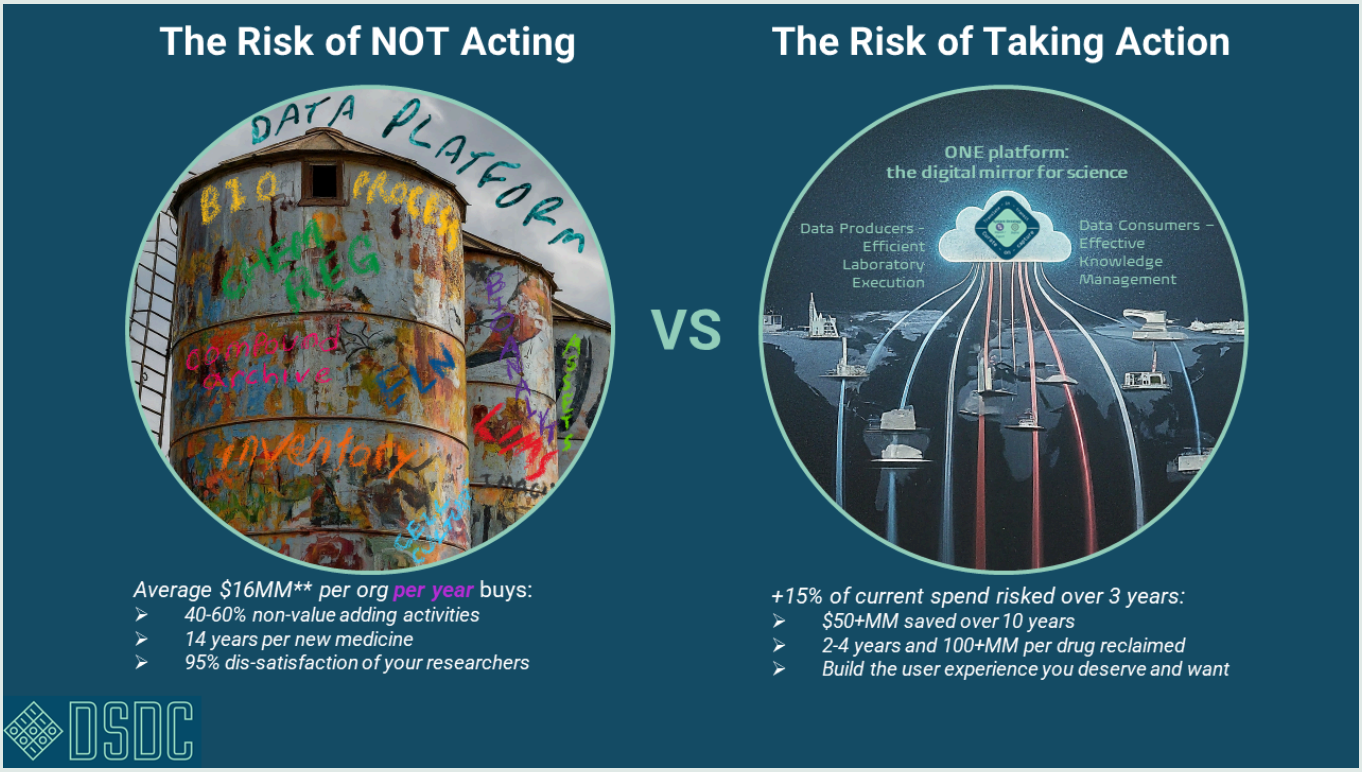
Post: Is This What We Should Be Focusing On Right Now?

Is R&D informatics for data management and lab execution what we (industry) should be focusing on right now?
…this is a great question received about the Digital Science Development Consortium from a long time industry expert. I think of Annie Duke, in her book *Quit: The Power of Knowing When to Walk Away.* Her insights on how changing your tactics when what you are doing is threatened is often the difference between success and failure.

SLIDE 1 - WE KNOW THE RISK OF NOT TAKING ACTION



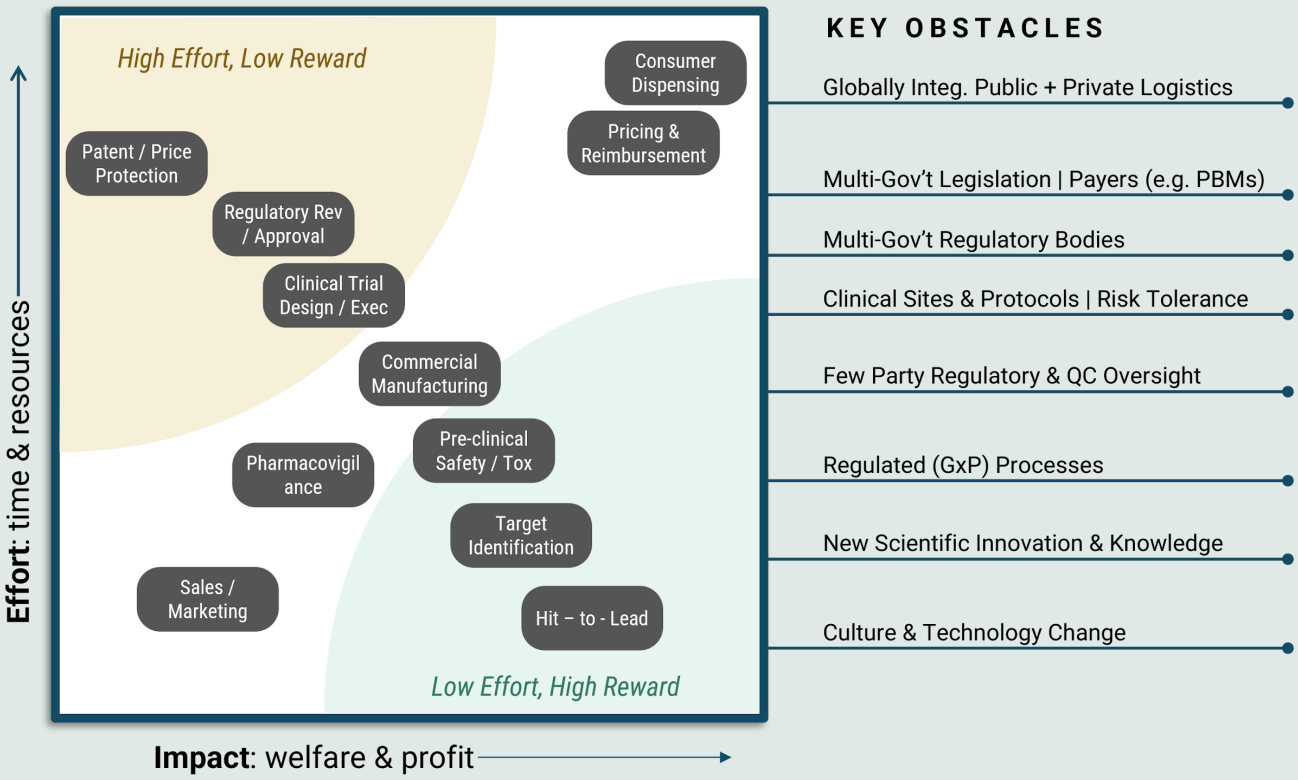
We have thousands of companies with decades of different laboratory informatics modernization and transformation ***attempts*** which have failed to achieve the desired outcomes. Continuing to capture data into silos and building "data platforms" on top of silos creates another data consumer silo.

Are we REALLY GOING TO CHOOSE the existing high cost for inadequate results?

The DSDC product solution will eliminate the silos using new technology design, new knowledge management (dynamic ontology) approaches, and a new commercial model. A dozen mid to large companies willing to commit 15% of their current R&D IT spend for 3 years will dramatically reduce their own spend and enable the entire industry to save hundreds of millions annually..

SLIDE 2 - PRIORITIZING

Drug Development Macro Functions– Effort, Impact, Obstacles Matrix

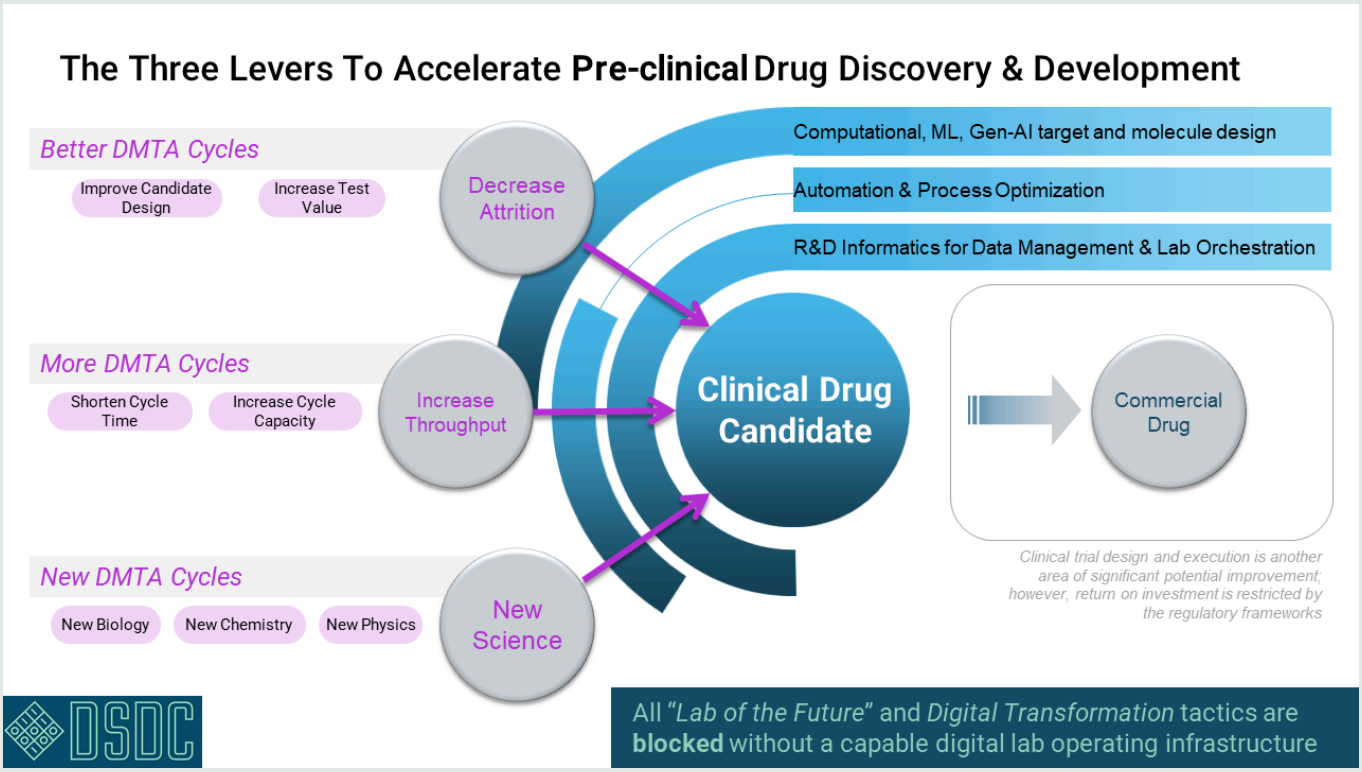


Key areas which demand change in the drug industry are placed on an effort (to change) vs impact (on welfare and business) matrix.

ALL of these problems are very difficult - thus why we maintain the status quo.

Solving our business functions which bring new compounds into the clinic is the highest impact and lowest effort area to solve.

SLIDE 3 - FIX THE FOUNDATION FIRST



Within the pre-clinical realm, there are three ways to improve the production of clinical drug candidates.
Decrease Attrition before and in the clinic
Increase Throughput of viable candidates
Find entirely New Science to impact disease and make drug candidates.

AI will help us through improved target selection, improved molecular design and synthesis, activity and liability prediction and drug formulations. Most importantly, AI will help us ensure that each DMTA cycle is far more informative compared with today. This has a critical dependency on our digital lab infrastructure..

Automation can increase throughput of DMTA cycles and industrialize new "academic" science. All levels of lab automation require integration with the experimental designs and result data to be effective. This is the primary reason for the limited impact of lab automation today.

Our entire DMTA cycle requires a robust R&D informatics infrastructure - including AI and automation enabled improvements. Evidence of this can be seen in the few companies who are at the tip of the spear with "AI led drug development". They have invested heavily in automation and they have built their own bespoke R&D informatics tools for executing their DMTA cycles. Why - because tools are not commercially available, go ask any of these companies.