

Review of: "Science desperately needs disruptive innovation"

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Potential competing interests: No potential competing interests to declare.

The authors tackle an interesting and consequential topic. I applaud the part of their method where they use funding data to compute disruption indices. I have some skepticism, however, for the way they compute these indices for science publications. Specifically, for the computation of disruption indices for remote science and other disciplines, where the authors use citations, I suggest the citations to be normalized. For how to normalize citations, please see the following article: <https://www.nature.com/articles/s41599-021-00869-9>

In the AI/Quantum computing realm, the authors use number of papers instead of citations. I believe that's why we do not see the well-known Gaussian behavior of citations over time. Instead, we see the well-known inflation of publication numbers effect, which has been going on for over thirty years due to the ever increasing scientific force and publication outlets.

In a nutshell, the authors should remove the two confounding effects that I described, so that we see if what it remains is still the same with the pattern they hypothesize.