

Innovation increasingly led by collaborative teams, not individual pioneers: Study

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Is disruption decreasing, or is it accelerating? That depends. With the exponential growth in scientific publications, the chance that an individual scientist might be highly disruptive in their field is decreasing.

Collectively, however, the overall level of disruption in science—the influence of new findings that tend to overtake previous understandings—is as strong or stronger than it was fifty years ago. In other words, the world of science is as disruptive as ever, even if each individual's place in that expanding world is shrinking.

A recent paper published in *Advances in Complex Systems* is of interest to leaders in innovation, industry, scientific policy and education. Although it may sound disheartening that each of us has a smaller role in innovation, the upside is that the world of science and innovation is stronger than ever, because it increasingly involves the collaboration of large, diverse and multi-disciplinary teams of researchers.

"In an exponentially-expanding world of information and innovation," lead author Bentley said, "we each have a smaller role to play. But overall, the pace of disruption, cultural and technological change still accelerates."

Written by contributors in Tennessee, Texas and Barcelona, Spain, the paper combines the perspectives of expertise in [cultural evolution](#), [complexity theory](#), ecology and the evolution of Technology. The finding that disruption is steady but individuals role is shrinking is a confirmation that science and innovation increasingly involves the collaboration of large, diverse and multi-disciplinary teams of researchers.

Corresponding author for this study is Alex Bentley, the Associate Dean of the College of Emerging and Collaborative Studies and Professor of Anthropology at University of Tennessee.

The paper [Is disruption decreasing, or is it accelerating?](#) can be found in the journal *Advances in Complex Systems*.

More information: R. Alexander Bentley et al, Is Disruption Decreasing, Or Is It Accelerating?, *Advances in Complex Systems* (2023).
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