

# RESEARCH IN ACTION:

## Wharton's David Hsu and Prasanna Tambe Reveal How Remote Work Helps Diversity Recruitment in STEM

### THE PROBLEM:

Tensions over office space, leasing costs, productivity, and employee morale have captured much attention in the ongoing conversations about remote and hybrid work. But less has been paid to discovering how the applicant pool responds to such work. Does remote work have a positive or negative role in attracting gender- and race-diverse applicants? If one barrier to diversity is flexibility, could firms hurdle that barrier by offering remote work?

Wharton professors [David Hsu](#) and [Prasanna \(Sonny\) Tambe](#) set out to answer those questions in their groundbreaking study, which examined the effect of remote work on diversity recruitment in STEM fields – science, technology, engineering, and math. Their findings could help shape how jobs are designed in the future.

STEM jobs are projected to grow 8% by 2029, compared with 3.7% for all occupations, according to government estimates. Although diversity in STEM occupations has increased in recent years, a troublesome gap persists.

“We wanted to look into this angle because we know that shortages are coming in STEM, and it’s been well-documented that diversity is quite important for innovation,” Hsu said. “There is an unequal landscape of opportunity.”



## THE RESEARCH:

In their paper, “[Remote Work and Job Applicant Diversity: Evidence from Technology Startups](#),” the professors analyzed thousands of technical and managerial jobs that were posted before, during, and after the peak of the COVID-19 pandemic. When the same jobs shifted from in-person to remote, that single change yielded a 15% increase in female applicants, a 33% increase in underrepresented minority applicants, and a 17% increase in total applicant experience.

Drawing on previous studies about women and minorities in the workforce, Hsu and Tambe outlined three reasons why they believe remote jobs attract a greater number of diverse candidates:

- [Time flexibility](#) -- This dimension is especially valuable for women who bear a greater share of child and family care. Remote work also erases commutes, giving women back more family time.
- [Location flexibility](#) -- Remote work loosens geographic constraints for women who may be confined to a location because of their husband’s job. It also provides broader job opportunities for underrepresented minorities who may not have the same access to living in an expensive city. Just five cities -- Boston, San Diego, San Francisco, Seattle, and San Jose -- accounted for 90% of the growth in tech jobs from 2005 to 2017.
- [Limiting face-to-face interactions](#) -- Remote work allows women and minorities to remove themselves from hostile work environments or offices where they may encounter microaggressions or overt discrimination. However, the professors caution that long-term remote employees may not develop the interpersonal skills required for managerial jobs, may get less useful feedback, and may be overlooked for promotions.

## THE SOLUTION:

Although the study focused on tech startups, the findings are relevant for business leaders across industries as they tackle the dual challenge of increasing workforce diversity and figuring out remote, hybrid, and in-person work. Managers don’t often think about offering remote-eligible jobs as a way to boost diversity, yet the research shows it’s an option.

“If we pay attention to the reasons why women and underrepresented minorities are drawn to remote work, we do think that this is fairly applicable for a pretty wide swath of skilled jobs,” Hsu said, noting that the average salary of the jobs in the study was \$120,000.

# THE SCHOLARS



[David Hsu](#) is the Richard A. Sapp Professor of Management. He joined Wharton's faculty in 2002 following a post-doctoral fellowship at the Massachusetts Institute of Technology's Sloan School of Management. He holds a bachelor's degree in economics and political science from Stanford University, a master's in public policy from Harvard University's Kennedy School of Government, and a Ph.D. in management from MIT.

Hsu's research interests are in entrepreneurial innovation and management. He has investigated intellectual property management, startup innovation, technology commercialization strategy, and venture capital, and his research has appeared in leading journals. At Wharton, he leads the Venture Acceleration Lab, an effort to speed startup development.



[Prasanna \(Sonny\) Tambe](#) is an Associate Professor of Operations, Information and Decisions. He joined the faculty at Wharton in 2017 after serving as a professor at New York University's Stern School of Business. He holds bachelor's and master's degrees in electrical engineering and computer science from MIT, and he earned his Ph.D. in managerial economics from Wharton. Tambe's research focuses on the economics of technology and labor, and he specializes in using large datasets to measure labor market activity. He is a co-author of "The Talent Equation: Big Data Lessons for Navigating the Skills Gap and Building a Competitive Workforce," published in 2013.

The Wharton Coalition for Equity and Opportunity (CEO) creates research-driven solutions to help current and future leaders ensure equity in business relationships and leadership. Dean Erika James, who is Wharton's first Black and first female dean, is emblematic of a paradigm shift in executive leadership. She has launched the Wharton Coalition for Equity and Opportunity as the hallmark of her leadership commitment to diversity, equity, and inclusion. The initiative is being led by Kenneth L. Shropshire, Wharton emeritus professor of legal studies and business ethics. Shropshire is the former director of the Wharton Sports Business Initiative and former CEO of the Global Sport Institute at Arizona State University.