## ILR Review Special Series: CALL FOR PAPERS

## **Novel Technologies at Work**

Adam Seth Litwin, Series Editor

The *ILR Review* is issuing an open and ongoing call for papers that address the challenges that advances in artificial intelligence (AI), robotics, and other novel technologies create for work, workers, and employers, as well as for organizations and labor markets more broadly.

Our interest in novel technologies and technological change is, admittedly, not altogether new. But, our focus differs from that of many others in our goal of advancing knowledge about their impact on work, workers, employment relations, and labor markets. In addition, the upcoming 75th anniversary year of this journal reminds us of how important technology and technological change have always been to unpacking work- and employment-related phenomena. In the very first issue of what was then the Industrial and Labor Relations Review, union leader-cum-academic scholar Florence Peterson (1947) described the ways that institutionalized workplace democracy influences "management efficiency." Along the way, she sketched a throughline from those independent artisans who owned their own tools to the then-emerging technologies and production methods that upended deep-seated norms and rules around job control. About a decade later, Dunlop (1958) positioned technology as one of three points determining the plane of "shared ideology"-along with product and labor market conditions and the relative distribution of power—in his seminal treatment Industrial Relations Systems. Slichter, Healy, and Livernash (1960) soon followed with their tome, The Impact of Collective Bargaining on Management, which included what remains the most useful framework for predicting union responses to technological change.

Yet, technologies' nature and capabilities have evolved much faster than the institutions and labor markets to which we devote our studies. We could once accept that technological change was "skill-biased" in the net (Krueger 1993) or that computers substituted for those workers undertaking routine tasks but complemented those doing nonroutine ones (Autor, Levy, and Murnane 2002, 2003). But, these findings may or may not extend to recent technologies that can "learn" on their own, sensing and adjusting to changes in their work environment in ways that improve their functionality over time. In our view, advancing theory and research to account for these changes requires the sorts of grounded, problem-focused approaches that have always characterized the best research published in the *ILR Review*.

Potential topic areas include, but are not limited to:

- What lessons can we apply from research on previous technological advances, such as containerization or programmable automation, to understand the labor market impact of AI and robotics?
- How should unions organize and strategize as they anticipate the diffusion of novel technologies?

- How do novel technologies vary in their application and outcomes across diverse industries and occupations?
- In what ways does the influence of inexpensive and ubiquitous broadband access refract through industry-specific features to affect job quality?
- How can policymakers craft institutions that direct the technological change process toward broad economic prosperity and improved job quality?
- When seemingly identical technological innovations drive divergent outcomes, what management and labor strategies or workplace features explain the variation?
- What have been and what will be workers' responses to "algorithmic injustice" outside the bounds of traditional unionism?
- How do the exigencies of financialization influence employers' technological investment choices and strategies for deployment and implementation?

We encourage researchers from across the social and behavioral sciences as well from multidisciplinary fields to share their unique perspectives—from anthropology, economics, political science, psychology, and sociology to history, law, public policy, and, of course, industrial relations.

Authors who want their papers considered for publication in this series should submit them through our <u>online manuscript submission portal</u>. When prompted in Step 5, click "Yes" for special issue and enter "Novel Technologies at Work" in the text box.

For more information, contact Adam Seth Litwin, *ILR Review* Associate Editor and Editor for this special series. You may also contact the *Review's* Editors-in-Chief, Rosemary Batt and Lawrence M. Kahn.

## References

Autor, David H., Frank Levy, and Richard J. Murnane. 2002. Upstairs, downstairs: Computers and skills on two floors of a large bank. *Industrial and Labor Relations Review* 55(3): 432–47.

Autor, David H., Frank Levy, and Richard J. Murnane. 2003. The skill content of recent technological change: An empirical investigation. *Quarterly Journal of Economics* 118(4): 1279–333.

Dunlop, John T. 1958. Industrial Relations Systems. New York: Holt.

Krueger, Alan B. 1993. How computers have changed the wage structure: Evidence from microdata, 1984–1989. *Quarterly Journal of Economics* 108(1): 33–60.

Peterson, Florence. 1947. Management efficiency and collective bargaining. *Industrial and Labor Relations Review* 1(1): 29–49.

Slichter, Sumner H., James Joseph Healy, and E. Robert Livernash. 1960. *The Impact of Collective Bargaining on Management*. Washington, DC: Brookings.