

# The Fourth Industrial Revolution: Issues and Implications for Career Research and Practice

Andreas Hirschi

The accelerating digitization and automation of work, known as the 4th industrial revolution, will have an enormous impact on individuals' career experiences. Yet, the academic literature in vocational psychology and career research has been remarkably silent on this trend so far. This article summarizes some of the most important issues of the 4th industrial revolution as they pertain to career development. The author then critically reviews how current models and frameworks of career development are suitable for addressing these emerging issues. Opportunities for future career development research and practice are outlined.

*Keywords:* digitization, automation, career development, career choice, career counseling

Digitization and automation of work, frequently referred to as the fourth industrial revolution (Schwab, 2016), is considered by many to be the most important societal and economic trend in the world—one that will fundamentally change the nature of work, business, and society in the coming decades (Arntz, Gregory, & Zierahn, 2016; Brynjolfsson & McAfee, 2014; Ford, 2015; Frey & Osborne, 2013). These changes might lead to the elimination of thousands of jobs and the disappearance or fundamental change of many current occupations. At the same time, new occupations, new industries, and fundamentally new ways of work will likely emerge (Brynjolfsson & McAfee, 2014). It seems clear that digitization and automation might therefore be one of the most important issues to shape the future nature of career choices, career development, and career counseling.

Surprisingly, however, the academic literature in vocational psychology, career studies, and career counseling has been largely silent on this major phenomenon, as is the case for the related disciplines of organization and management studies (Barley, Bechky, & Milliken, 2017). Hence, despite clear relevance, the scientific literature lacks a more profound discussion and investigation of the consequences of digitization and automation of work for career development research and practice. It seems particularly important to reflect critically on the extent to which prominent models and frameworks of career development are suitable for addressing the occurring changes in the world of work and how career counseling practices might be affected by these changes.

To address these issues, I first summarize key elements of the current discussion about the nature and consequences of the digitization and automation of work. On the basis of this overview, I then address how recent models and perspectives from vocational psychology and career development are

---

*Andreas Hirschi, Institute for Psychology, University of Bern, Bern, Switzerland. Correspondence concerning this article should be addressed to Andreas Hirschi, Institute for Psychology, University of Bern, Fabrikstrasse 8, CH-3012 Bern, Switzerland (email: andreas.hirschi@psy.unibe.ch).*

© 2018 by the National Career Development Association. All rights reserved.