

Book Review

"Working with AI: Real Stories of Human-Machine Collaboration." Davenport, T. H. & Miller, S. M., 2022, MIT Press

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Davenport and Miller's book "*Working with AI: Real stories of human-machine collaboration*" (MIT Press, 2022) is focused on showing and analyzing how AI is currently implemented in various organizations across the globe. This by itself makes it an interesting contribution to current scholarship, since so much of what is written about emerging technologies either focuses on technologies that have not yet been commercially deployed, or mixes present and future, making it at times hard to discern where the line between what exists in the present ends and what may come to exist in the future begins. Davenport and Miller's focus on the present allows for a much more grounded debate about the social implications of AI technologies on humans, since instead of projecting either utopian or dystopian schemes on the future, the book deals with processes that are occurring today, that pose ethical challenges today, and that are having impact on humans today.

Another important feature that sets this book apart is the richness of cases that the two authors bring to the table. The book offers no less than twenty-nine case studies, from different economic sectors, with different application types, and from different corners of the world (specifically from North America and Asia). Each case study includes a concise, yet very informative, depiction of an application of an AI technology (or sometimes a combination of a few AI technologies) in a certain organization. The authors skillfully offer sufficient description to make the ways in which the AI is used in each case clear, yet without going into too many details which might render the text tedious. All in all, this richness of case studies culminates in quite an informative text. Thus, if you are interested in how AI is currently deployed in a specific field, you will, most probably, find a relevant case study in this book. Moreover, within the mix of AI applications discussed in the book, you can also find some of the more ethically challenged applications, such as in the fields of healthcare and policing, which may appeal specifically to scholars who focus on risks within AI.

Unfortunately, the book's rigor with regards to *depicting* the current applications of AI by various organizations in a variety of settings, is not matched by a high level of *analysis* of each case, or of the general trends that emerge from them. Its problematic research method, its apparent lack of interdisciplinary outlook, and its adoption of the business-world narrative regarding AI, severely handicap it, and its ability to get a good read of the social implications and ethical challenges of AI technologies. Therefore, while I found the depictions of each case quite interesting, I found the debates that followed and the conclusions that the authors asked to draw from each case somewhat limited and flawed.

With regards to methods, the initial idea of the two authors seems rather solid: to study the application of these AI technologies from the "frontline"; that is from the perspective of

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individuals “who actually used AI” (Davenport & Miller xviii). While this was their initial idea, what they ultimately did was interview a large number of people higher up in the hierarchy, alongside those at the frontline. They also interviewed vendors who sold some of the AI capabilities to the organization, and one or more customers. While I find this variety of interview targets to be a good choice, as it provides several perspectives on each AI deployment, what I find problematic is the fact that the companies themselves were the ones that chose who will be interviewed (both within and outside the organization; Davenport & Miller xviii). There is a well recorded reluctance of corporations to grant access to academic scrutiny (e.g., interviews, ethnographic observations), unless they can be convinced that the research can contribute to the corporation directly (Urban & Koh 2013; Verhage 2009). The authors seem to cope with this reluctance by granting the organizations that they focused on in each of the twenty-nine cases virtually total control over the research process and output. This control is not just limited to the decision who will be interviewed, but also, as the authors admit, “Our write-ups had to go through the company for review and approval” (Davenport & Miller xviii), which for me comes to signify that their independence as researchers was compromised.

We are therefore left to surmise that the companies featured in the case studies chose only managers and workers who support the AI deployment, and who are in line with their self-serving framing regarding the application of AI. This also applies to these companies’ customers, which were most probably chosen for their endorsement of the AI implementation, and for generally being on good terms with the company. Even before handing control over the research settings to their target of observation, the authors admit that they chose to cover only cases of successful AI deployment, and refrained from analyzing failures (Davenport & Miller xix), which is yet another bias that degrades the quality of analysis that can emerge from the research. Cases of failed deployment of AI technologies can, for instance, be most illuminating with regards to either active or passive forms of resistance to the AI application by stakeholders. By limiting ourselves to cases of success, we only focus on cases in which resistance was overcome or did not exist in the first place.

Moving on to the analysis itself, the primary point that *Working with AI* makes concerns the fears that have been emerging among workers and social thinkers, that AI is replacing people at their jobs. This is indeed an important ethical issue, since, if the fears are founded, then AI technologies have a built-in detrimental effect on a large stakeholder group - workers; an effect that needs to be addressed and mitigated (Duke 2022). Given that for most of the adult population’s income derives from wage earnings, being “relieved” from tasks by a new AI system may result in finding oneself out of work. In the book the authors show quite convincingly that while current AI technologies are effective in doing some types of tasks, they are poor in doing others, and are very far from being autonomous at this point in history. Thus, the authors conclude time and again, that rather than replace workers, AI is actually augmenting workers at their jobs, and that actual replacement or dismissal of workers does not take place. They back this claim of no-job-loss, by relying on the self-declarations of the employers they interviewed, that they did not lay off any employee due to the uber-efficient AI technologies, but instead redirected redundant workers to other jobs at the organization, while partially redundant workers were assigned new tasks.

Unfortunately, the authors did not take any empirical steps to examine these claims and their truthfulness, and simply take employers at their word. Yet even if we sidestep this scholastic deficiency, and assume employers’ statements are true, since the book does show significant gains in efficiency by virtue of AI technologies, I cannot but suspect that in the grand scheme of implementing them, jobs are actually lost. The authors’ argument that there is no job loss holds water only when we limit ourselves to scrutiny of a single company. But since we know that post-AI deployment these companies experience increased efficiency, and since the authors do stress that such efficiencies have given a competitive edge to these companies, we can assume that their competitors were compelled to react, and either had to shrink, or in extreme cases close shop, and that overall, jobs in the field were lost. For

instance, if an insurance company automates much of the insurance process by using AI, allowing it to cut prices and be more competitive, its growth comes at the expense of other insurance companies that are either not or are less automated, which can easily result in the total workforce in the insurance sector shrinking. In any case, just looking at the single company implementing the AI, without also examining its economic ecosystem, misses many of the automation's effects.

Moreover, the writing on the effects of AI on workers has already significantly shifted from the mere notion of "job loss" and instead talks about job erosion and the polarization of the workforce (Acemoglu & Autor 2010; Duke 2022; Frazzini 2001; Kristal 2013; Petropoulos 2018). Job erosion means you still keep your job, but your job standing is reduced. This often happens because automation renders the need for certain skills redundant, and is a phenomenon that dates back to the industrial era. Automation, much of the time, allows less skilled workers to do processes that previously demanded special skills. This lower skill demand reduces the workers' job standing and their general bargaining power. Polarization of the workforce is also something that was observed with automation, in which some workers are upgraded thanks to the technology, while others are downgraded. The result is, of course, greater inequality of the workforce, and more internal divisions, that may play into the hands of employers. The absence of such discussions in the book, and the almost exclusive focus on the 'total job loss within a single workplace' scheme, renders it out of sync with current scholarship on the subject. Furthermore, this anachronism in the book is also apparent in other aspects of the effects of AI on society, such as surveillance, willful consent, data ownership, risk to health, work-life balance, etc. The book touches on all these issues in some way or another, but is at large disconnected from current interdisciplinary debates on them.

This apparent disconnect from current scholarship seems to me to be a consequence of the lack of multidisciplinary outlook. The book's theoretical grounding is lean, indicated by a very low number of references to academic sources, and it is almost exclusively limited to the business management discipline. This, in an era in which knowledge on a given subject is usually produced across several disciplines and logical schemes. I believe ignoring current debates on a subject matter one is studying, just because they exist in adjacent disciplines, is much less acceptable than before, and in any case degrades the analytical value of the text.

All in all, while *'Working with AI'* offers its readers a good glimpse into the ways in which AI is being implemented by companies today, its insights are limited by a superficial and uninformed discussion about the phenomena that emerge. Still, given enough prior knowledge about the debates on the social and ethical issues that AI produces, this book may prove a fascinating read.

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