Only Humans Need Apply

Winners and Losers in the Age of Smart Machines

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H A R P E R BUSINESS

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Introduction We are entering a third era of automation, in which machines encroach

on decision-making.

1. Are Computers Coming After Your Job?

Yes, your current job will be done better by a smart machine in part if not in whole. Take this threat seriously.

2. Just How Smart Are Smart Machines? 33

Key technological advances have made machines more capable than humans on many dimensions—but there is still a role for wetware.

3. Don't Automate, Augment

Instead of asking what work will machines take away from us next, we need to start asking what work will machines enable us to take on next?

4. Stepping Up

People who still manage to problem-solve at a higher cognitive level than machines will do so because they comprehend the bigger picture and apply judgment to decisions where insufficient data exists.

5. Stepping Aside

People who tap into the human condition are able to complement machine intelligence with other of their "multiple intelligences" beyond rational problem-solving.

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6. Stepping In

People who make the machines productive will rely on them to make routine decisions but will know when to correct their mistakes and how to tweak them for better performance-and how to explain their automated logic to other people.

7. Stepping Narrowly

People who hyperspecialize will hold on to decision-making by gaining deep expertise in areas that are so narrow they don't make economic sense for anyone to automate.

8. Stepping Forward

People who build the next generation of smart machines will be entrepreneurial as well as technically brilliant. No one will ever go broke automating the intelligence of the knowledge worker.

9. How You'll Manage Augmentation

For managers, augmentation is the only viable enterprise strategy, given the competitive imperative for constant innovation and the very fast following of any software-based advantages.

10. Utopia or Dystopia? How Society Must Adapt to Smart Machines

An emphasis on augmentation has implications for education policy, job creation policy, and more.

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