

Who Will Prosper in the New World

Tyler Cowen

Self-driving vehicles threaten to send truck drivers to the unemployment office. Computer programs can now write journalistic accounts of sporting events and stock price movements. There are even computers that can grade essay exams with reasonable accuracy, which could revolutionize my own job, teaching. Increasingly, machines are providing not only the brawn but the brains, too, and that raises the question of where humans fit into this picture — who will prosper and who won't in this new kind of machine economy?

Who will do well?

THE CONSCIENTIOUS Within five years we are likely to have the world's best education, or close to it, online and free. But not everyone will sit down and go through the material without a professor pushing them to do the work.

Those who are motivated to use online resources will do much, much better in the generations to come. It's already the case that the best students from India are at the top in many Coursera classes, putting America's arguably less motivated bright young people to shame. "Free" doesn't really help you if you don't make an effort.

PEOPLE WHO LISTEN TO COMPUTERS Your smartphone will record data on your life and, when asked, will tell you what to do, drawing on data from your home or from your spouse and friends if need be. "You've thrown out that bread the last three times you've bought it, give it a pass" will be a text message of the future. How about "Now is not the time to start another argument with your wife"? The GPS is just the beginning of computer-guided instruction.

Take your smartphone on a date, and it might vibrate in your pocket to indicate "Kiss her now." If you hesitate for fear of being seen as pushy, it may write: "Who cares if you look bad? You are sampling optimally in the quest for a lifetime companion." Those who won't listen, or who rebel out of spite, will be missing out on glittering prizes. Those of us who listen, while often envied, may feel more like puppets with deflated pride.

PEOPLE WITH A MARKETING TOUCH There will be a lot more wealth in this brave new world, but it won't be very evenly distributed because a lot of human labor won't seem like a special or scarce resource. Capturing the attention of customers with just the right human touch will command an increasing premium. Don't forget that Mark Zuckerberg was a psychology major in addition to being a tech genius. Sheer technical skill can be done by the machines, but integrating the tech side with an attention-grabbing innovation is a lot harder.

MOTIVATORS A lot of jobs will consist of making people feel either very good or very bad about themselves. Coaches, mentors and disciplinarians will spread to many areas of life, at least for those of us who can stand to listen to them. These people will cajole us, flatter us and shame us into improving our lives, our work habits and our consumption. That's why so many people go to yoga class instead of relying on the podcast. Managers who are motivators of first-rate talent will see their earnings continue to rise.

Who will be most likely to suffer from this technological revolution?

PEOPLE WITH DELICATE FEELINGS Computing and software will make it easier to measure performance and productivity.

It will be harder to gloss over our failings and maintain self-deception. In essence everyone will suffer the fate of professional chess players, who always know when they have lost a game, have an exact numerical rating for their overall performance, and find excuses for failure hard to come by.

Individuals will have many measures of their proficiency. They will have an incentive to disclose that information to get the better job or social opportunity. You'll assume the worst about those who keep secrets, and so openness will reign. Many of us will start to hate the idea of Big Data.

PEOPLE UNLUCKY IN HEALTH CARE Quality surgery and cancer treatment cannot be automated very easily. They will be highly expensive, and unlucky health breaks will be all the more tragic because not everyone will be able to afford the best treatments.

With marvelous diagnosis available online, some people will get the right treatments early on, whereas others will know exactly what they are dying from.

PEOPLE WHO DON'T NEED MONEY We are used to thinking in terms of rich, poor and middle class, but those categories will change. Berlin's eastern neighborhoods and Williamsburg, Brooklyn, are a window onto our future. These urban areas are full of people who are bright, culturally literate, Internet-savvy and far from committed to the idea of hard work directed toward earning a good middle-class living. We'll need a new name for the group of people who have the incomes of the lower middle class and the cultural habits of the wealthy or upper middle class. They will spread a libertarian worldview that working for other people full time is an abominable way to get by.

POLITICAL RADICALS: A mechanized, computer-driven, highly unequal future is sometimes viewed as a recipe for rebellion. But the Edward J. Snowden saga shows this

won't be easy, as tech is at least as much an instrument for surveillance and control as it is for revolt. We're also aging rapidly, and that tends to make society more peaceful, less violent and less extreme in all directions. It was the 1960s, a peak era for manufacturing jobs and the American middle class, that brought so much social turmoil and unrest. The more that work is done by machines, the less compelling is the case for putting your manufacturing in a distant country where wages are low. If there is any big winner from all of these trends, it is probably the good ol' United States.