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The Problem With Blind Faith in Technology and Job Creation

By Thomas H. Davenport

I was impressed—both positively and negatively—by one of the items in yesterday's Technology News items in the *CIO Journal* Morning Download. It said that:

Artificial intelligence is next frontier for Infosys . Infosys Ltd.'s new CEO, Vishal Sikka, is looking to push the company into artificial intelligence, to help customers automate jobs currently done by people, Bloomberg reports. Mr. Sikka said he wants to focus on design and automation to bolster sales growth. He compared the move to technological advancements in the Industrial Revolution, and said he plans to require training for his employees in order to make the push without cutting jobs.

On the positive side, you have to give Mr. Sikka, who came to Infosys from SAP SE , some credit for noticing an important trend. I think he's correct that automation will be a major focus in the coming years and decades, and it's probably a good idea for a professional services firm to be on top of it—even to assist with it, I suppose. It's not entirely clear to me what specializing in automation will entail, but it's an idea worth exploring. Infosys needs a new direction, and perhaps this will be a valid part of it.

What puzzles me, however, is the blind faith that Mr. Sikka places in job creation through new technology. Here's a more detailed quote from the Infosys announcement on LiveMint, an Indian online business source:

"The Industrial Revolution was supposed to take away all the jobs and the steam loom was going to make people irrelevant and the sewing machines were going to take our handiwork away—it never happens," Mr. Sikka said. "Everything about our world has become more productive as a result of technology but that has, in the grand scheme of things, nothing to do with employment."

This extremely high level of faith in technology-fueled job creation is interesting, but I don't think it stands up to serious examination. There are several logical problems in the comment:

1. The fact that lost jobs were eventually replaced by new ones in the past does not mean that they will continue to be replaced in the future. Mr. Sikka's complacent attitude may be warranted, or it may not be. A recent Pew Research survey of almost 2000 experts on the topic found that about half believed there is a real problem. To quote the survey's key findings:

Half of these experts (48%) envision a future in which robots and digital agents have displaced significant numbers of both blue- and white-collar workers—with many expressing concern that this will lead to vast increases in income inequality, masses of people who are effectively unemployable, and breakdowns in the social order.

2. Even if jobs will eventually be replaced "in the grand scheme of things," that doesn't mean that a lot of people won't suffer. In the long run we're all dead, but if people lose their jobs to computers in the short run they will be justifiably unhappy. The resulting widespread social disruptions may well be meaningful, even in the grand scheme of things.

3. Mr. Sikka clearly doesn't believe his own comment that technology-driven productivity has "nothing to do with employment," because Infosys itself is planning a major training effort to ensure that its own employees don't lose their jobs in its movement toward automation and design technologies. That's a good idea, but it also suggests an implicit belief that new technologies can have significant effects on employment.

Since Mr. Sikka and his Infosys colleagues are presumably human, one hopes that they will think about the fates of their fellow humans as they do their automating work. Perhaps they could advise their clients to do as they are doing and invest in retraining efforts for the client's employees. Perhaps they could develop automation systems that augment human work, and educate their client humans on how to augment the work of computers. Perhaps if they don't do these things, clients will search for consultants who are more sympathetic to displaced workers.

One of the things that we humans do best—or at least better than computers—is to maintain an open mind. Certainty and binary thinking is for machines; ambiguous and subtle thinking is for humans. On the issue of computers and employment, this is clearly a time to keep our minds, eyes, and ears open about how best to transition ourselves into the Automation Economy.

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