The automation revolution

History, Revolution



Automation is increasingly being questioned as anti-job with chatbots, robots etc., usurping human employment across sectors. Or it might well trigger the rise of 'knowledge' workers. The new industrial revolution is on the anvil.

The Machine Age

The way relationship between man and machine is evolving today has never happened historically. The robots from thesciencefiction movies are turning reality. Imminent is the fact that robots will impact millions of jobs in multiple sectors particularly the blue-collar ones. Instances like Taiwan-based contract manufacturing giant FoxconnTechnologyGroup replacing around 60, 000 factory workers with robots in May this year are occurring globally.

"We have companies likeGooglewhich have released speech application programming interfaces (APIs) that convert streaming audios into streaming text, have a machine to render it and understand exactly what we are saying in real time. It is only a little bit further when humans will be able to actually re-render that as a response in text to speech in the way that we won't be able to tell the difference," says Kaiesh Vohra, Co-founder, Lucep. The Singaporebased start-up offers mobile solution that helps businesses increase their online lead generation and conversion. One can think of telecalling shrinking

from hundreds of people sitting in multiple buildings to just two racks inside a server

room. This kind of impact can be across sectors. "The simple act of making potato chips and selling it to people via a super market involves lot of workers. There are start-ups existing today that can mechanize that entire

process and on top of it addartificial intelligenceso that there are no humans involved except for eating. Farmingtoo can be done by robots including pulling weeds out of the ground by themselves,"

Nonetheless the fear of job loss among people will be tempered with the rise of many interesting jobs for knowledge workers who will have robots as their teammates.

"It is like a new industrial revolution. Earlier all work was done manually followed by human aided machines but humans never lost their jobs, in fact it created millions of them. Now it is all about automation and in the long run there will only be more jobs," argues Juergen Hase, CEO – IoT Business, Reliance Group.

"The willingness of people in India to use and implement IoT in their daily lives is fantastic with so many start-ups coming up in this space. It is now about executing it into mass market. So, the next step is to operate IoT instead of developing IoT which we will see in next one-two years," adds Hase.

Impact on Financial Services

This includes the hassle of accepting payments in India which still remains in cash. However, merchants today have realized that accepting cash is not the most seamless way for payments. "Merchants have realized that while it may not have an upfront cost but the overall lifetime cost of handling cash is really expensive compared to going cash less," says Harshil Mathur, Cofounder, Razorpay. Bengaluru-based payment gateway solution provider,

Razorpay was part of winter 2015 batch of world's top seed accelerator Y Combinator.

"With the launch of unified payment interface, Aadhaar etc., in the next two years, the way payments are done will be changed in India. It will also be critical as more and more people enter the banking ecosystem," adds Mathur.

Gurgaon-based Eko India Financial Services that offers payment andmoneytransfer services to customers and retail merchants believes that data generated by these digital transactions will in-turn help merchants cope up with their working capital issues. "We share the data generated by merchants' earnings with alternative lending companies who can offer working capital loans to these merchants based on that data as traditionally merchants have been unable to raise working capital loan from formal institutions like the bank," says Abhinav Sinha, Cofounder & COO, Eko India Financial Services.

Clearly, fintech is the way forward in such cases even as vast Indian population remains bereft of banking services. "A government in favor of dematerialization and online on boarding of the rising rural middle class could only augment the fintech growth," says Nikhil Kamath, Co-founder and Director, Zerodha – Bengaluru-based discount brokerage firm. However, banks too are undergoing digital restructuring to avoid being on the edge of their seats courtesy fintech start-ups that have been unbundling banks' various services. On the face of it, banks, however, term fintech start-ups as partners rather than their possible nightmare.

"Banks have the wherewithal of putting the right governance structure, audit mechanisms, settlement and reconciliation processes in place where as start-ups are good at knowing how to work on the user interface and user experience design. This is a perfect combination to offer better services. I often joke about it saying that if fintech start-ups are to be WhatsApp of today then banks have to play the role of Internet service providers. So both have to go hand in hand," concludes Ritesh Pai, Senior President and Country Head - Digital Banking, Yes Bank.

(This article first appeared in the Indian edition of Entrepreneur magazine (September 2016 Issue)