

How to prepare for the new era

With the advance of new technologies and the automation of work, the most feared ghost is that robots will replace human work. According to experts this will not happen but there will be great changes, what will they be and what will their influence be on work and consequently on society?

Artificial Intelligence is gaining ground little by little and although the term still sounds distant, every day we all have contact with some type of AI. For example, when making an online purchase, without requesting it, the same ecommerce offers us similar products to continue buying or when uploading a photo to Facebook, the social network itself labels our friends because it recognizes their faces.

The most heard question when talking about AI is whether robots will replace humans. The answer is no". According to Martin Ford, author of *The Lights In The Tunnel: Automation, Accelerating Technology and the Economy of the Future*, we are moving towards a place where machines will no longer be tools used by workers to become workers themselves. But that will not make human work disappear, although we can talk about metamorphosis: human work is transforming

and will continue to do so much more. So, the question that arises is, rather, how will automation impact the labour market and what should companies do?

Social framework, principles and practices

For Jon Iwata, former Senior Vice President and Brand Director at IBM (a pioneer in AI application), to enter the new model it is essential that companies establish policies, practices and a social framework aimed at the progress of society. And in fact, IBM established some concepts for the new era that are worth reviewing:

- The purpose of the use of AI must always be to improve and expand human capacity, experience and potential.
- Information must be handled with transparency: be clear about training methods and sources of information when using AI tools.
- Privacy and information security must always be ensured, and customers cannot be asked to renounce the ownership rights of their information.
- Customer information cannot be provided to any entity, government agency or other organization under any control or surveillance program that involves bulk content collection.



Main impacts on the world of work

1) Displacement: more technology and fewer people?

No machine sits down and says: What should I do today? What would be a good way to earn some money? Reed Hastings, CEO of Netflix, affirms that the human factor will continue to be fundamental when making decisions since, when introducing a change in

work dynamics, a robot needs to be reprogrammed and that means time and money.

For its part, IBM created a Commission to study and observe, together with MIT economists, the impact of AI on the job. A first preliminary report revealed that less than 10% of global occupations will disappear as a result of the development of AI, and a similar percentage of occupations will be created from the emergence of this

new technology.

If we look back, technology has always transformed the nature of human labour through history, and this moment will not be the exception; the way of doing things will be modified but it is not foreseen that complete categories of work will disappear. In terms of new industries, the majority will use more technology, but there are also others (such as the automobile industry) that are heading towards an increasing



customization of the products and machines may be counterproductive.

2) Crisis and new opportunities

What will the people who are supposed to be displaced to a greater or lesser extent by the machines do? Surely there is a period of labour crisis, but the most optimistic believe that new job opportunities will arise and we will even have time to do other types of activities, develop our creativity and innovate.

According to Mary Cummings, direc-

tor of the Human and Autonomy Laboratory (HAL) at Duke University, and Co-Chair of the World Future Council on Artificial Intelligence and Robotics, global change will be seen mostly in low-paid and low-skilled jobs, at least at the beginning. "In 2030 we will have a much broader debate about what we will do with people who need new training. In accordance with that, we will see companies tied hand and foot for not finding robots or PhDs in Artificial Intelligence that can attend, maintain and fix their systems," says Cummings.

3) What WILL the robots be used for?

Although they do their part very well and will replace part of the human work, AI and the robots have no feelings or opinions about what they do and that is their great limitation.

They will take care of the jobs that have to do with routine, mechanical processes that are related to activities that can be done in scale or with topics that do not add real value.

They may help relieve the tedious and even physically strenuous tasks that require a lot of time, without employees losing their jobs. In fact, the most likely scenario is that humans and robots (there are some specially designed to collaborate, also known as co-bots) work together.

As a consequence of the above, they will allow people to be more productive.

4) Developing new skills

It will be necessary to help people to acquire the required knowledge to be successful in the cognitive economy. In the current digital age, change comes quickly and from unexpected places. Therefore, it is imperative to know the implications that automation will have in our work. Although we might regret it, it is not a matter of generations but we will all have to acquire new skills, even those who have been in the same job for twenty years and assume that they can decide not to

more on what differentiates men from computers. They are those capabilities that no matter how intelligent machines are, they cannot reproduce them: the desire to create, to discover, to distinguish right from wrong and to find meaning in uncertainty. Thus, skills related to critical thinking and problem solving become more important.

5) Data ownership and handling

Even if we do not know exactly how it will be done, the impact on data management will exist. For example, if AI allows Google to install sensors and other equipment to gather data on a street or in a community to deliver valuable information about the city and discover new knowledge about the infrastructure, who does that information belong to?

Does the data belong to Google, the city or both? Does the city have the resources or capabilities to deal with that information and take advantage of it in an ethical way? These are all

some of the focuses will be topics such as: creativity, innovation, the ability to be adaptable and flexible, to pay attention to new ideas. Also, the soft skills to socialize (such as empathy and the emotional capacity to connect and understand), and the cultural sensitivity that businesses need to develop new products and services.

The new work scenario

We are certain that we must prepare ourselves for a reconfiguration of the labour market in which AI and human beings should work together doing what each of them knows how to do best. As companies adopt AI tools and processes, robots, machine learning and deep learning, they will need a clear strategy to take advantage of technology without creating fear around job displacement or crossing ethical lines. If we understand these effects better and if we work to reinvent our business processes, we will be able to take advantage of these technologies to create and drive a positive impact and benefits for corporations and society. ▸

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take that wave. Because change, this is a fact, will come to knock on the door of young and old, employees, entrepreneurs and business owners.

Facing the arrival of AI, it is essential to educate society in the management of skills that adapt to new forms of work, which will come hand in hand with more flexible and changing jobs. Workers, therefore, should present a more creative and dynamic profile, and of course, a broad mastery of new technologies. These are practices that fall less on a technical feat and much

important questions that companies should ask themselves as they commit to trust the data, especially because AI will increasingly blend with our lives.

3) Remember the things we are good at

Finally, according to the creativity expert Ken Robinson, the imminence of changes driven by drones, AI and robots should help us to remind humans in what things we are unique and talented so that we can focus on that. For Robinson,