



Picture 1. *RoboMan vs HumaRobot*

(link: <http://propozitsiya.com/roboty-protiv-lyudey-rabochiy-apokalipsis-poka-pod-voprosom>)

RoboMan vs HumaRobot: BATTLE FOR THE FUTURE

*Cultivate a deep understanding of yourself –
not only what your strengths and weaknesses are
but also how you learn, how you work with others,
what your values are, and where you can make the greatest contribution.
Because only when you operate from strengths can you achieve true excellence.*

Peter Drucker

Have you ever wondered how the world will change when robots become a significant part of our society, what's left of human values in the future, whether our society will maintain a human face and a soul or turn into a robosociety with a utilitarianly cool mind and a heart of metal? Lately, these questions have been arousing heated discussions among the public, broad [economic sectors](#) and scientific community. To my mind, the issues related to robotization are rather controversial and relevant nowadays, especially in the light of new technologies and consequently a rapidly changing society. However, there are some proponents of a total

robotization who doubt the necessity of worrying about a progressive introduction of robotic technologies into our society believing that nothing is going to change because everything is under control. They stick to the opinion which was expressed by Larry Tesler, a computer scientist who works in the field of human-computer interaction: *“Artificial Intelligence is whatever hasn’t been done yet.”* At the same time, plenty of people consider that such recklessness can result in undesirable consequences and the loss of a human face of the society. They might also argue that a total robotization will yield more benefits than new problems. Let us speculate who is right.

To that end, I propose going on a trip to the future with the help of our imagination and accumulated knowledge concerning the matter. Let us assume and imagine that on the battlefield for the future two opposing camps have met. The first camp comprises adherents of ManKind who are in favour of maintaining the predominance of human factors, values and a people-centred way of functioning and managing like the approach of Peter Drucker. The second one consists of robots being supporters of RoboKind which are convinced that the human dimension can be removed from a new society where machines and rule.

The first round of this humans vs machines battle is devoted to the arguments of defenders of humanity in a robot society and, as you have probably guessed, I am on their side. To start with, it should not be forgotten that all the machines, robots and digital intelligence were created for serving people in order to facilitate their lives, for example, release women from the oppression of daily routine, improve the standards of living, provide an opportunity for implementing more creative tasks, etc. Thus, we need machines and digital intelligence but we need them to improve the conditions of our work, to help us to find fulfilment, realize ourselves having reached the full potential. Robot should contribute to our development and progress engaging in monotonous conveying stages of different activities leaving us more interesting phases of work and a place for creativity. To put it another way, they should eliminate obstacles and limits during work flow, make it easier, but not substitute us from it. Secondly, one of the most important human qualities is creativity, repeatedly mentioned already. Machines and robots carry out tasks using strict instructions and guidelines. Of course, artificial neural networks and digital intelligence are endowed with the abilities to study and therefore make own decisions, but it cannot nevertheless be compared to the human cognitive ability to create as human creativity is an ability born deep inside, from the combination of knowledge, some experience, a little bit of genetics and a great desire. Thirdly, yes, without wanting, nothing does work out. It’s like in the poem of Rsagov:

*We live while we can dream
Desiring our hopes to be fulfilled.
When they are lost we are so blue
And like in childhood we rejoice ice cream
When our dreams come true.¹*

Peter Drucker was the first who demonstrated (*The Practice of Management*, 1954) a great importance of the employees' attitude towards their work that is such an attitude which generates willingness to work. He also notes that this aspect of the functioning of any organization requires constant monitoring that is why the organization should provide dignified conditions primarily through modern technologies and, in particular, robotization of processes, managers should create a friendly atmosphere with a productive coordination of people and machines and a kindly communication among human beings. Hence the need for increased complex management involving robots as well and up-to-date communications specialists meeting current realities with new requirements in order to adjust interrelations and interactions between people and machines. But the most important thing in the administration of the processes and particularly in a robot society is a leader. Nowadays it is becoming more and more necessary to cultivate a new generation of leaders who are able to conciliate all the generations of humans and a new generation of robots possessing digital intelligence. That person should have a warm human heart and, at the same time, a cool head with analytical mind using programmatic but people centred approach. Like Peter Drucker states (*Managing in Turbulent Times*, 1980), a top manager has to become a leader who is an assistant, a tutor and a source of knowledge and inspiration at once, especially for saving human dimension in a robot society. And his major goal must be remaining a human core in the world of machines.

The second round of the humans vs machines battle is going to deal with the arguments of robots and sticklers of total and absolute robotization with the widest possible minimisation of a human factor in a robot society. They claim that all should be automatized for several reasons. Firstly, in their opinion, a human is weak since he is susceptible to a lot of different external and internal factors, such as the family, mood, illnesses, etc. which can reduce efficiency and provoke changes in functionality. Secondly, robots assume that there is a limit to human capabilities because of human nature.

¹ It is my humble translation of the following poem: <https://www.stihi.ru/2015/04/02/10625>

Proponents of the above mentioned idea and their lobbies represented by robots may be applauded for seeking to defend their point of view, but, however veracious it sounds, I would not agree with this contention as, although it has merits on the surface and could be acceptable to an extent, one should not underestimate all the circumstances of the matter and remember that machines were created by humans that is why intellectual superiority of a human over machines is evident. First of all, contrary to the first argument of the adversaries, we know that machines break as well and in the course of time they become less effective or outdated. People can maintain their functionality looking after them, repairing them and operating them skillfully. So, robots cannot exist without a human, they need the involvement of people. Secondly, to diminish a negative impact on efficiency and workability of people, managers can create a fruitful atmosphere at work so that employees will not want leave their workplace seeing that they are needed, understood and appreciated. It is a human, not a machine, namely a manager who should, according to Peter Drucker, set goals, organize everything, work on the motivation and communication of the staff, their development including self-development, indicate shared values and evaluation. Thirdly, as opposed to the second statement of the robofans, as far as I am concerned, human nature is unexplored to the end. In fact, human creativity is unlimited and infinite and human willingness with desire can work wonders therefore this idea cannot go further than being an immature claim. Furthermore, it should not be left unmentioned the main principle of existing and working in a new reality, namely in a robot society, that every leaders, manager and robot should always remember Isaac Asimov's Three Laws of Robotics formulated back to 1942:

1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
2. A robot must obey orders given to it by a human being except where such orders would conflict with the first law.
3. A robot must protect its own existence as long as such protection does not conflict with the first or second law.

In conclusion, taking everything aforesaid into consideration I would like to emphasize that we need to stay human in a developing and widening robot society, especially it concerns those who are at the management level. So, in other words, we should not become RoboMen. On the contrary, we should make robots more and more human creating a new generation of machines which will be called HumaRobots for opening a new era of collaboration of humans and machines with digital intelligence. And I am strongly convinced of the propriety of this way. Yet,

this is a controversial issue, so it is up to a person whether to accept my attitude towards the matter or adopt the other point of view.



Picture 2. *Humans & Robots: Era of Collaboration*

(link: <https://uxmag.com/articles/humans-ai-and-the-user-interface-of-the-future>)