УДК 811.111:62

Ganushchenko A., Lichevskaya S. **Upcoming Technology**

Belarusian National Technical University Minsk, Belarus

We have seen great leaps in digital technology in the past five years. Smartphones, cloud computing, multi-touch tablets, these are all innovations that revolutionized the way we live and work. However, we are just getting started. Technology will get even better. In the future, we could live like how people in science fiction movies did.

The following five upcoming, real-life products are set to revolutionize the world, as we know it.

1. Paper diagnostics 2020

Experimental paper sensors that detect chemical or biological molecules have proved to be easy to use without the need for pricy equipment or trained specialists. They could have broader applications, such as treating neglected tropical diseases, mostly because pharmaceutical companies are focusing on widespread maladies that have a larger market. In addition to saving hundreds of thousands of lives each year in the developing world, these paper-based tests could stem health care costs by allowing home-based disease testing in developed regions [1].

2. Smart clothing 2028

DuPont Advanced Materials (DuPont) have announced availability of its newest generation of stretchable electronic inks and films for smart clothing. Smart clothing technology provides critical biometric data including heart rate, breathing rate, form awareness and muscle tension. IntexarTM offers

superior stretch and comfort and is easily integrated into garments to make smart clothing.

Garments powered by IntexarTM can endure over 100 washes, and continue to perform through repeated stretching and demanding performance [2].

3. Cheap solar power 2033

A cheap solar panel system will forever be the best solution to expensive electric bills. Solar cells are getting cheaper each year.

While you could pay up to \$10,000 for an off-the-shelf installation and could cover the system's price in just over 10 years, it is still better and more educational to make one yourself.

Let us face it: we are living in a war right now. The battle for energy efficiency has never been fought with more advanced weaponry, and the winners are all those who pay less for more month after month.

The first line of defense against paying more for electricity than you did last year is building your own solar panel system.

It would certainly be nice being energy independent, let alone having an electric car that you could power with those solar cells to give you free rides for the rest of your life [3].

4. 3D printing in every home 2037

The ability to design and manufacture a physical object using 3D printing was a major technological breakthrough. Today, just a few years since it was first introduced, there is already talk of how it is reshaping our future. Imagine if 3D printers could be found in every home. What would this mean?

So say your dishwasher breaks down and needs just one, single part replaced – wouldn't it be easier and faster, not to mention significantly cheaper, to print the part at home versus

calling the store, figuring out your warranty, ordering the aforementioned part, and waiting for it to arrive?

It is not entirely as simple as that. There is a lot more to 3D printing than loading the paper tray and pressing *print*.

The prospect of owning a 3D printer in every home is an exciting one, and as the technology continues to advance, 3D printers are able to produce more and more objects of varying materials on demand. However, while the potential applications are promising, the fate of 3D printing as a necessary appliance in households is still unclear [4].

5. Holographic pets 2041

We have recently seen iRobot go public and its IPO did quite well. Each year iRobot is introducing new models in their consumer division. Some say that cats and dogs do not like these robots much, but animals often follow the robot around the house and cats stock it and then pounce and then run away. So indeed iRobot has in fact become part of the family and people would not want it any other way. While you are gone, you might set it to display various animals that your cat might like to hunt. Such as a pigeon landing on it and then taking off again — your cat will no doubt find this challenging and intriguing and it will hone their hunting skills. The vacuum might have a random projection set of 10-12 holographic images to keep your cat entertained and more than occupied [5].

It is obvious that modern life is impossible without rapid technological progress. That is why despite increasing number of health problems, atmosphere pollution, huge nature damage, people continue to introduce innovations in the field of technology. New technologies are for good. Technological progress continues and it moves rather fast.

References:

- 1. Paper Diagnostic Tests Could Save Thousands of Lives [Electronic resource]. Mode of access: https://www.scientificamerican.com/article/paper-diagnostic-tests-could-save-thousands-of-lives/. Date of access: 25.03.2016.
- 2. New smart clothing technology [Electronic resource]. Mode of access: https://www.printedelectronicsworld.com/articles/11421/new-smart-clothing-technology. Date of access: 28.07.2017.
- 3. Solar Panel System: How to Build a Cheap One [Electronic resource]. Mode of access: https://www.greenoptimistic.com/solar-panel-system/. Date of access: 22.01.2015.
- 4. Will We Ever Have 3D Printers in Every Home? [Electronic resource]. Mode of access: https://futurism.com/will-ever-3d-printers-every-home/. Date of access: 27.01.2016.
- 5. Holographic Projection Technologies of the Future [Electronic resource]. Mode of access: http://www.worldthinktank.net/pdfs/holographictechnologies.p df. Date of access: 05.05.2017.