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NEW INVENTIONS – WHAT SHOULD SCIENTISTS FOCUS ON?

Shame of you mobile!

Your elegant mobile phone is playing your favourite song notifying someone is calling; the sound quality is much better than the previous one had. The feeling of haughtiness is not appropriate anymore; electronic gadget has just disrupted your crucial meeting. You are already late for work and only want to get the address your client sent on your e-mail box but you get flooded by queries unimportant indeed at the time whether to install the newest software. Those are only few in number of examples when you think that technology is not so brilliant and you do not admire it. From broader perspective, one could ironically say that your new mobile phone can seek for information from around the world at the speed of light but at the same time it is not able to comprehend that his owner is busy. This sceptic would get the key point – current devices lack what scientists call *emotional intelligence*. Behind this phrasing lies simple ability to work out the situation they are and the emotional state of their users. They need to do what people do naturally, estimate the possible costs and benefits related to sending a message to their surrounding. It is just assessing if sending information about ongoing meeting is really urgent when someone is driving a car and struggling with difficult situation on the road. Marketing specialist tries to convey customers that they are willing to buy intelligent devices. We are exposed to claims about intelligent software, cars, vacuum cleaners and even intelligent microwaves but all it is mainly a media hype. When it comes to emotional intelligence they are as dumb as a wooden shoe. Advertising assures that our new mobile phone or Personal Digital Assistant (PDA) will be our best friend, but who has friends behaving like importunate egocentric? Now we are starting to get the picture, first ambition of scientists should be equipping devices with more human-specific characteristics that we, people, do admire like shyness, politeness and patience with getting own message disseminated.

Pleasant experience

Recent analyses show that very advanced technology can greatly improve health care system. Both individuals and hospitals can benefit from more dispersed process of medical treatment. A common view that people who spend time during being treated in familiar environment with their family restore much faster than isolated ones is now proven by research. It should spur companies and scientists to design and develop devices tasked with monitoring patient in his own home. All data collected by such a device would be analyzed relentlessly and if something alarming is detected the doctor would be called by mobile phone immediately. It means reducing costs of maintaining patients in hospitals and increasing their satisfaction with treatment process.

Harmonious couple

Exploring more medical prospects of applying new technological advances it seems that couple bio- and nanotechnology will be another breakthrough as computer science was. Biotechnology allows us to reduce costs (measured in consuming time and money) of producing specifics and not yet invented materials.

Nanotechnology is the way to go for discovering deeper details of the world we live and consequently manipulating it for our needs. In fact, nanotechnology is also gateway to the incredible nano-world, where common sense is not in effect anymore. Already scientists are able to move atoms, objects so small that pinhead

contains the number of few billions of them. From practical point of view it means that engineers can design units thousand of times smaller thus cheaper than ever before. Imagine a swarm of small robots behaving like ants helping people with dangerous tasks like monitoring gas pipelines for potential damage. Instead of people squeezing through kilometres of corridors it can be just an operator with a bag of our ant-like, extremely cheap robots emptied out on the floor and left for a few hours. Speaking again about more everyday applications it is worth to mention nanotechnology helping with curing a cancer which seems to be becoming the most serious medical issue of the beginning of the XXI century. Those small robots described above are so small that can be injected into human's blood flow. Programmed to fight cancer's cells they can cure someone more efficiently and without side effects well-known from traditional methods. It may not sound seriously but nanotechnology can demote cancer to the today's flu importance level.

Dampen enthusiasm

To stay objective it is needed to concur with those opinions who are really concerned about progressing infest of technological devices in almost all human activities. Even now it is hard to name a field which is not supported by some electronic assistant. Technology has proven (too) many times its unreliability. Scientists made a significant improvement in research of managing a risk in last few years. Yes, risk is completely unpredictable but at the same time manageable. We have learned how to do some heavy testing before any product hit the shelves. Nevertheless, if we come to privacy, it is more an issue. Most of inventions described earlier to work assumed collecting big amounts of data, sometimes really private one (like vital parameters) that could be exploited for an abuse. Technically it is not a problem because devices could be programmed to only analyze a *stream of data*. It is like standing on a bridge and observing flowing water underneath. You can see flowing boat, can shout a greetings to the passenger, you can see other flowing objects but actually you do not collect them, you just observe and cannot make use of any object that you has observed.

Roundup

To sum up, our future driven by technological miracles seems to be bright. The most urgent issue now is to make technological inventions our slaves not the contrary. If we reach that point technology can really help us with coping day-to-day problems giving us more free time for tasks and ambitious we are really interested in. One after another, scientific and technological breakthroughs give us more ways to shape our already small planet we live on. Always, it is a great opportunity but even greater responsibility. Technology itself is neither good nor bad; all duties are still up to us – the creators.