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## **FASHION INNOVATIONS**

In modern society with the utter social disparity visual identification features prominently, as the garment becomes the main broadcaster of person manifest to the environment. The personality on the top of social pyramid tries to materialize his notions by appealing to fashion industry.

In order to step forth the fashion industry should be x-plat. Somebody should be able to gather together light-industry representatives, mathematicians, programmers, retailers and telecommunication delegates.

Each and every year new technologies in fashion amaze us deeply. Smart fabrics, which change their color depending on the mood of a person, 3D shoes printing, sewing robots, virtual dressing rooms etc. Everybody agrees that should make a revolution in fashion industry and garment production. [1]

Electronics manufacturers have combined their efforts with designers in order to create revolutionary “smart clothes”. In such a way Samsung developers represented Smart Garment and Accessories lines 3 years ago in Las Vegas on CES 2016 Exhibition. The garment models have been manufactured under “The Human Fit” brand. They yet incorporate 3 fashion lines. For example, men’s classic suits, which dub “Smart Suits” have an additional option, such as smart button. Standard NFC tag in this button allows fast information exchanging with potential clients and partners and switching the phone to “Do Not Disturb” mode.

Such direction as creation of smart fabrics becomes really massive. Like the fabric with light emitting diodes on-board. Studio XO company offers the customers bright colored garment with built micro gadgets. Recently so called “digital punk designers” have created the swimsuit with huge amount of LEDs, which exteriorly looked like Swarovsky crystals.

They shine with the whole color palette, retract light in time with music or just “blink” with various colors in the way the layout customizer, who regulates their work, wants. Or we can take as an instance the fibers with built-in lamp-wax micro capsules. [2]

American company named Outlast Technologies has created the fabric with micro pills lamp-wax capsules, which you can dare to implant directly into nylon yarns or into another polyester fiber. When a dress with such substance is placed in the room with 20°C+ temperature, the lamp-wax in these pills turns to a liquid. As long as the temperature lowers to like -20°C, they harden and generate the heat for a couple of hours.

In respect to “useful” technologies, we can outline the variety of directions. At first we can see micro encapsulation – when micro capsules with useful substances, like herbal essences, moistening components etc., are infiltrating into the fabrics and emit into the body in wearing process. [3]

At second – fibers with micro sensors, which can read the information, such as pulse rate, pressure, temperature along with tracing the state of both the owner and environment. At third – the “idle” fabrics without the need for ironing, with the certain level of protection from ultraviolet rays, viruses, bacteria and harmful substances. Such fabrics can be antiallergic and repellent. Like the fabrics which can save either heat or cold.

For all intents and purposes such technologies are already widely used, but not in haute couture. All the innovations come to us from sportswear and workwear, even from military uniform. The living pace of catwalk fashion nowadays is too great: when you need to make up to 6 collections a year, you can hardly find the time for time-consuming collaboration with engineers or chemists in order to create brand new fabrics of technologies. As long as such experiments are too tough to be rolled-out. Therefore, there are many geeks-enthusiasts, who create really innovative fashion-handicrafts from scratch and for their own pleasure. If the desire exists, it is not so hard to find the proper instruction in the Internet and to create something like jersey with LEDs by yourself.

