

Безусловно, кибербезопасность в настоящее время является одной из главных забот бизнеса в 2021 году.

5) Телемедицина.

Этот новый для нашей страны рынок вырос за время пандемии в 2 раза и тенденция роста так и продолжится.

6) Умные здания.

Технологии «умного дома» в настоящее время в Российской Федерации еще считаются привилегией достаточно обеспеченного слоя населения. В 2021 году особый интерес у потенциальных потребителей вызвали системы безопасности, развлечений, а также умное управление энергообеспечением и микроклиматом.

7) Масштабное внедрение блокчейна.

Масштабы внедрения в 2021 году блокчейна увеличились, его активно используют в госсекторе и корпоративных бизнес-процессах. С помощью блокчейна пользователи могут безопасно хранить свои электронные документы и аутентификационные данные в интернете.

Для достижения успеха в бизнесе, в настоящее время предприятия должны адаптироваться к тем условиям, которые складываются на рынке, от них требуется менять взгляды на свои продукты, бизнес-модель и компанию в целом. Данное умение является важным и необходимым, как уметь читать и писать.

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## **MODERN ACHIEVEMENTS IN NANOMEDICINE**

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Medical additions of nanotechnology contributed to the emergence of a new scientific direction – nanomedicine. It covers such sections as tracking, correction, design and control of human biological systems at the molecular level using specially designed nanodevices and nanomaterials. The American National Institute of Health has included nanomedicine in the top five priority sectors of the development of medicine of the future.

It is expected to create molecular robots-doctors who can «live» inside the human body, eliminating all the damage that occurs, or preventing the

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appearance of such. By manipulating individual atoms and molecules, nanobots will be able to repair cells.

Scientists suggest that when creating molecular machines, it will be possible to repair tissues and organs directly. Molecular machines can enter a cell, build or rebuild every molecule in the cell, and disassemble damaged molecules. Consequently, in the future, nanomachine-based systems will be built so that they can find differences with a healthy cell and make modifications to the structure. The medical capabilities of such cell repair machines are impressive. In the future, molecular machines will be programmed for a greater number of possibilities with the help of advanced artificial intelligence systems.

Nanomedicine aims to provide a valuable set of research tools and clinically useful devices in the near future. The National Nanotechnology Initiative is looking forward to new commercial applications in the pharmaceutical industry, which may include advanced drug delivery systems and new treatments. One of the simplest and most effective ways to deliver drug molecules to the human body is through the skin. Liposomes of no more than 20-50 nm in size may be of interest for practical purposes, which are used as vehicles for the supply of a variety of biologically active molecules, such as DNA, proteins, peptides and various medications (antibiotics, cytostatics, etc.) are placed in the body and activated only when a certain signal is detected. For example, a drug with poor solubility will be replaced by a drug delivery system in which both hydrophilic and hydrophobic environments exist, improving solubility. Modern pharmaceutical science can already boast of a number of successful examples of using the achievements of nanotechnology as in the creation of medicines with targeted delivery, and in their analysis. There is a constant trend of growth of innovative research activity in the global pharmaceutical market. The foreign market is constantly being filled with original medicines, unlike the Russian market.

The report analyzes the following key points:

- New innovative developments in the field of nanomedicine make treatment faster and more effective.
- The main areas on which nanomedical research has focused are the development of methods for targeted drug delivery to damaged tissues.
- Study of diagnostic approaches using molecular nanomachines and the latest systems.