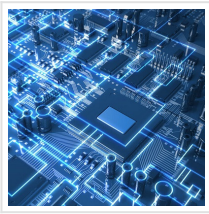
Nanotechnology Named As One of the Top Five Tech Growth Sectors Forecast to Quadruple Over Next Few Years



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Five key tech sectors will enjoy a combined growth of more than 400% over the next five years, according to market reports.

These innovation pacesetters – nanotechnology, AI, Digital Twins, genomics and other biotech life sciences – attracted a combined $892.63 billion of investment in 2020, set to rocket to $2.44 trillion by 2025.

Paul Stannard, Chairman of the Vector Innovation Fund (VIF) – an international alternative investment vehicle for advancing enabling technologies globally – said:

“These top five tech growth sectors are the ones currently lighting up investment opportunities, and we have specifically aligned our investment pipeline to them. They hold the key to solving major global challenges relating to sustainability, healthcare, energy, food resources and equal and fair distribution of innovation worldwide.

“Most tech sectors are growing, but these game-changers attracting that $2+ trillion investment won’t be companies enhancing things that already exist, like simply making your TV screen sharper.

“We are backing tech companies that transform how we deal with healthcare and future pandemics, sustainable clean energy, food production and combine these opportunities with AI and machine learning.

“Our fund’s first key target is health tech, which has enjoyed record levels of investment in the wake of COVID, so we would focus on potential nanomedicine breakthroughs such as reversing degenerative diseases and cancers or creating a multi-vaccine to protect us from a range of diseases.

“And while funds like ours can supply management expertise, our target companies are also those showing the skill to commercialise and monetise their offering to a willing market.

“What we have seen with the pandemic as well as Climate Change is a global realisation that we must also accelerate investment in enabling technologies supporting environmental, social & corporate governance (ESG) and the UN’s Sustainable Development Goals (SDG) principles where impact can deliver better outcomes for everyone.”

The Top Five tech growth sectors highlighted by market reports are:

1. Artificial Intelligence has the most far-reaching potential, and the market is forecast to grow 16-fold from $62.35 billion in 2020 to $997.77 billion by 2028 at a 40.2% CAGR, being the catalyst for accelerating almost all tech sectors and has already shown how it can enhance food science, lower retail and banking costs, and develop medical advances such as remote patient monitoring and more intelligent clinical diagnosis.

AI is transforming future healthcare, food, energy, transport, construction, aviation, and many other sectors. Combining AI with nanotechnologies, for instance, allows platform technologies to re-invent the industries over this decade.

According to data gathered by StockApps.com, in the last quarter of 2020, there was a massive surge in investment in AI technology companies totalling $73.4 billion, which was a $15 billion increase on the start of 2020. In the first half of 2021, we have seen 4,080 investment deals in AI technology companies, according to the investment monitoring platform Pitchbook. The average investment deal flow value has increased nearly three-fold in 2020.

2. Nanotechnology is set to grow its market from $54.2 billion in 2020 to $126.8 billion by 2027, which has enabled significant advances in medicine, electronics, environmental solutions, and materials, with the potential to improve drug delivery procedure and storage, and renewable energy. For example, COVID-19 accelerated both vaccine and virus testing and also drove specific developments such as nanotech material masks that filter out 99.9% of bacteria, viruses, and particulates.

According to the investment monitoring platform, Pitchbook, in 2020, $5.56 billion was invested in nanotechnology companies. In the first half of 2021, there has already been $7.72 billion of investment in nanotechnology companies, from 775 deals, with the average deal size value increasing three-fold in just the last six months.

Paul Sheedy, a co-founder of the World Nano Foundation (WNF), said: “The COVID pandemic is fuelling an investment trend behind the nanoscale tech that is already being billed as the ‘COVID Decade’ and driven by the fear of human and economic devastation from another pandemic.

“And that risk is high: there are only ten clinically approved solutions to over 220 viruses known to affect humans, and we can expect at least two new viruses to spill from their natural hosts into humans annually, but nanotech and biotech can help counter this threat.”

3. Biotechnology is the biggest and most mature market here, forecast to grow from $752.88 billion in 2020 to $2.44 trillion by 2028 at a 15.83% CAGR through significant effects on agriculture, improving the nutritional value and preservation of foods, minimising waste, and healthcare advances – the last being highlighted by the record-breaking speed of the Pfizer COVID vaccine development last year.

According to Nature magazine, global biotech funding in 2020 had its best year ever: 73 life science firms alone raised a collective $22 billion. Private fund-raising also mushroomed by 37% on the previous year - already a stellar year. This is being further fuelled with the COVID-19 mitigation market and the advent of a surge of investment in pandemic protection and preparedness using multi vaccines, autoimmune treatments and early intervention

testing. Pitchbook has recorded 3,800 deals in biotechnology companies in the first half of 2021, totalling $34.48 billion in investment in these companies. Again, the average investment level is nearly three times what it was the previous year, and post valuations of invested biotech companies have doubled from 2020.

4. Digital Twins are a new up and coming high growth tech sector, forecast to grow 15-fold from $3.1 billion in 2020 to $48.2 billion by 2026 at a 58% CAGR, with the technology already widely used in the construction, energy, healthcare, automotive, and aerospace sectors, and new fields opening up all the time.

According to Pitchbook, last year, there was $103.8 million of capital invested from just 53 investors into the Digital Twins technology start-ups. One company, Cityzenith, has added over 5000 new investors in the last 18 months, raising $10 million to date.

Cityzenith uses its Digital Twin SmartWorldProOS™ software platform to enable architects, planners, and energy providers to track, manage, and reduce emissions and energy waste from individual buildings, infrastructure, and even whole cities and has just reported major contract wins and seen its share price rocket 161% in early 2021. The company is partway through a $15 million Regulation A+ investment raise to scale up its international commercial opportunities.

The Digital Twin sector is an interesting space with tremendous growth opportunities for nimble, fast-moving start-ups who have the opportunity to compete with major conglomerates in this dynamic field such as Microsoft, Siemens, Phillips and Bentley.

5. Genomics is a market set to grow from $20.1 billion in 2020 to $62.9 billion by 2028 through its key role in healthcare innovation and tailoring care to an individual patient while providing more data on diseases and human genetics. The World Health Organisation reports that gene sequencing was critical to the rapid development of COVID-19 tests and other tools used to manage the virus outbreak.

According to Pitchbook, investment capital in genomics companies has more than doubled in value per deal in 2021 over the previous year. So far in 2021, post-investment valuations have also more than doubled against the whole of 2020.

Paul Stannard added: “The accelerated innovation since the COVID-19 pandemic is astonishing – some experts say we witnessed ten years’ growth in the last 18 months of the outbreak – giving us a glimpse of even greater possibilities, especially when some of these pacesetters, such as nanotech, genomics and Digital Twins are able to advance, accelerate and complement each other.

“If it is backed by astute and enlightened investment, our future is looking bright!”

Read the original article on Nano Magazine.