

Week_8_df

describe the impact the future of software engineering will have on this industry:

- healthcare

COVID opened a new era of information technology. One of the changes is no paperwork, all recipes are digital. Now you can ask a doctor to make a video conferencing, you can send him photos of problematic areas of the body and more.

EHR - electronic health record systems are involved in scale. "[Grand View Research](#) estimates that the size of the global healthcare IT market will be USD 142.7 billion in 2022 and will expand at a CAGR of 17.9% during the forecast period. If your healthcare business is yet to enter the digital world, it's high time to start looking for a healthcare mobile app development company." (VC, 2023). They also added: "The healthcare industry is on the brink of a technological revolution, from Artificial Intelligence & Machine Learning to Telemedicine, Blockchain, and Wearables & IoT Devices."

Healthcare services which uses AI and ML

Clinical Decision Support	Predictive Analytics
Personalized Medicine	Telemedicine

Telemedicine uses video conferencing, mobile applications and other devices.

Healthcare Software Development: 2023's Top Trends"

The Future Of Healthcare Delivery



01

Telemedicine

The Provision Of Healthcare Treatments Via Distant Technologies

Key Benefits: Improved Healthcare Outcomes, Financial Savings, And Higher Patient Satisfaction



02

Artificial Intelligence & Machine Learning

The Application Of Computer Algorithms And Data Analysis To Automate Decision-Making Processes In Healthcare

Key Benefits: Cost Savings, Customized Treatment Strategies, And Improved Diagnostic Precision.



03

Blockchain

A Secure And Decentralized Digital Ledger For Secure And Transparent Record-Keeping

Key Benefits: Improved Data Security, Simplified Administrative Procedures, And More Patient Privacy.



04

Wearables & IoT Devices

Devices That Can Be Worn Or Utilized To Track And Monitor Patient Health In Real-Time

Key Benefits: Real-Time Monitoring, Better Patient Outcomes, And Lower Costs.

"Discover The Future Of Healthcare Delivery With ValueCoders"

"Select The Top Healthcare Software Development Partner Today."

Image taken from [this resource](#)

Using Generative AI we can build more intelligent systems.

Security is also quite an important and undeniable matter of information protection. Blockchain technology with web 3.0 makes the digital world more safe and secure.

Challenges and considerations

interoperability	privacy
Regulatory compliance	HIPAA and GDPR must be followed by businesses.

Data sharing or lack of it between service providers. "Patient data and information are not routinely shared across providers, which can cause avoidable challenges, frustrations, delays and potentially harmful outcomes for patients. It can also create issues for health systems."
(Capone, Jan. 2022).

Another interesting problem is initial error rate. "Generally, new technological products require iteration before they're sufficiently reliable. This iterative process can be painful, potentially resulting in inaccurate predictions and inappropriate recommendations." (Capone, Jan. 2022)

Another example could be computer vision, where machine learning can help to diagnose in early stages cancer.

In addition AI is used in data management, prediction of future diseases and "inventing" new medicines.

Currently I see that in my country there is a lack of doctors and medical staff. Smart systems could solve such a shortage.

Summing up: development of intelligence systems and adoption of blockchain technologies will boost future software development in healthcare industry.

References:

Yunyoung Nam (August 2021) The future of software engineering: Visions of 2025 and beyond
https://www.researchgate.net/publication/353623646_The_future_of_software_engineering_Visions_of_2025_and_beyond

Anthony Capone (Jan 11, 2022) The Future of Healthcare Technology
<https://www.forbes.com/sites/forbestechcouncil/2022/01/11/the-future-of-healthcare-technology/?sh=2fd36acb4750>

The future of healthcare software development
<https://www.valuecoders.com/blog/industries/the-future-of-healthcare-software-development-emerging-trends-for-2023/>

Afrah Almasoori (April 17, 2022). Ecosystem of healthcare software engineering 2050
https://link.springer.com/chapter/10.1007/978-3-031-03918-8_29