

Summary Post :

In the initial post I made, I discussed the concept of industry revolution 4.0 and provided two real-world examples of how useful Industry 4.0 can be. I also brought attention to the potential risks. (Kovaitė and Stankevičienė, 2019)

I would like to express my thanks to Mr. Dough for reading my initial post and asking the important question, both of which have assisted me in pursuing additional reading on this subject.

As was covered in my first post, the Life Science Industry Revolution 4.0 has assisted scientists and researchers in accelerating the development of their inventions through the application of artificial intelligence (AI) and machine learning (ML). Even during the height of the pandemic, AI and ML were instrumental in the development of vaccines and vaccine roll outs. (Arshad, et al. 2020) (Thomas, et al 2002)

Having said that, this sector faces a number of concerns relating to personal privacy and data protection, which are currently being addressed by legislative initiatives. The government has implemented a number of regulations and keeps a close eye on the life science industry. (Murdoch, 2021)

Although signing a business associate agreement (BAA) is a good way to ensure the privacy and security of one's data to some degree, HIPAA does not take into account certain emerging technologies that may present significant risks. In addition, vendors can avoid the need for a Business Associate Agreement (BAA) if the data has been de-identified, which means that it can no longer be connected to a specific person and, as a result, is no longer governed by HIPAA. (Mckee, N.D)

In conclusion, the fourth industrial revolution is digitizing all industries; some of these advancements are truly saving human lives, while others raise significant concerns.

Reference:

1. Arash, et al. (2020) Artificial intelligence for Covid-19 Drug discovery and Vaccine Development Available from: <https://www.frontiersin.org/articles/10.3389/frai.2020.00065/full> [Accessed Aug 27 2022]
2. Sunil, T. et al. (2022) Artificial intelligence in Vaccine and Drug Design Available From: <https://pubmed.ncbi.nlm.nih.gov/34914045/> [Accessed Aug 27 2022]
3. Blake, M. et al. (2021) Privacy and artificial intelligence: challenges for protecting health information in a new era Available From: <https://bmcomedethics.biomedcentral.com/articles/10.1186/s12910-021-00687-3> [Accessed Aug 27 2022]
4. Jill, M. (N.D), Regulatory Gaps, Challenges of AI in healthcare Available From <https://healthitsecurity.com/features/security-privacy-risks-of-artificial-intelligence-in-healthcare> [Accessed Aug 27 2022]

