

Report on the Talk by Professor Christian Hitz

On the 7th of February 2023, Mr. Christian Hitz, an invited faculty member of the Business Analytics Institute who is also a highly esteemed expert in the field, shared his views in a hosted speech focusing on the industry reforms due to introduction of AI. Mr. Hitz started his talk by explaining that artificial intelligence (AI) is not confined to a single area but rather touches on mathematics, business technology, deep technology, big data, business intelligence, and analytics. He went into detail on how these sectors' increasingly heavy dependence on data has made it essential to use AI in order to efficiently handle the vast amounts of data available and draw insightful conclusions. Mr. Hitz elaborated on the potential outcomes of A.I. development, predicting that our aspirations would far outstrip our present capacity to conceive them. He emphasised that event streams are likely to replace transaction tables in the future for data management. He went on to explain why event streams, as opposed to transaction tables, are more adaptable and flexible, making them ideal for handling and analysing massive volumes of data. Mr. Hitz believes that moving forward, all information would be kept in real-time event streams, which are federated systems that are both flexible and easily shared.

Mr. Hitz also foresaw that the creation of artificial intelligence wouldn't be restricted to computer-savvy individuals, but rather that it would be available to anybody with an internet connection. He spoke about how the widespread availability of AI tools and methods would help sectors that previously lacked the financial means to embrace them. In addition, Mr. Hitz stressed that data-dependent enterprises would have a new lens through which to extract these amounts of data as the globe moves towards the 4th Industrial Revolution and cyber-physical systems become more prevalent.

Mr. Hitz also discussed the growth and rising popularity of distributed ledger technology (DLT). DLT, which is based on the decentralised notion of the internet, is gaining popularity for value transactions much like the internet did for information transactions. But Mr. Hitz speculated that, in reality, truly decentralised systems could be difficult to maintain. He spoke on the practical uses of DLT and how smart contracts might limit our effectiveness. The open web scenario he described centres on who owns what data online. Advances in technology are occurring at a rate never seen before. The way we work, play, and communicate with one another has changed dramatically over the last several decades. Significant technological progress has been made throughout the years, from the development of the internet to the widespread use of smartphones. The cyber-physical system is poised to play a pivotal role in altering our lives as we enter the tumultuous era of the fourth industrial revolution. The widespread use of event streams is a hallmark of the current period. Companies are capitalising on this trend of real-time data by using it to develop novel revenue streams and enhance the customer service they provide. Since firms now need to react rapidly to shifting market circumstances, federated systems and dynamic scalability are essential.

The fact that anyone can now create software is a significant advancement in the modern world. Once upon a time, only "tech-savvy" people dabbled in computer programming. However, with the advent of more accessible development tools driven by AI programmers of all backgrounds may now acquire the skills they need to make their own software. The widespread availability of programming languages is helping to spur creative and commercial endeavours.

The development of cyber-physical systems is a key feature of the current fourth industrial revolution. These technologies combine analogue and digital signals to allow machines and

humans to converse. This has massive ramifications. The capacity to extract data sets and evaluate them from a fresh angle is a game-changer for every business that depends on information. Cyber-physical systems assist companies in improving productivity, streamlining operations, and enriching the customer service they provide. The proliferation of online communication and commerce has changed the nature of many industries. It's now simpler than ever to transmit information because of the advent of social media and other internet channels. It is in the development of value exchanges, however, that the internet really shines. The decentralised nature of the internet is the basis for distributed ledger technology (DLT), which has the potential to completely alter the way we handle monetary transactions. DLT's capacity to cut down on middlemen means it can boost transparency and safety while simultaneously decreasing transaction costs.

There are many who say it would be impossible to maintain a completely decentralised society. He also warns that being overly reliant on blockchain and other DLTs makes us more susceptible to assaults and that smart contracts may limit our ability to use our full potential. The application of DLT also has various difficulties. For instance, there are issues related to privacy and data ownership, and the adoption of DLT necessitates the development of a new legislative framework. The movement for a more open internet is gathering steam despite these obstacles. The idea that the Internet ought to be a free and democratic arena has inspired this shift in perspective, which places a premium on individual control over one's own data and on safeguarding one's personal information. In this new reality, consumers have more sway over their data, and companies must be more forthright about how they put it to use.

He is of the view that a new age of technological progress is just around the corner. Event streams, federated systems, and the flexibility to scale on the fly are all hallmarks of the Fourth Industrial Revolution. Cyber-physical systems are changing the way we interact with the physical environment, and programming is getting easier for everyone. While there will be obstacles to overcome, the advent of an open online world is a beneficial trend for society, and DLT implementation is only one part of it. The future of our epoch is dependent on our ability to accept and adapt to new ways of doing things, particularly in light of the rapid development of new technology, with the internet moving in a different parallel, all of which is fuelled by the development of some of these technologies. Mr. Hitz's lecture was an illuminating and thought-provoking debate that stressed the enormous potential of A.I. to revolutionise numerous disciplines and how these breakthroughs might affect the way we handle and interpret data. We can only anticipate additional advancements in A.I. as a result of his talk about the democratisation of A.I. technology and its benefits for enterprises and industries of all kinds.