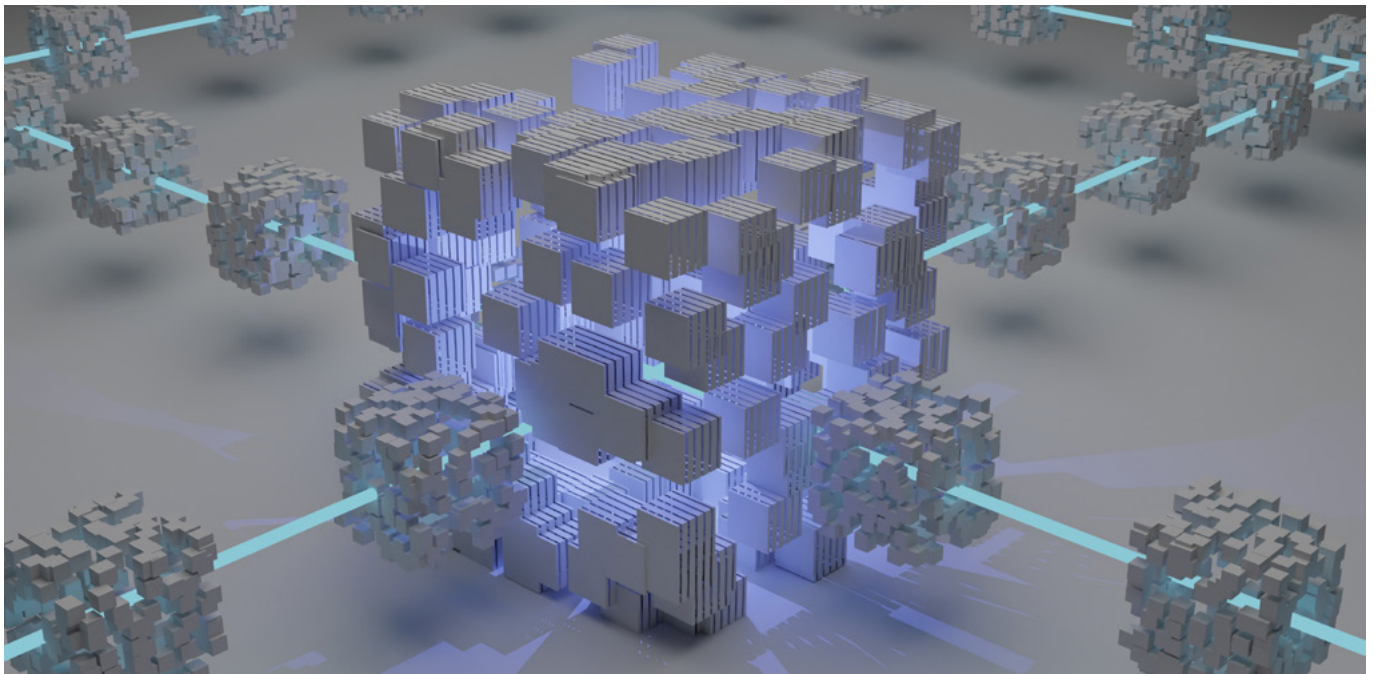


OPPORTUNITY #38

What if we tokenised our most sensitive data?

NOT A TOKEN GESTURE

Individuals tokenise sensitive personal data to protect its integrity and retain control over who has access – with a possible commercial upside.



MEGATREND
Technological Vulnerabilities

TRENDS
Artificial Intelligence
Data Protection & Privacy
Tokenisation

SECTORS AFFECTED
Materials & Biotechnology
Communication Technologies & Systems
Cyber & Information Security
Data Science, AI & Machine Learning
Insurance & Reinsurance

WHY IT MATTERS TODAY

With annual increases of 15% between 2022 and 2025, the costs associated with cybercrime are expected to reach \$10.5 trillion worldwide by 2025 – a 300% increase from 2015 levels.⁶⁴⁶ By 2030, it is estimated that the economic benefits associated with a secure digital identity will range between 3% and 13% of GDP.⁶⁴⁷

While 137 out of 194 countries globally (almost 71%) have put in place legislation to protect privacy and personal data, the levels of adoption in Africa and Asia dip to 61% and 57%, respectively.⁶⁴⁸ At the same time, the average cost of a data breach in 2022 was \$4.35 million and, having gone up 42% since 2020, a data breach in healthcare had an average cost of \$10 million.⁶⁴⁹ Stolen or compromised credentials were the most common data breach and, at 327 days, the longest to identify.⁶⁵⁰ Almost half of these breaches occurred in the cloud, and organisations with a hybrid cloud model had lower average data breach costs (\$3.80 million) compared to organisations with a public (\$5 million) or private (\$4.2 million) cloud model.⁶⁵¹

Besides the economic cost, cybercrime affects people too. A survey found that, out of those who had been victims of fraud, 70% felt anxious, stressed, displeased or frustrated when they were warned about potential fraud.⁶⁵² It has been estimated that the cost to a fraud victim's well-being can be valued at around \$3,000 or higher, compared to a financial cost of around \$700.⁶⁵³

The potential target market size when it comes to data protection is up to \$100 billion and only 30% to 35% of that market is currently served.⁶⁵⁴

71%

of countries globally have put in place legislation to protect privacy and personal data



THE OPPORTUNITY

Tokenisation transforms financial markets⁶⁵⁵ and offers individuals the possibility of sharing their sensitive data by converting the data into charitable value – for the greater good – or monetary benefit, if sought.

In this way, the data can be put to use and its original sensitive elements which make the data traceable to an individual or family, for example that used in training predictive models for novel cancer treatments – are stored outside the database. Tokenisation offers advantages over encryption as tokenised data cannot be decoded and tokenisation is irreversible. When individuals are confident that sensitive data cannot be traced back to them or accidentally revealed, they will be more willing to share and, in doing so, contribute to medical and scientific innovation and enhance community-based policymaking .

BENEFITS

More transparent data-sharing systems will engender more trust, particularly in the sharing of personally sensitive areas such as health and education. More distributed gains across business and society by delivering greater value to individuals that are generating and sharing data.

RISKS

Sophisticated mass breach of tokens. Dependency on network stability and associated technologies. Widening economic gaps brought about by margins in the value of personal tokens.



7505
10555
17267

The costs associated with **cybercrime**
are expected to reach

**\$10.5
TRILLION**

worldwide by 2025 – a

300%

increase from 2015 levels