

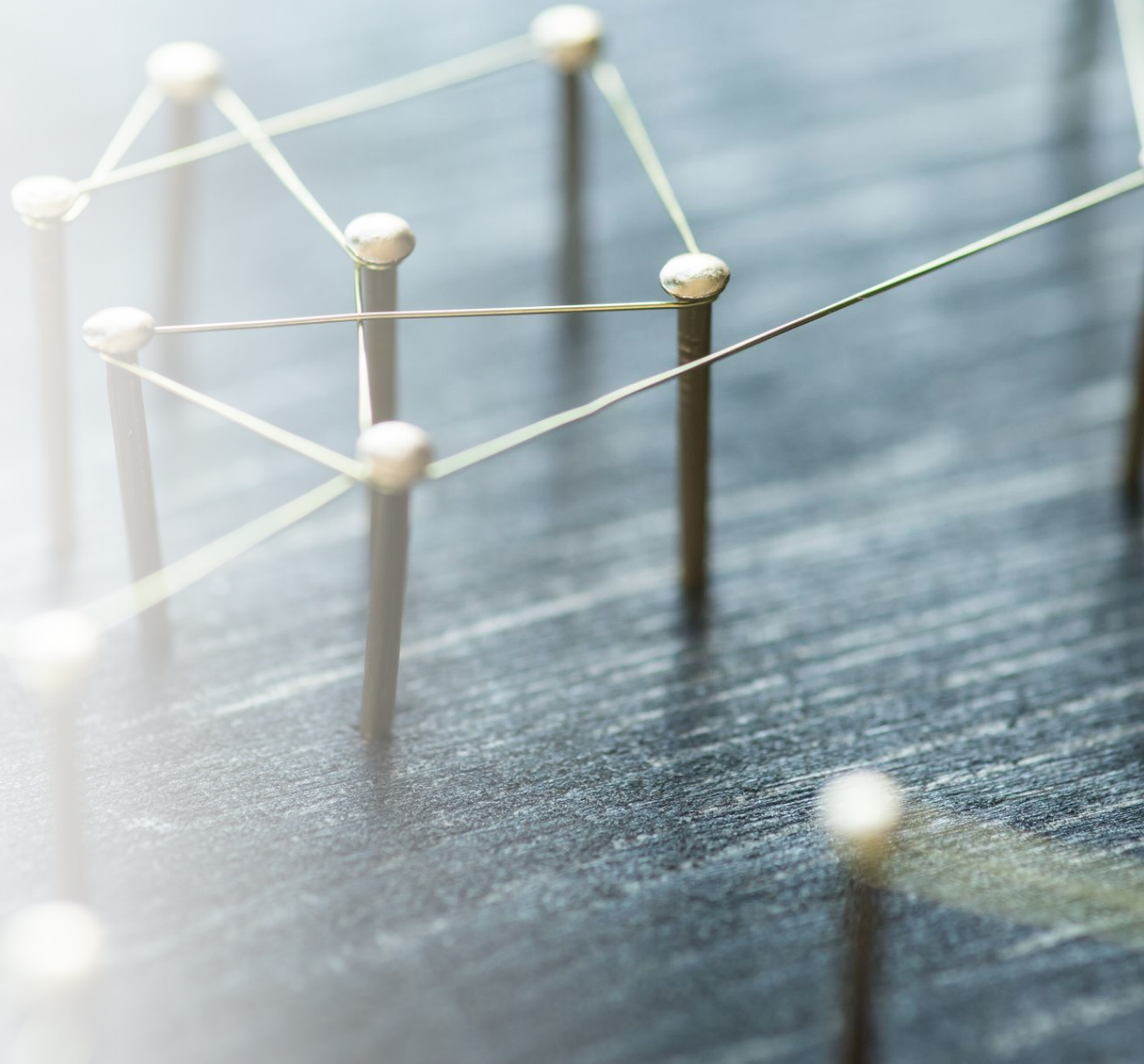


Blockchain in Public Governance: New Possibilities and Challenges for Public Data Management and e-Voting

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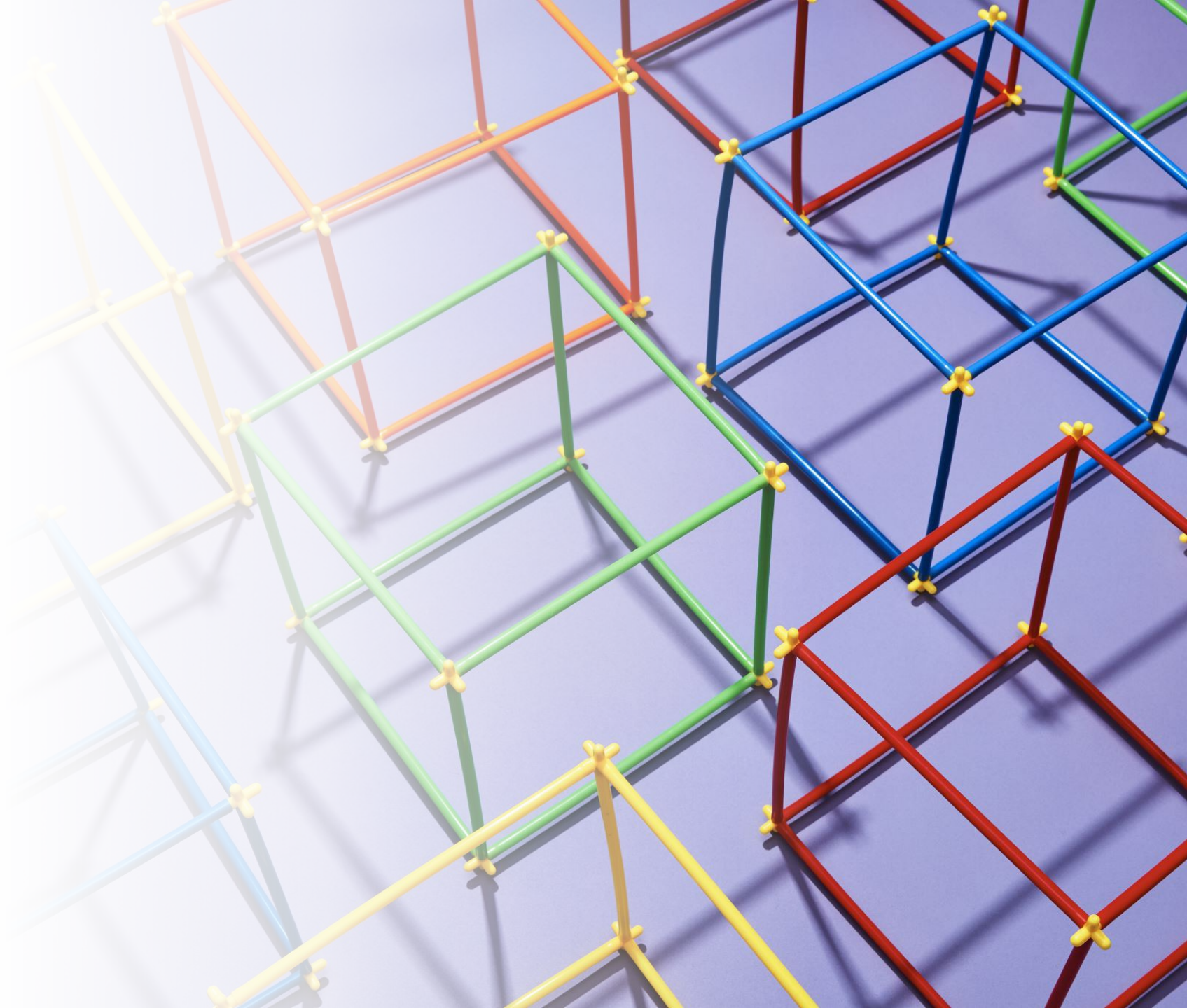
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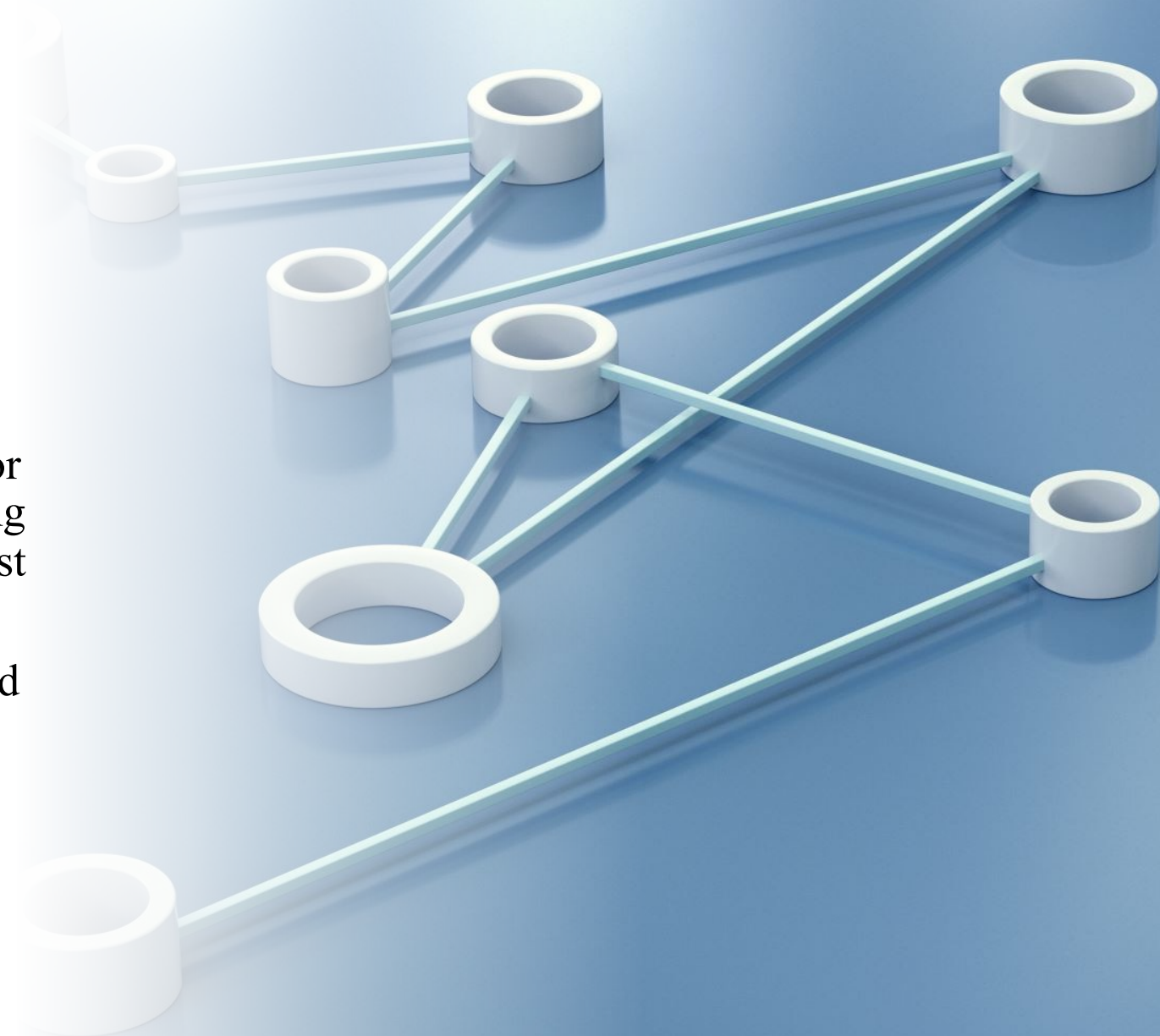
Introduction

- The aim of the presentation:
 - To discuss the benefits and challenges of blockchain in public data management and e-voting
 - Providing important use cases
 - Potential solutions for challenges
 - Looking ahead



Background

- The elimination of the need for central authorities by providing trust with technology: 'the trust machine'.
- Decentralized, transparent, and immutable nature
- Not only trust, but efficiency



Blockchain in Public Data Management

- Decentralization and Transparency:
 - Accountability
 - Improved access to information for citizens and stakeholders
 - Combating corruption and fostering trust
- Immutability and Cryptography:
 - Enhanced data integrity and security



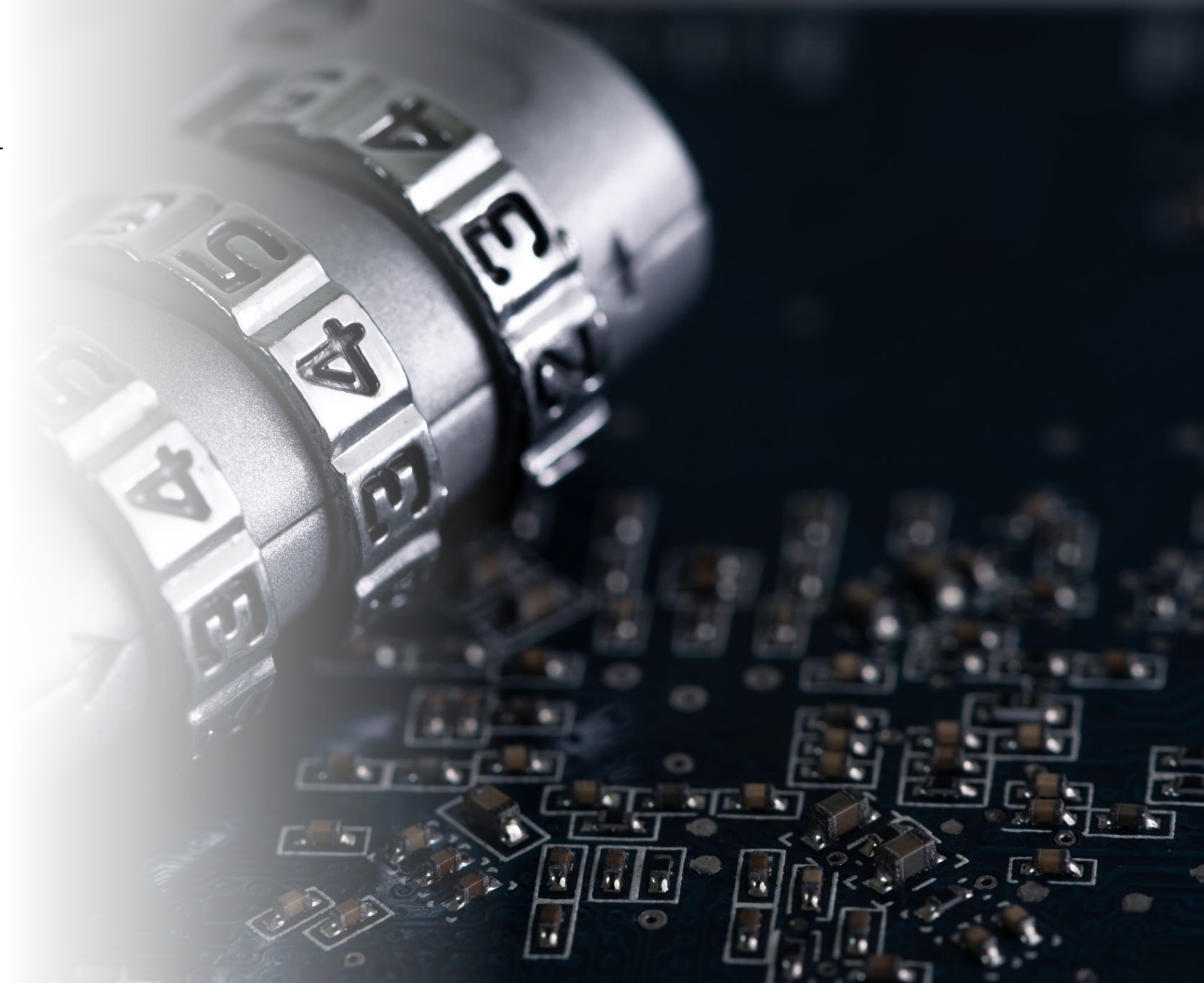
The background features a complex, futuristic design of concentric circles and data-like patterns in shades of blue and white, creating a sense of depth and digital connectivity.

Example Use-cases and Pilot Projects of Blockchain in Data Management

- Land registry management: Georgia and India
- Digital identity management: Estonia's e-Residency program
- Supply chain tracking: IBM and Walmart's food safety initiative
- Health data management: Malta Biobank and MedRec of MIT

Blockchain and e-Voting

- The importance of trust in voting
- Transparency of votes
- Security of the process with cryptography
- Anonymity of the voters
- Immutability of the records
- Cost/Time-Efficiency
- Potential for:
 - Direct democracy
 - Oversea voting





Real-World Examples of Blockchain in e-Voting

- Zug Digital ID of Switzerland
- West Virginia's mobile voting pilot for military personnel
- Sierra Leone's 2018 presidential election along with paper ballot
- A negative example: Moscow's e-voting system
- The lack of mature examples





Challenges and Concerns

- Technical challenges:
 - Scalability
 - Privacy
 - Interoperability
- Regulatory and legal obstacles
- Blockchain needs trust
- Digital illiteracy of citizens






Addressing Challenges

- Providing a trustful environment
- The role of regulatory frameworks and global cooperation
- The need for ongoing research and development
- Technology evolves and matures over time:
 - Off-chain Solutions for Scalability
 - Zero-Knowledge Proofs for Privacy
 - Cross-chain dApps for interoperability
- Education





Future Directions

- Democracies are in crisis
 - The potential for growth and innovation in the public governance domain
 - Digital disruption
 - Advancements in technology
 - Understanding the limitations but also the potential
 - A better understanding of the technology
 - The importance of cross-disciplinary collaboration for sound and effective regulations
 - The necessary advancements in both technological and societal domains
- 



Conclusion

- Unique and important features which can be useful for public governance
 - Understanding the potential and limitations
 - How and where to use it
- Challenges should be mitigated
 - Technological and regulatory developments
 - Further exploration and discussion on the topic



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UNDER THE HOOD

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