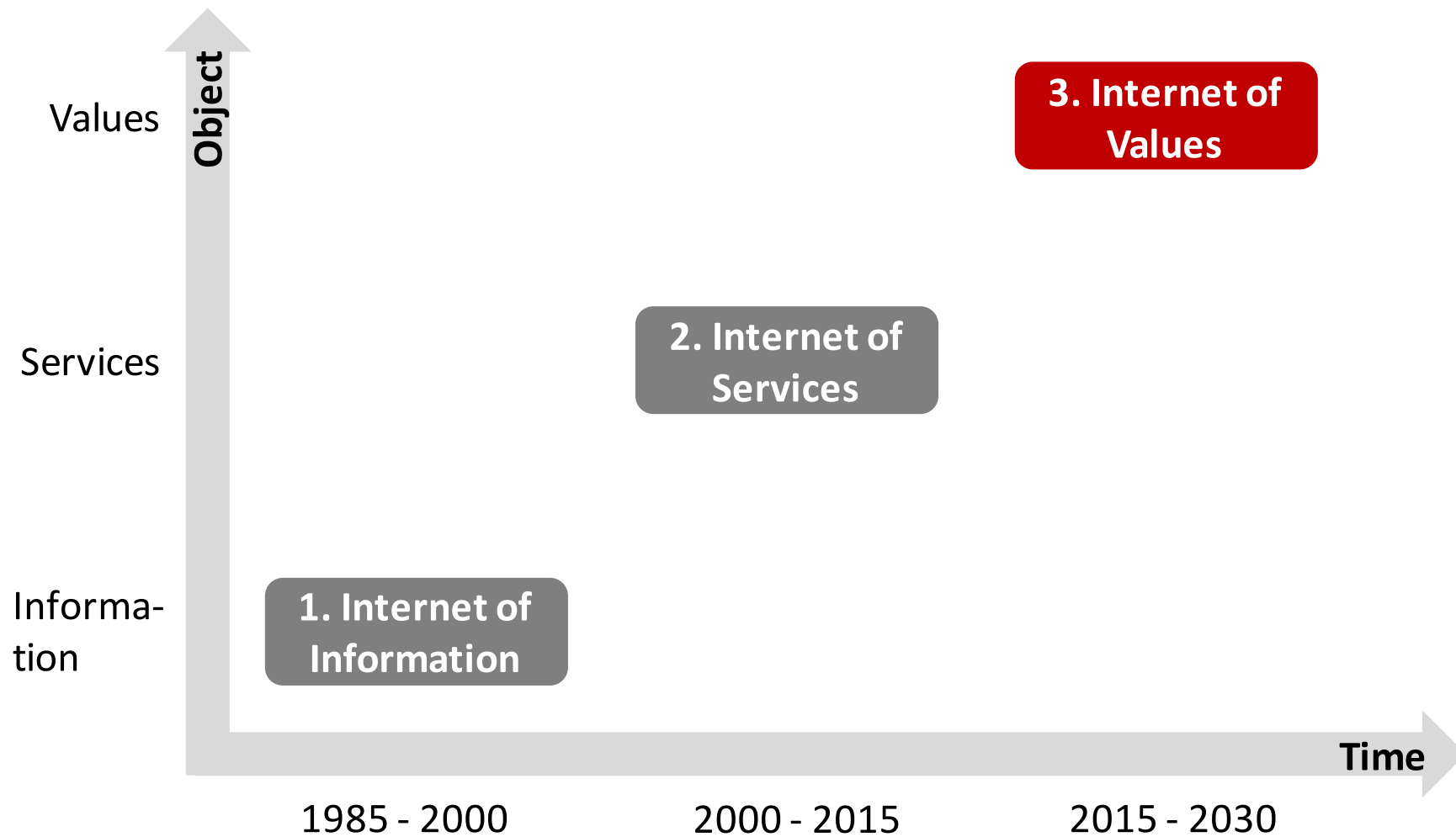


Banking without Banks?

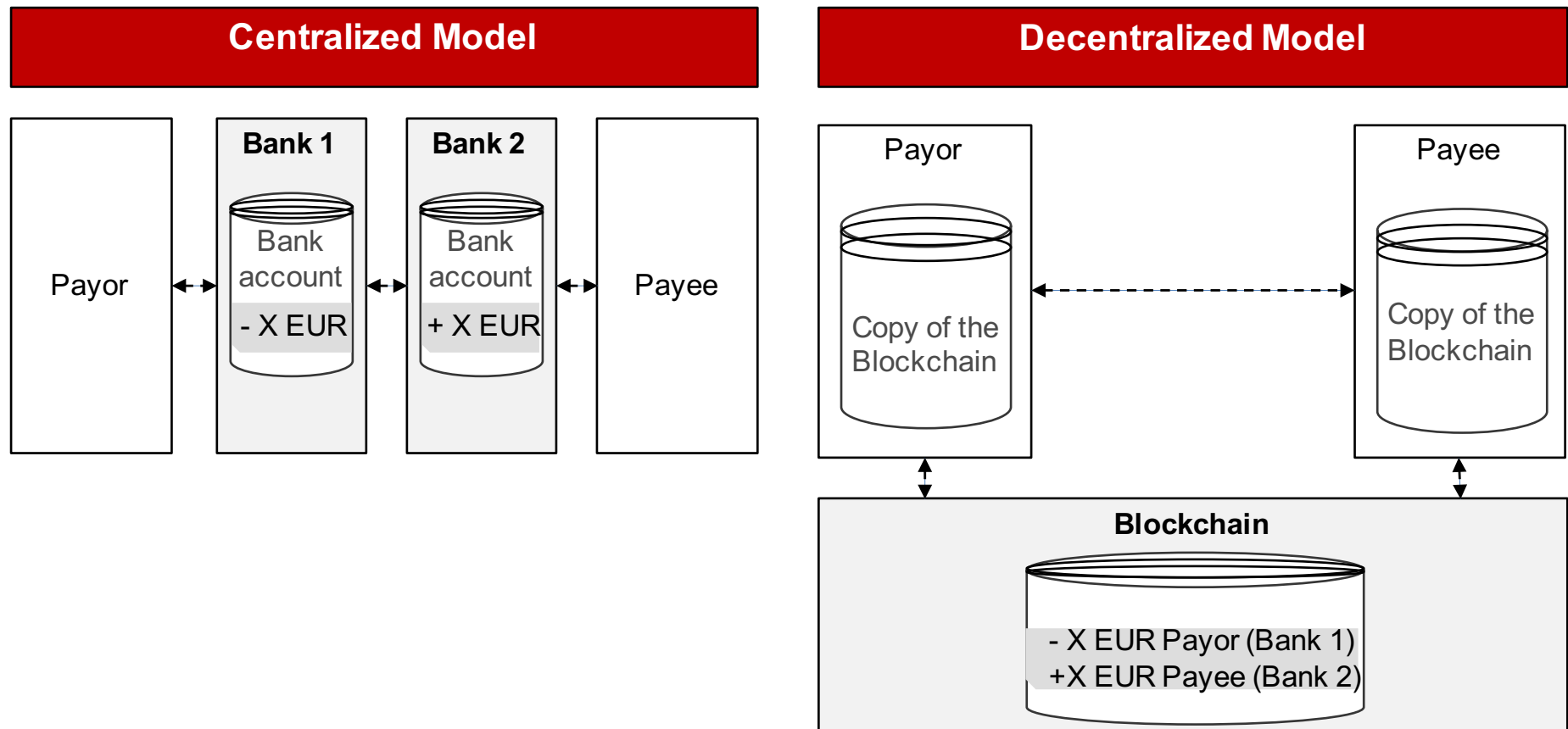
How will Technology transform financial Intermediation?

Vienna, 29.05.2017
Thomas Puschmann

Hypothesis: In the future we will transfer values among individuals and organizations directly without intermediaries



The dependency on time and location disappears with distributed ledgers like blockchain



Source: Alt., R. Puschmann, T. Digitalisierung der Finanzindustrie, Springer, Berlin etc., 2016

But what are the differences between the intermediary model and the blockchain model?

Charateristics	Database	Blockchain
Organization	Central	Decentral
Transaction validation	Intermediary	Consensus
Data structure	Relational	Chronological
Hidden data changes	Possible	Impossible
User transparency	Known	Pseudonymous

Source according to:

Nakamoto, S. 2008. "Bitcoin: A Peer-to-Peer Electronic Cash System",

Ali, R., Barrdear, J., Clews, R., and Southgate, J. 2014. "Innovations in payment technologies and the emergence of digital currencies," Bank of England Quarterly Bulletin (54:3), pp. 1-14.

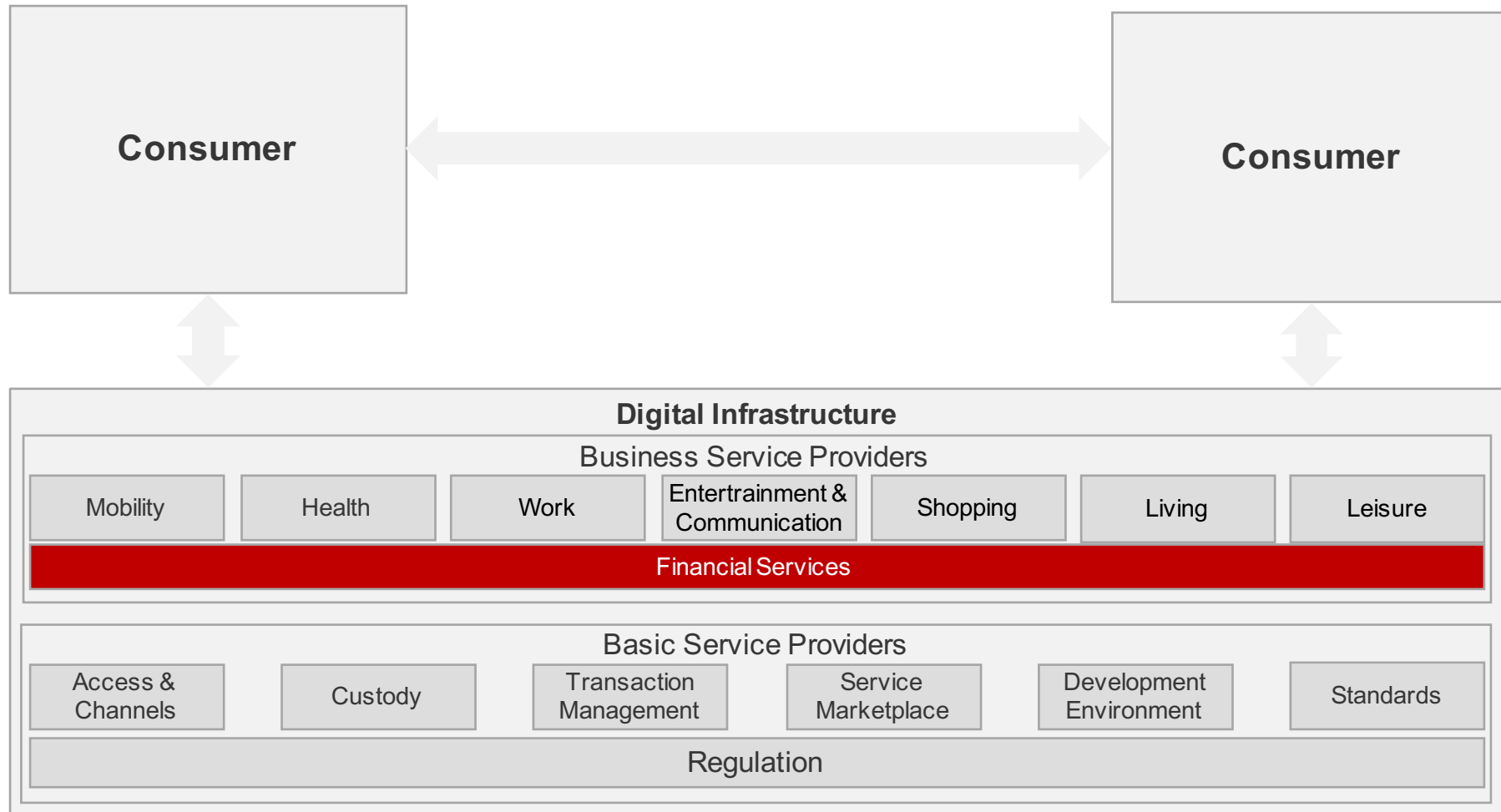
The blockchain enables new business models

Amount of Complexity and Coordination	High	Substitution E.g., Retailer gift cards based on Bitcoin	Transformation E.g., Self-executing smart contracts
	Low	Single Use E.g., Bitcoin payments	Localization E.g., Private online ledgers to process financial transactions
		Low	High

Degree of Novelty

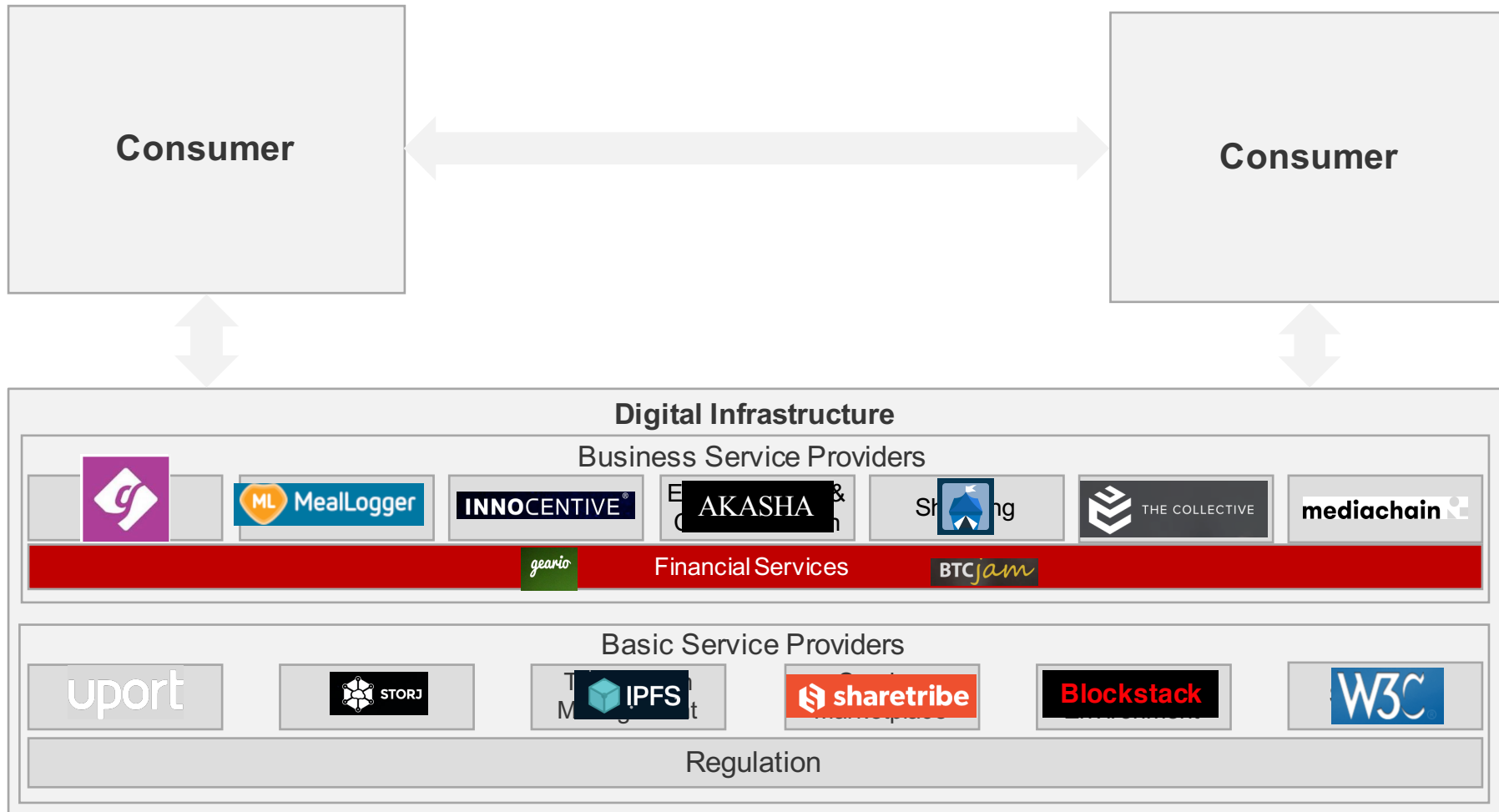
Source according to: Iansiti, M., & Lakhani, K. R. (2017). The Truth about Blockchain. Harvard Business Review, 95(1), S. 118–127.

This approach allows a fundamental paradigm change and the foundation of a global peer-to-peer economy (examples)



Source according to: Puschmann, T., Die Bank als Teil digitaler Ökosysteme, NZZ, 15.09.2016, S. 19

This approach allows a fundamental paradigm change and the foundation of a global peer-to-peer economy (examples)



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Consequences

- **New financial system:** The internet of value will lead to a new financial system supporting new, cross-industry ecosystems.
- **Repositioning required:** Firms need to reposition themselves in the evolving new financial system.
- **Time horizon:** The development of standards and new services requires time and will not happen over night.
- **Benefiting firms:** The early movers may benefit like the two first phases have shown with Cisco (phase 1) and Apple (phase 2).
- **Take action:** Financial institutions need to act if they don't want to experience the Kodak or Olivetti "effect".

Thanks for your attention!