



# Blockchain and Government

May 2018

Exploring the impact of blockchain on government

# Agenda

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Origin and application



Government adoption and impact



Applying blockchain to California's issues



# Origin and application

# Blockchain was created out of necessity to facilitate a peer to peer electronic payment system now known as bitcoin.

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“What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party.”

- Satoshi Nakamoto

# The trust that is inherent in blockchain is the product of a combination of other attributes.

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Permanent

Transparent

Secure

Validated



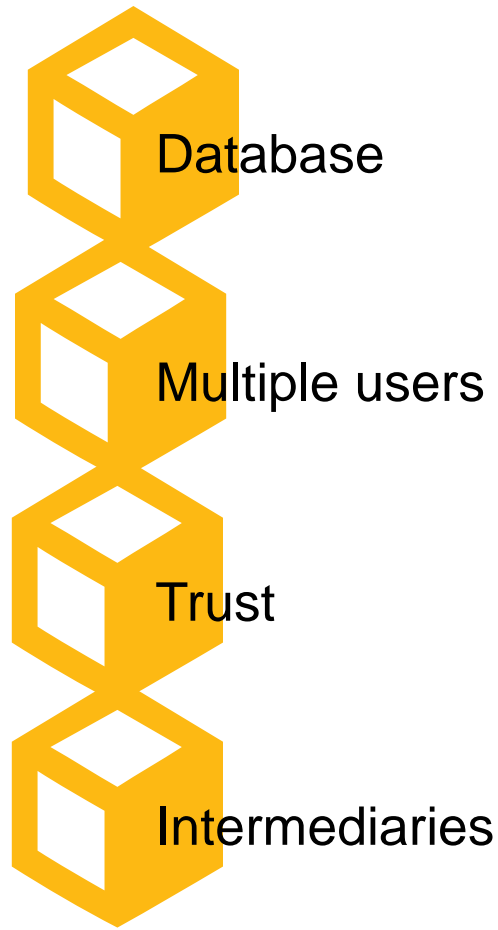
**Early blockchain applications eliminated intermediaries, which led to increased speed and streamlined processes.**

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# The application of blockchain has evolved and the parameters of the business situations to which it is applicable been further defined.

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Blockchain is a distributed ledger, or database, with properties that make the records entered onto it valid, authentic, unique, immutable, and trusted

Blockchain enables databases to be shared securely among multiple users

All changes to the database are known to all validating entities. To alter one record within the chain requires altering all the records in the chain

Involvement of a person/company that facilitate transactions between two or more parties

# Blockchain is now being applied to a wide range of business functions in multiple industries.

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# Government adoption and impact

# Many state government efforts have focused on legislation related to a variety of blockchain and blockchain-related topics

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Arizona  
California  
Colorado  
Florida  
Hawaii  
Illinois  
Maine  
Nebraska  
Nevada  
New York  
North Carolina  
Tennessee  
Wyoming

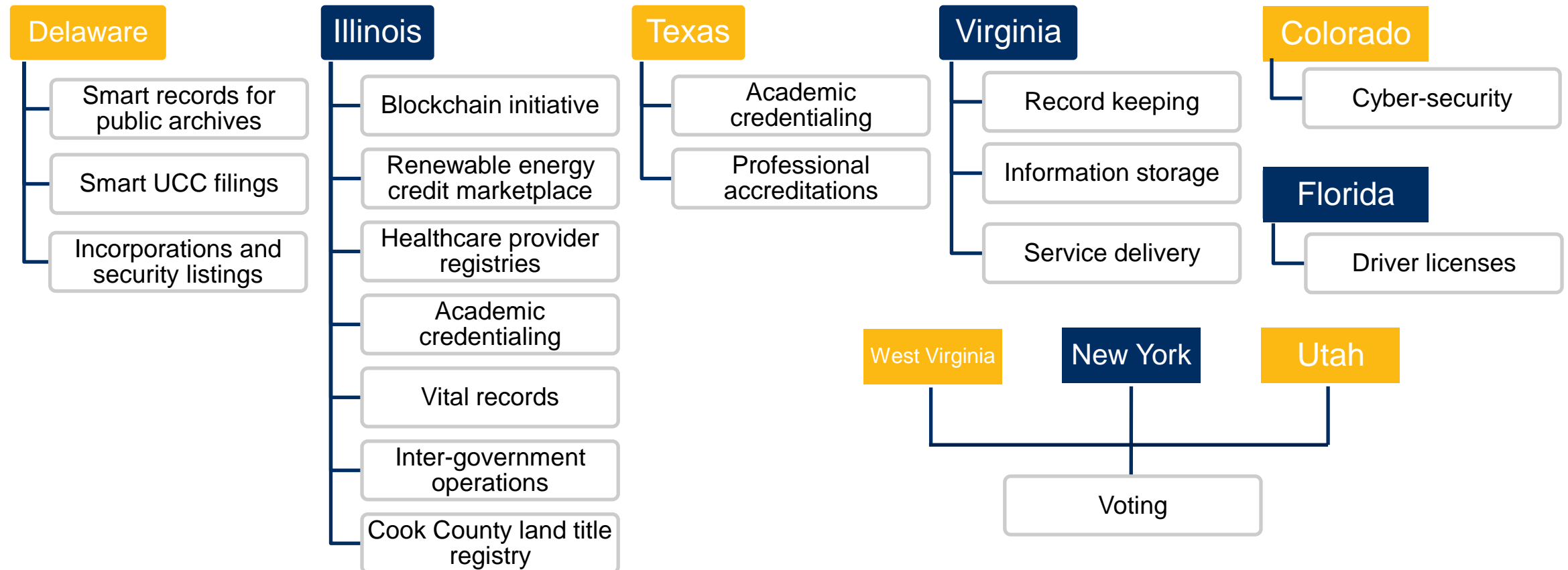
## Blockchain

- Cybersecurity
- Digital signatures
- Marijuana tracking
- Smart contracts
- Tax exemptions

## Cryptocurrency

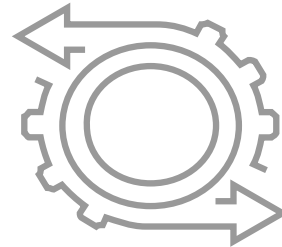
- Investments
- Mining
- Tax payments

# Adoption is following legislation, as states apply blockchain to a variety of functions.



# Blockchain infrastructure often requires information to be gathered from outside sources.

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# Being the oracle of critical information presents new opportunities for government entities.

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# Applying blockchain to California's issues

# Blockchain can be applied to multiple issues that have been identified by California as being among the key focus areas.



- Agriculture
- Climate change and environment
- Public safety and criminal justice
- Jobs, trade, and economic development
- Education
- Economic mobility
- Healthcare



# Blockchain can address issues in agriculture, the environment, and criminal justice.

***Food / Cannabis***

***Toxic waste***

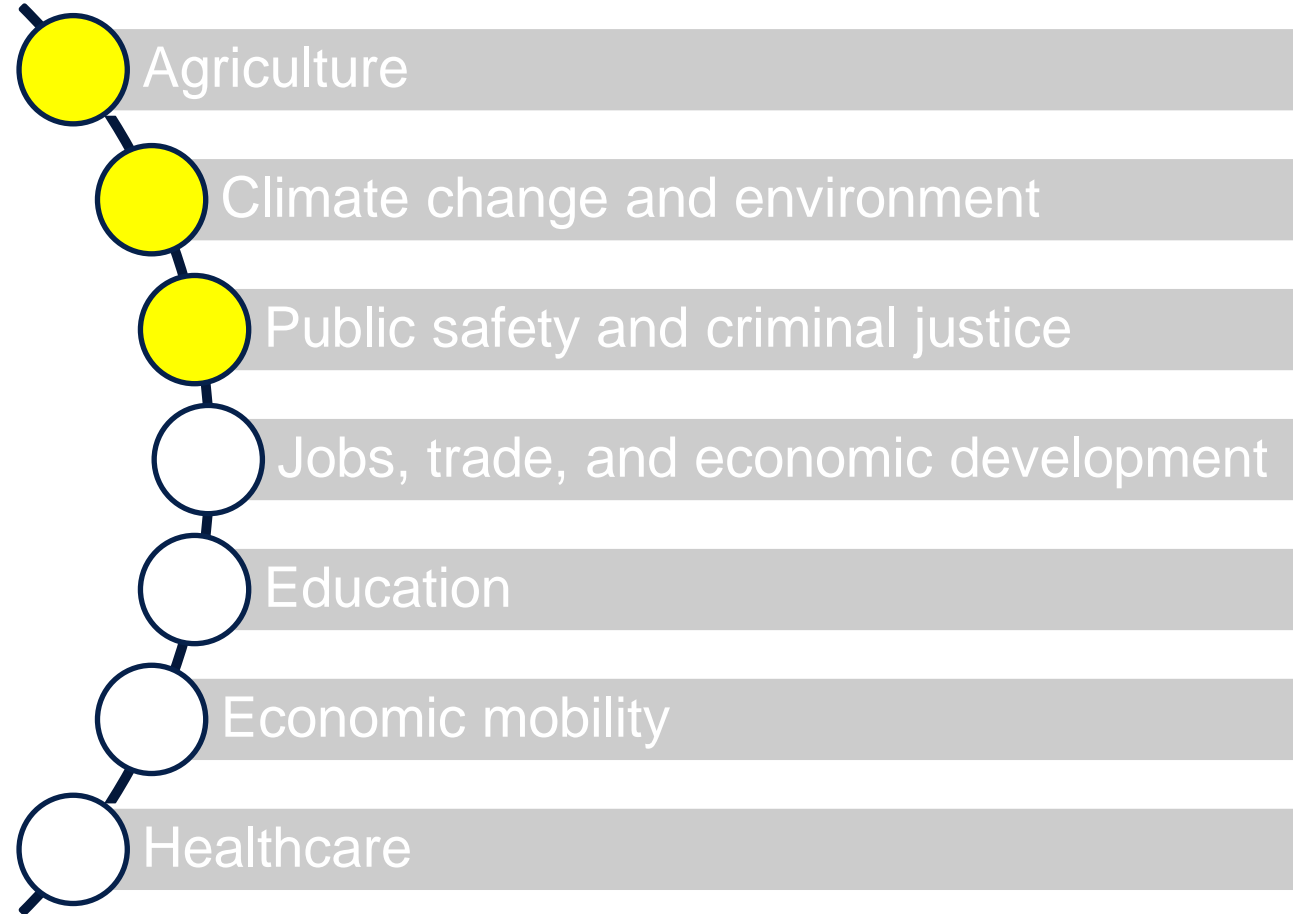
***Evidence management***

Professional licensing

Academic credentialing

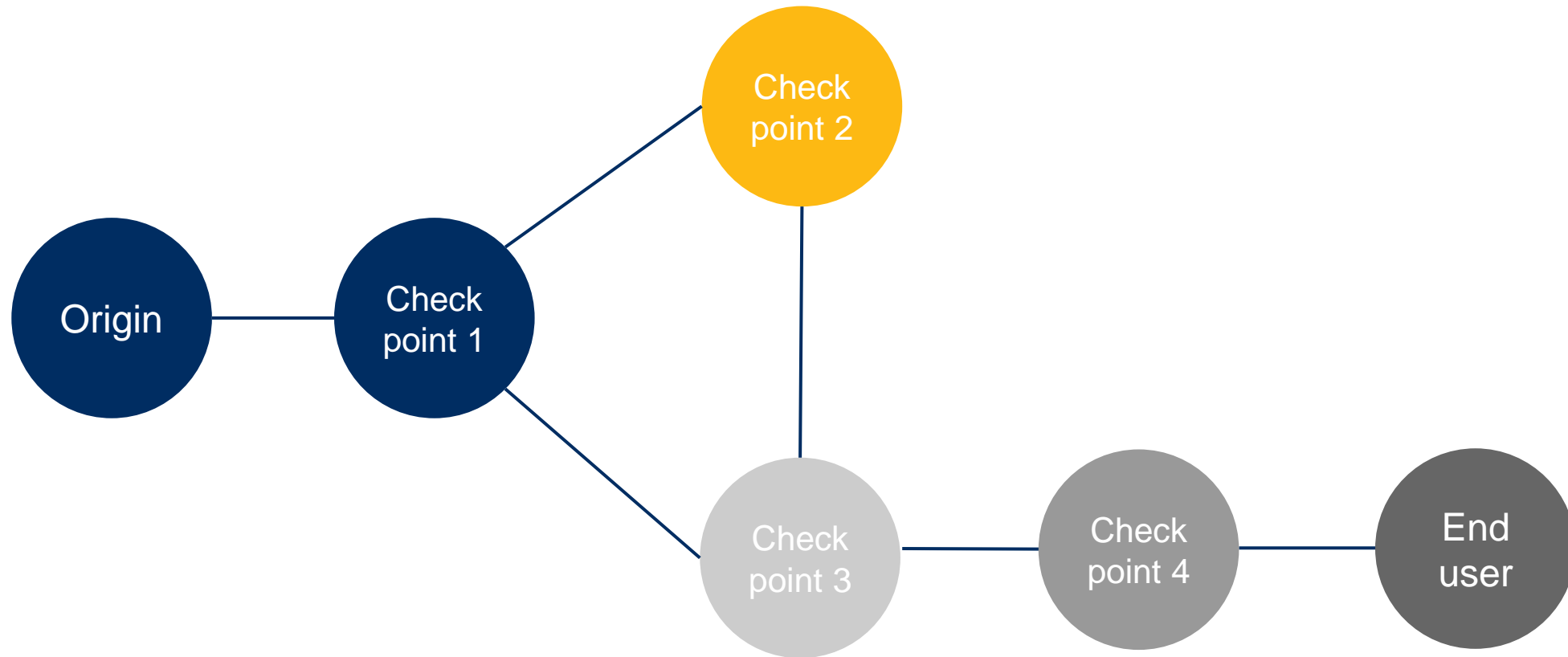
Land titles / Identity management

Patient record management



# Blockchain networks can be developed that will track materials from origin to end user or disposal.

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# Blockchain can impact economic development and education.

Food / Cannabis



Toxic waste



Evidence management



***Professional licensing***



***Academic credentialing***



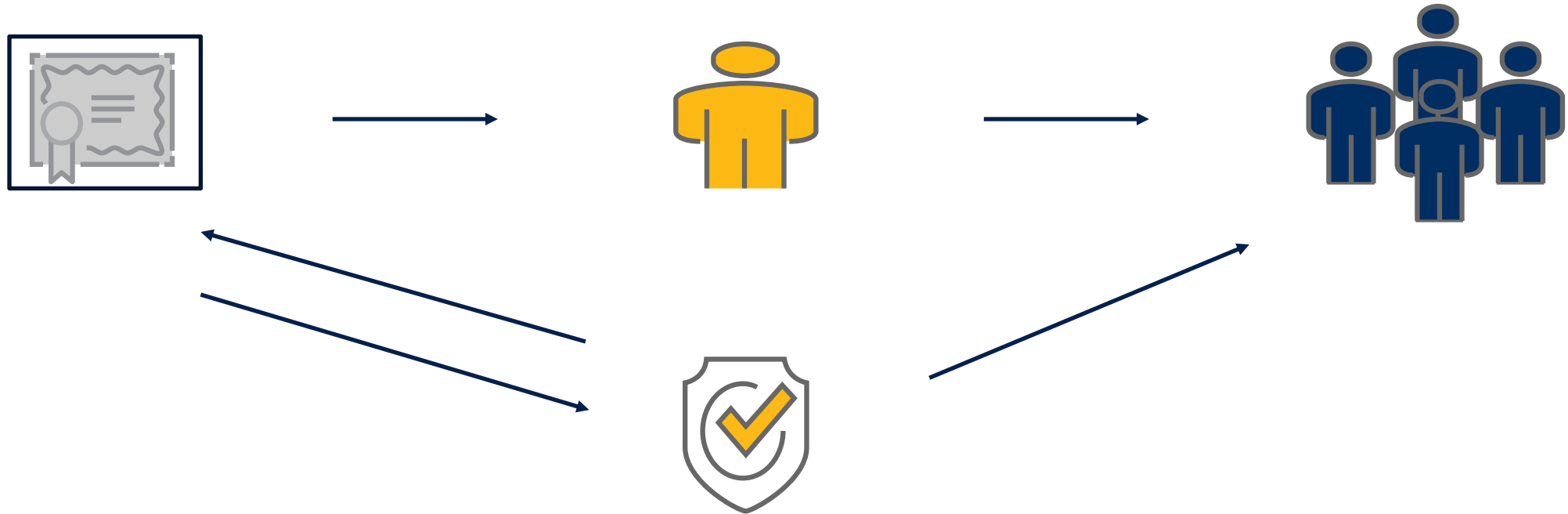
Land titles / Identity management



Patient record management



# Blockchain can protect the public by ensuring that professionals have valid and current licenses and appropriate academic qualifications.



# Economic mobility and healthcare

Food / Cannabis



Toxic waste



Evidence management



Professional licensing



Academic credentialing



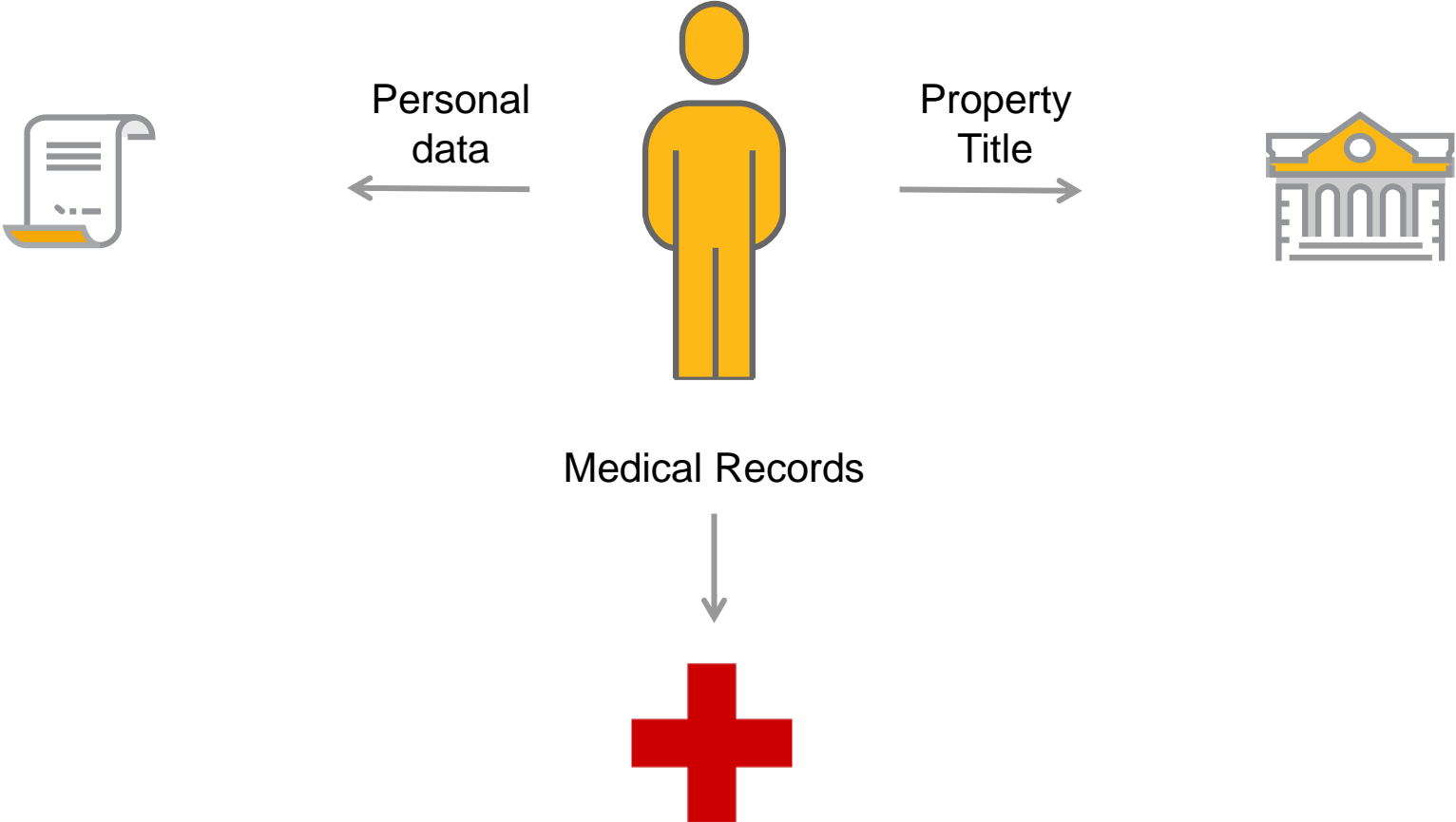
***Land titles / Identity management***



***Patient record management***



# Consumers can gain control of their property, medical history, and identity.



# Thank you!

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