

# IEEE P2145 Blockchain Governance Framework

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# Blockchain Governance?

## Eco-system Governance

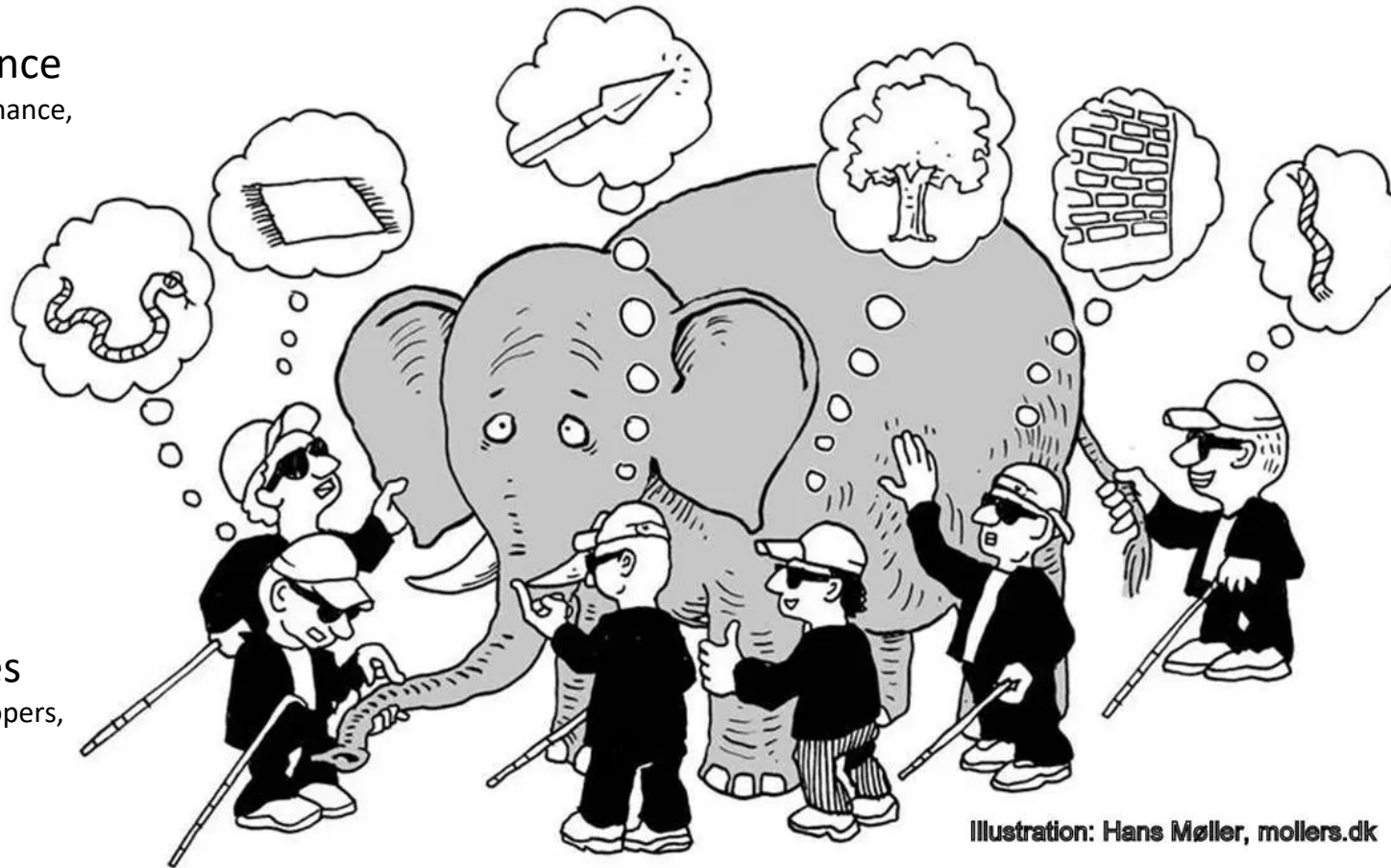
Cooptation, consortium governance, regulations

## Enterprise Blockchain Governance

Permissioned? Permissionless?  
Business? Technology? Network?

## Governance Strategies

benevolent dictator, core developers, open governance?



## Network operations

Coordination among nodes, infrastructure providers?

## Forking / Change

To fork or not to? Software configuration management? Agreement on forks

## Network Functionality

On-chain transactions, consensus

## Interoperability

Cross chain transactions, Agreements of structures, Protocols

# Blockchain Governance

- What is Governance?
- What is Blockchain Governance?

# Governance Definition

<a href="#"><u>Merriam-Webster</u></a>	the act or process of governing or overseeing the control and direction of something (such as a country or an organization)
<a href="#"><u>Institute on Governance</u></a>	Governance is how society or groups within it, organize to make decisions
<a href="#"><u>DLT Governance Lexical Framework DRAFT PROPOSAL</u></a>	Governance is the method by which a collective makes decisions for its members
<a href="#"><u>Governance of the Internet's Second Era</u></a>	When we use the word "governance" we mean stewardship, which involves collaborating, identifying common interests, and creating incentives to act on them. We do not mean government, which involves legislating and regulating behavior and punishing those who misbehave.

# Governance Key Takeaways

- Governance is needed for non-static (dynamic) systems
- Governance is about providing control/direction
- Governance is about decisions/rules
- Governance is about organizing, coordinating, collaborating to make decisions/rules
- Governance is about trust in decisions, decision making, decision performance and conformance
  
- *The entities involved may be humans or machines*

# Governance questions

## **Purpose of Governance**

1. What is governed? What is the scope of governance?
2. What are the objectives? Why it matters?
3. What are the decisions to be made?
4. What could go wrong? Risk/issue management?

## **Mechanics of Governance**

1. Who are governed, who makes decisions?
2. How are decisions made? What is the process?
3. How are the decisions documented / codified?
4. How are decisions executed and enforced?

## **Politics(?) of Governance**

1. Legitimization of Governance
2. Is the process for decision making fair and equitable (norms, principles, values)?
3. What are the incentives for decision makers?
4. What are the incentives for performance and conformance of decisions?

# Governance considerations

Membership,  
Responsibility,  
Accountability,  
Incentives

- Who makes decisions, who is impacted



People

- How are decisions made



Process

Coordination,  
collaboration, Voting /  
Consensus mechanisms

Rewards,  
Consequences,  
Risk, Issue  
management



- How are decisions executed, enforced

Practice

- How decisions are codified / communicated

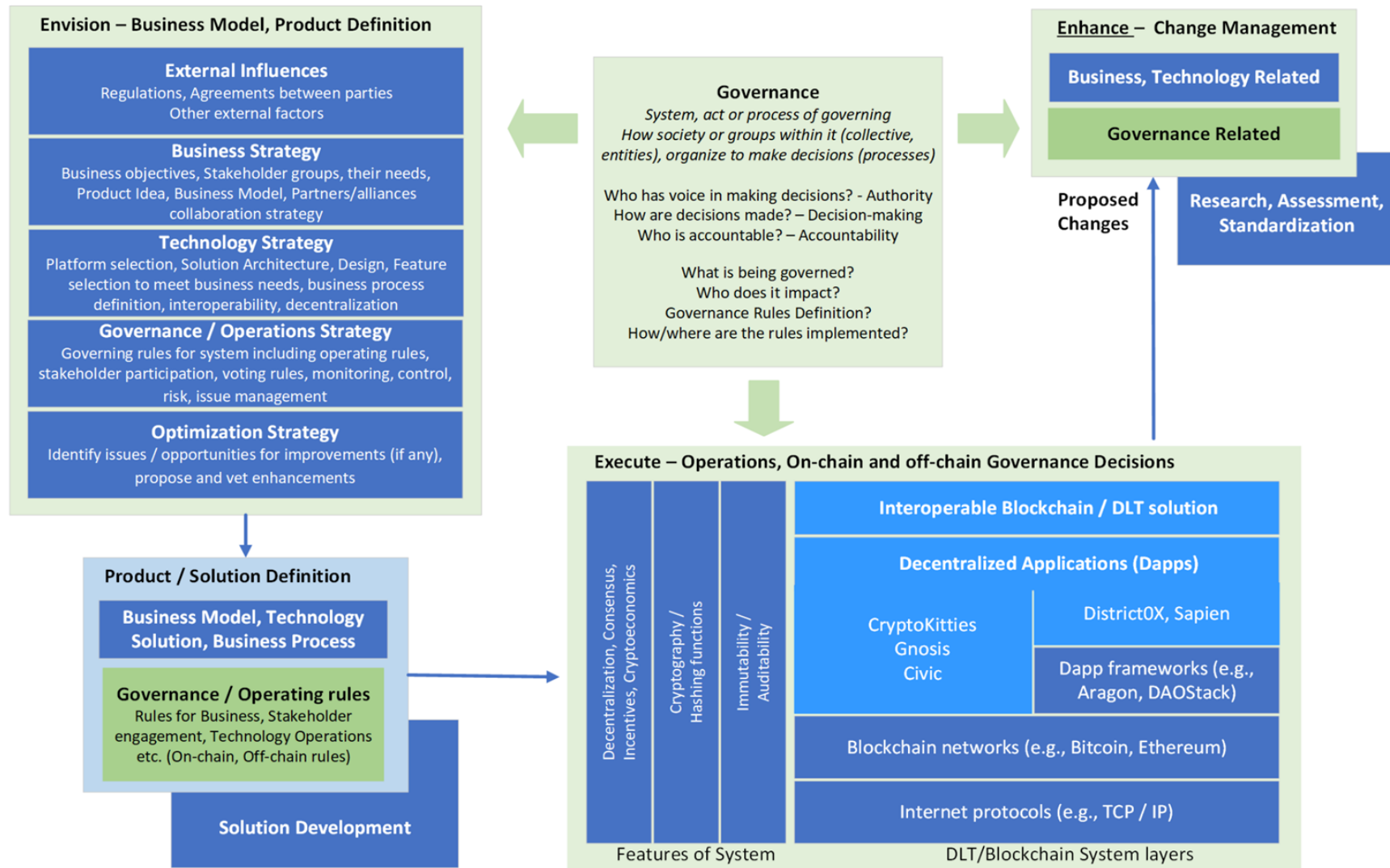


Policy

Informal norms,  
Standards, Policies,  
Legal Contracts,  
Informal agreements

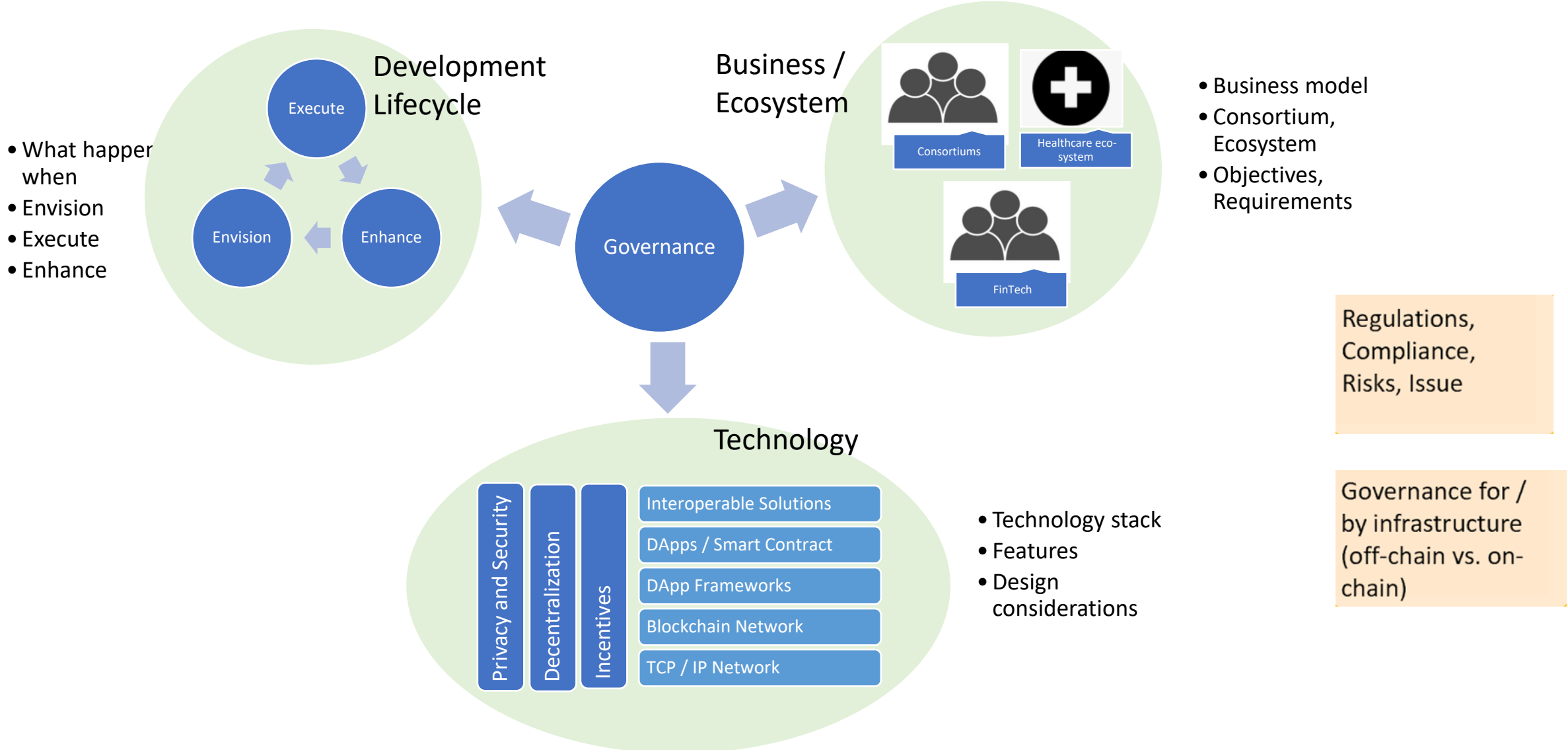
Legitimization of all activities above is critical to ensure trust in Governance (supported by different models of Governance – benevolent dictator, federated, open, democratic etc.)

# Blockchain Governance





# Blockchain Governance



- What happens when
- Envision
- Execute
- Enhance

- Business model
- Consortium, Ecosystem
- Objectives, Requirements

Regulations, Compliance, Risks, Issue

Governance for / by infrastructure (off-chain vs. on-chain)

- Technology stack
- Features
- Design considerations

Governance Dimensions		Governance Framework (GF)			
<b>Defition:</b> Governance is about decision making for direction and control of a dynamic system		Governance for the Blockchain System Development lifecycle.			
<b>Governance Considerations</b>		<b>Envision (Blockchain System)</b>	<b>Execute (Blockchain System)</b>		<b>Enhance (Blockchain System)</b>
			<b>Software Design and Development</b>	<b>Network Operations</b>	
<b>Object of Governance</b> What is governed?		Envision phase of Blockchain System Development Lifecycle	Software Design and Development for Blockchain	Blockchain network	Enhance the Blockchain system
<b>Scope</b> What is the scope?		Blockchain system business, technology, operations, optimization strategy, Blockchain protocol	Software design and development for different compoents of the system, configuration and release management	Network operations	Blockchain system business, technology, operations, or the governance for any of these areas, including risk management
<b>Purpose / Objectives</b> Why is governance needed? What is the purpose / objectives? Why it matters?		Ensure that the envisioned Blockchain solution will meet the business needs, makes right technology decisions (including protocol decisions), can be operationalized and optimized for long term success	To ensure that the software design and development changes are coordinated, version controlled and quality controlled across the development community. Requirements traceability.	Ensure that the network runs smoothly as envisioned, with nodes running appropriate software and executing corresponding roles in the network	Provide an ability to enhance the system as a result of real-life experience of the stakeholders, or any external changes including regulatory changes
<b>Requirements</b> What are the requirements to meet the business need/objectives?		Capture business, technical, operational requirements	Encourage developers to particiate and contribute to the software development, by providing appropriate tools and guidelines.	Network to meet business, technical and operational requirements, including protocol, cryptographic security, immutability, on chain consensus, incentives etc.	Provide change management for various aspects of the system
<b>Principles of Governance</b> What are the guiding values and principles for Governance?		Support decentralized, distributed, secure and immutable system (that honors	Open, Participatory, Collaborative, Quality focused	Open, participatory, distributed, decentralized, immutable	Open, flexible, optimized
<b>Governance Structure</b> Who is involved in Governance?					
<b>Members</b> Who are the members? Governed members/ Governing Authority?		Founding members, Business stakeholders, Technical stakeholders (system architects, leads) Investors, Early adopters, Regulators etc.	Developers in different toles such as Contributors, Reviewers, Maintainers, Leads; certain roles may provide certain privileges with associated responsibilities. Failing to abide by rules may	Network node operators, miners, Dapp managers, smart contract administrators etc.  <b>Network level:</b> Network full nodes, miner nodes, wallets, SPVs etc.	Everyone who can raise change request, everyone who may be affected by the change.  Business stakeholders, technical stakeholders, node operators,