

# Blockchain Incentive Structures: What they are and why they matter



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Founders of blockchain platforms must understand the nuances of incentives — what they are, what they aren't, how they work and how they can go wrong.

Incentives are what encourage communities of participants to cooperate and create the value that will ensure the success of their platform.

The economics of incentives are frequently misunderstood. A well-known senior economist has told me, “when a person tells me their company does not use incentives, I tell them they’re wrong.”

## What are incentives?

An incentive is any design element of a system that influences the behavior of system participants by changing the relative costs and benefits of choices those participants may make.

Incentives include pay-for-performance reward systems that compensate individuals with money and they also include systems that incorporate no financial rewards at all.

## Incentives are everywhere

University course grades, for example, provide powerful incentives for students to study hard or even to cheat, all without the university or the course instructor giving the student a dime.

Companies, platforms, and governments all operate systems in which each individual participant makes choices that best suit herself. These choices involve trade-offs, which balance costs and benefits.

Costs and benefits can be immediate and monetary, but they can also be long-run and/or nonfinancial.

When those costs and benefits stem from a system that has been *chosen* by an entity like a university or a blockchain start-up, they are *incentives*.

	SHORT-RUN	LONG-RUN
FINANCIAL	SALES COMMISSION	JOB PROMOTIONS
NONFINANCIAL	COURSE GRADES	PROFESSIONAL REPUTATION

Examples of incentive levers in traditional settings

## Why incentives matter for cryptocurrency

I have written before about an experiment at MIT which gave each undergraduate student \$100 worth of bitcoin.

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In addition, the wallet selection process, such as seeking and valuing the different potential benefits, involved costs that were non-monetary. The results of this study demonstrate that non-monetary costs are so important that they can be the determining factor in how people behave. In this case, participants in the experiment tended to choose the first wallet that was presented to them; how's that for incentives?

This example demonstrates that every choice made by a founding team will shape the incentives of the users of their platform, and therefore must be viewed through the lens of incentive design. Design elements as simple as providing helpful information about options (or not) and making it easy for users to find and navigate toward their best choice (or not) have a big impact not only on what users do once they get to a platform, but also on whether they show up at all.

## Other economic incentive systems in blockchain

There are several fields of economics that focus on how the design of systems influences behavior. Three vital areas are contract theory (which includes the study of pay-for-performance), market design, and the economics of information.



## Incentives are the foundation for blockchain platforms

We at Prysm Group utilize these three areas of economics to design platforms for blockchain ventures. These three pieces incorporate both tokenized financial rewards and non-monetary incentives, such as reputation systems, in order to shape the behavior of the community so that the vision of the founders can be realized.

From miner rewards, to transaction fee-setting mechanisms, to token curated registries, to prediction markets, incentives are everywhere in blockchain platforms.

Incentive design is a critical part of the overall economic design of effective blockchain platforms. It is the piece that builds on a platform's value proposition and structures the system for which the token of the platform will be designed. From an economics perspective, it is the crux of the system.

*Stay tuned as we return for more on the incentive design of effective blockchain platforms.*

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