

# Polys – the digital voting system

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Polys is a secure digital voting system based on blockchain technology that's both reliable and easy to use.

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Polys is designed to change the way people vote. It's easy to set up and use, and provides maximum safety and transparency for its users. We believe this is what voting should look like in our high-tech on-demand world.

### **Making voting secure**

Digital voting based on a blockchain allows you to create transparent elections and eliminate any interference in the voting process

### **Saving resources**

No need to print and distribute ballots. You save time and money for your organization in any elections using digital voting

### **Building trust**

A high level of trust in the voting process and results is achieved thanks to the unique voting observation feature available to anyone. Voters can also check their vote remains secure and is counted.

## **Main features**

### **Transparent technology**

Polys ensures a high level of trust in the voting process and its results. Anyone can observe an ongoing vote online and make sure there are no irregularities. It's even possible to download the entire blockchain and confirm that votes remain unchanged. Participants can also check that their vote remains completely anonymous.

### **Secure, immutable, anonymous voting**

Polys is the perfect solution for digital voting at all levels due to its simplicity and security. Unlike regular servers where stored data can be hacked or manipulated, data in a blockchain is kept in blocks on the computers of all network participants. Both the voting process and the results are immutable. Voter anonymity is assured thanks to the transparent algorithms we use on top of the blockchain.

### **Fast deployment on desktop and mobile voting**

You can create a vote in a few easy steps with the Polys organizer panel. Being so fast makes it ideal for all your voting needs.

## **Where can it be used?**

Polys can be used for voting at different levels. The blockchain and crypto algorithms that we use make voting extremely secure, meaning it's suitable for voting at the highest level. Polys comprises an Organizer panel for voting deployment and a client application for casting votes. No specific training or IT literacy is needed. Polys is a flexible system and can be easily customized for your specific needs.



### **Cities&communities**

If you're looking for a tool to increase engagement in your city council, municipality, parliament or community, Polys is the ideal solution for efficient voting that gets people involved.



### **Political parties**

Polys is suitable for a variety of different types of voting within political parties, such as primaries, debates, conventions or party referendums.



### **Education**

Polys is suitable for university, college and school management, board elections, yearly advisory council voting, student body elections and alumni voting. It's also perfect for awards ceremonies, grant allocations or holding quick votes at conferences.



### **Businesses**

Polys offers a solution for public companies looking to conduct shareholder votes, voting at Annual General Meetings, or can serve as the ultimate decision-making tool for executive boards.

# Polys for state elections

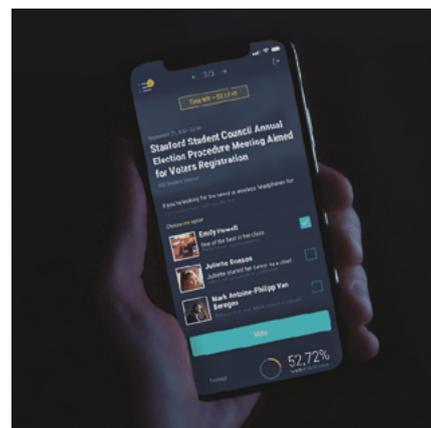
Today, the vast majority of elections in democratic countries are still held offline. There are reasons for this – paper-based voting is a tried-and-tested approach that's been around for centuries. However, it is far from ideal. In terms of organization, it is complex and expensive, vulnerable to manipulation and, in many respects, depends on the human factor.

The Polys blockchain-based voting system is designed to increase the transparency and simplicity of traditional elections, while also improving efficiency and reducing costs.

Obviously, the switch from paper to digital voting cannot happen overnight, but to make the transition as smooth as possible, Polys has designed a digital polling station – also based on blockchain technology – that can be easily set up at polling places.



With the **Polys digital polling station**, it doesn't matter where a voter is – they can go to the nearest polling place and participate in municipal, regional or state elections from anywhere in the country. Thanks to the usability of our solution, voting is a smooth process for all groups of people, regardless of digital literacy.



With Polys digital remote voting, voters can vote from anywhere on the planet. All they need is **a smartphone and a stable internet connection**. All votes are transparently stored in the blockchain. After casting their vote each voter receives an anonymous ID that allows them to check their vote was counted without revealing their identity.

All voting data is written into the public blockchain database that anyone can verify. The advantage of a blockchain is that it's impossible to change any data already stored in it without being noticed.

## The technology behind Polys

Digital voting is only beginning to make some headway. It might seem strange that acceptance of this method of voting has been so slow, but the reason is simple. It is certainly convenient, but it also opens up vast opportunities for tampering with the results. That's why digital voting imposes extremely stringent requirements on the security of every aspect of voting. To give our solution the ultimate protection and ensure complete transparency, Polys was built on blockchain technology.

## Blockchain

A blockchain is a decentralized database that allows independent parties to verify transactions with that data. Transactions are placed in blocks in such a way that they cannot be replaced or changed. These blocks and their chain are generated according to specific rules and synchronized among all the network participants. At the same time, all network members constantly verify the information within a blockchain, so that it's impossible to manipulate or compromise it. This is what makes blockchains so transparent and trustworthy.

## System architecture

### Voting stage

Voters send encrypted ballots to the blockchain. This maintains anonymity and ensures the receiving party has no way of filtering out any unfavorable votes.

### Counting stage

The system calculates the final votes and any observer can independently calculate and verify the correctness of the published results.

**Polys**

Polys | blockchain-based  
online election system

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