

Presented by Jesco, Saifulla, Selan, Eva & Alireza

# SMART VOTE

**E - V O T I N G   S Y S T E M**

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THYNK UNLIMITED

# ABOUT US.

Eva | M&T @TUM

Salan | M&T @TUM

Jesco | RCI @TUM

Alireza | MiM @TUM

Saifulla | IS @TUM



# PROBLEMS.

Traditional electoral systems face many challenges that undermine the trust of citizens and the effectiveness of elections

## Bureaucracy

Long queues, bureaucratic procedures and the need for personal presence at polling stations scare away voters and make the process less convenient.

## Low turnout

Physical turnout for elections is difficult for people with limited mobility and those who are abroad.

## Falsification

The falsification of ballots and manipulation of election results undermine the trust of citizens.

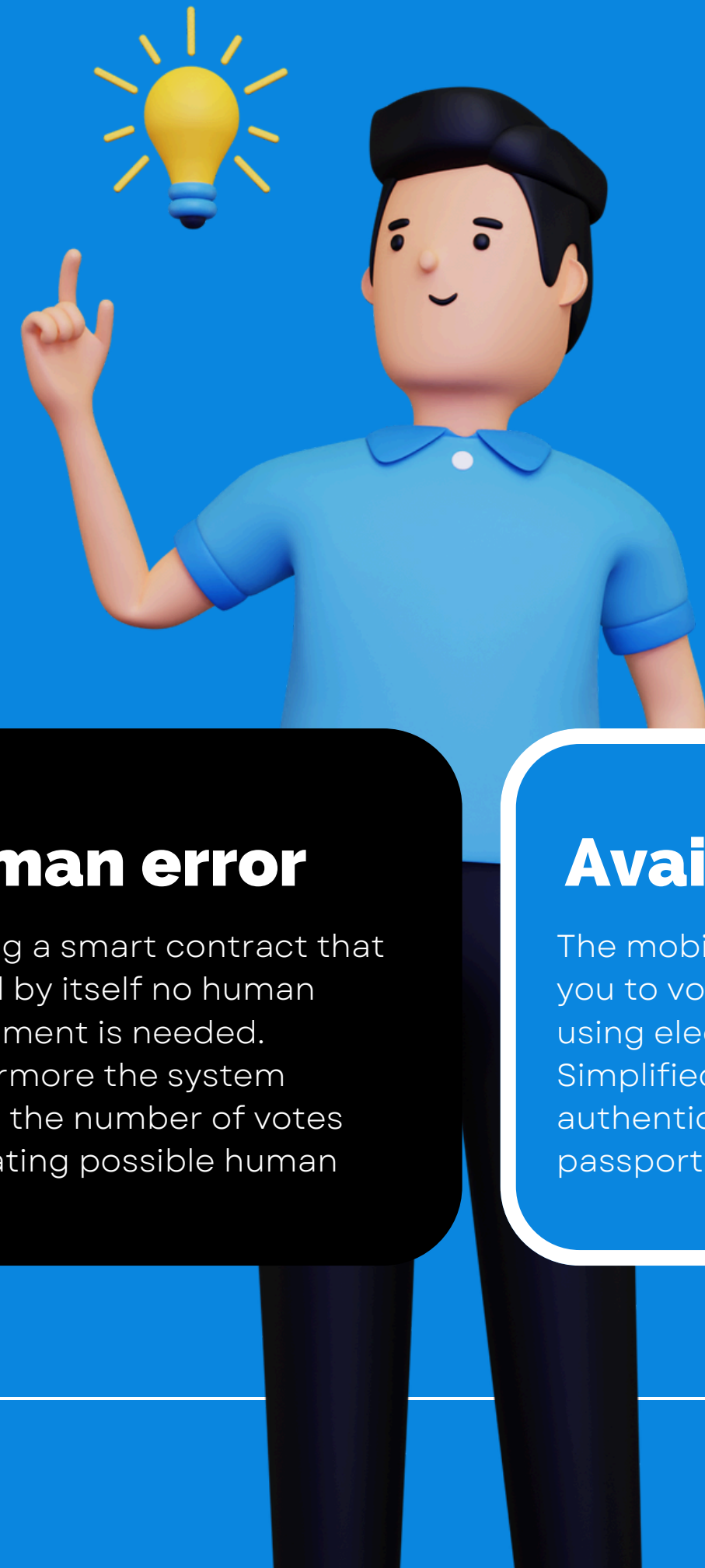
## Lack of transparency

The process of counting votes and verifying the results is often hidden from the public.



# SOLUTIONS.

Our e-voting application using blockchain technologies solves these problems



## **Simplification**

The automated registration system via e-passport and blockchain reduces bureaucratic barriers. Voters can register and vote online, avoiding queues and lengthy procedures

## **Security**

The use of zero-knowledge proofs and storage of voting history on a blockchain enables complete security of data

## **Human error**

By using a smart contract that runs all by itself no human management is needed. Furthermore the system counts the number of votes eliminating possible human error

## **Availability**

The mobile application allows you to vote from anywhere using electronic devices. Simplified registration and authentication process via e-passport

# INFLUENCE.

The implementation of our application will have a significant impact on the electoral processes:

## Increased voter turnout

The convenience of mobile voting will attract more citizens to participate in elections.

## Building trust

The transparency and security provided by blockchain and NFT will strengthen trust in the electoral system.

## Cost reduction

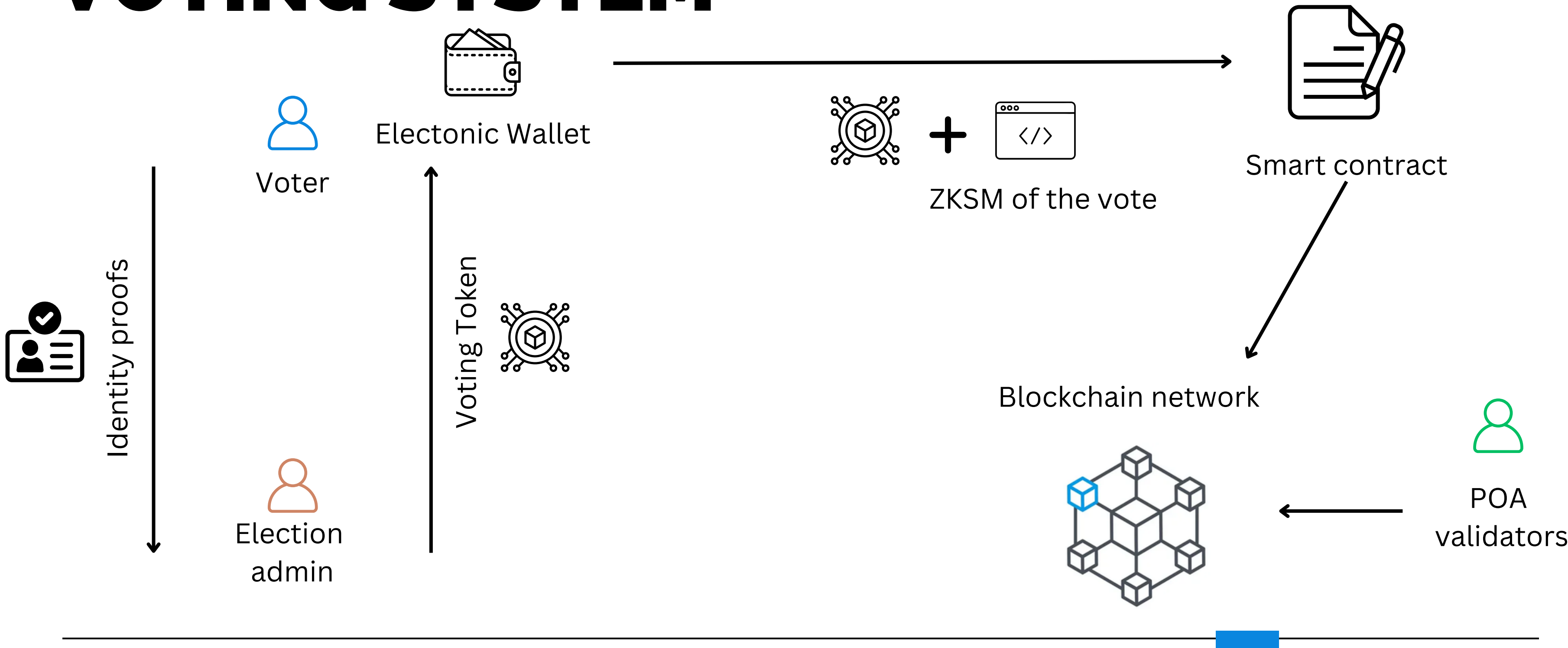
Automation of the voting and vote counting process will reduce the cost of conducting elections.

## Improved convenience for voters

It is easier and faster to register and vote, which increases participation in elections.



# BLOCKCHAIN-BASED VOTING SYSTEM



# WORKFLOW

PREVOTING

VOTING

POSTVOTING

CONFIGURE  
ELECTION

GENERATE  
TOKENS

GENERATE VERIFY  
IDENTITIES AND  
TRANSFER TOKENS

PASSPORT

CAST THE  
VOTE

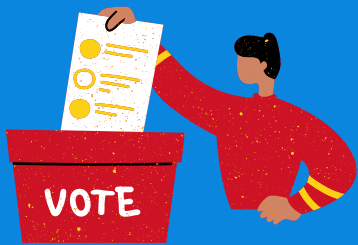
TRANSFER  
TOKEN

VERIFY VOTE AND ADD  
NEW BLOCKS

OBSERVE RESULTS



Election Admin



VOTER



POA VALIDATORS

A black smartphone with rounded corners is centered against a dark background. The screen displays the text "THANK YOU!" in large, bold, white capital letters. Below it, the text "VOTE SMART!" is displayed in smaller, bold, blue capital letters. A thin white horizontal line is positioned below the phone.

**THANK  
YOU!**

**VOTE SMART!**